

## Assessment Methodology for Domestic Systemically Important Banks

The G20 leaders' final declaration at the 2011 Cannes Summit requested the Financial Stability Board (FSB) to work hand in hand with the Basel Committee on Banking Supervision (BCBS) on modalities to extend the framework for dealing with Global Systemically important banks (G-SIBs) to domestic systemically important banks (D-SIBs).

In order to comply with this requirement, the BCBS released in October 2012 a set of principles to which banking supervisors should adhere when establishing a framework for dealing with systemically important financial institutions in their jurisdictions.

In line with the terms for implementing the requirements to be met by G-SIBs, national authorities have agreed to disclose the regulatory framework for D-SIBs in each jurisdiction before January 2014, and to phase-in additional capital requirements from January 2016 to January 2019.

The aim of adopting a framework for G-SIBs is to mitigate the impact that the insolvency of this type of institutions may have on global financial stability, and to reduce risks and competitive distortions arising from institutions which -as the public expects- will be aided or rescued by governments, if necessary and on account of their large size. The standards developed in the BCBS, and later on endorsed by G20 Leaders, establish a global assessment methodology to pinpoint which banks fall within the G-SIB framework and how much additional capital they must hold in terms of their global systemic importance<sup>1</sup>. The methodology identifies global systemically important banks based on 5 indicators that show their size, interconnectedness, substitutability or alternative financial institution infrastructure for the services they render, the scope of their inter-jurisdictional activity and their complexity. Based on such indicators, no financial institution incorporated in our country falls within the global systemically important category. However, the BCRA and supervisory authorities in other countries have the mandate to regularly review the systemic importance of all banks in a global context.

The D-SIB framework is supplementary to the G-SIB regime, since these institutions further generate 'negative externalities' (i.e., adverse side effects) at a domestic level and, while they are not meaningful from an international perspective, they may cause their domestic financial systems and economies to be at stake, even having cross-border implications. In the case of D-SIBs, the aim is to assess the impact a financial institution's distress or failure may exert on a given economy. Thus, unlike the universal G-SIBs standards, D-SIBs are assessed in each country, since local authorities are expected to better estimate the impact that the distress of banks may have on their domestic economies.

Even though national authorities may exercise a greater degree of discretion in the assessment of the systemic importance of financial institutions in their jurisdictions and in the application of adequate supervisory tools than in the case of G-SIBs, local decisions adopted in each jurisdiction are to be in tune with the set of principles developed by the BCBS<sup>2</sup> with a view to buffering unwanted effects at a

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<sup>1</sup> [http://www.bis.org/publ/bcbs255\\_es.pdf](http://www.bis.org/publ/bcbs255_es.pdf)

<sup>2</sup> <http://www.bis.org/publ/bcbs233.pdf>

regional level. The principles enable to accommodate the structural characteristics of each country's financial system; however, like G-SIBs standards, they are applied on a consolidated basis -i.e., at economic group level in each jurisdiction, including foreign branches-, and are mainly based on a higher additional loss absorbency, i.e., a higher capital requirement.

In reply to the G20 Leaders' request and according to the commitments undertaken at the BCBS, the BCRA has devised an assessment methodology for systemically important financial institutions in Argentina, the main features of which are described below. More details and a numeric example are given in the following annex.

According to Principle 5 of the framework developed by the BCBS, the process for assessing the degree of systemic importance of financial institutions licenced in our local market starts with the individual assessment of specific aspects related to size, interconnectedness, substitutability —both in terms of alternative infrastructure and market concentration in the financial system—, and complexity. Moreover, pursuant to BCBS recommendations, in order to include an institution within the category of D-SIB, and estimate additional capital requirements, the structural characteristics of the Argentine financial system as a whole are taken into account, especially, in terms of depth, concentration, and degree of substitutability as regards intermediation and lending activities.

Moreover, our country still evidences a significant level of regional concentration as to financial services along with some inequality in terms of population access to such services, a pair of unresolved issues in which public policies will play a critical role in the coming years.

It should be mentioned that the financial institutions falling under the scope of our system are comparatively small in size. Our largest institution in terms of assets/GDP is significantly smaller than leading institutions in most of other countries in the region. Contrariwise, there is a moderate degree of market concentration, which allows to foresee that diversification in our financial system will help mitigate the possible systemic impact of distress of either a given financial institution or banks as a whole. The safety network and the resolution regime provided for in the Bank Deposit Protection Insurance Scheme Act and the Financial Entities Act have proved to be effective during the 2001-2002 crises, and are mechanisms which, like diversification, allow mitigate contagion effects of individual insolvency scenarios.

On the basis of the foregoing considerations, it has been deemed appropriate to assess the following elements for each indicator:

- a) *size*: volume of assets —excluding liquid assets—, number of branches and ATMs;
- b) *interconnectedness*: intra-system assets and liabilities, excluding transactions with the BCRA, and wholesale funding volume;
- c) *substitutability*: security custody services, participation in the payments system, and origination and administration of securitisations; and
- d) *complexity*: trading in OTC derivatives and holdings of marked-to-market securities, excluding those instruments issued by the BCRA.

In the course of assessment, indicators and their components are weighted as follows: volume of assets, 20%; number of branches, 15%; number of ATMs, 15%; interconnectedness, 20%; substitutability, 20%, and complexity, 10%. The composite indicator may take values from 1 to 0.

In the coming months, the BCRA will classify institutions based on data about the foregoing components that were gathered as of the end of 2013, and will disclose the additional capital requirement to be met by the banks so classified, as well as the time and manner of compliance. As set forth in Principle 12 of the document issued by the BCBS on D-SIBs, such higher requirement is to be exclusively paid in with Common Equity Tier 1 (CET1). As agreed in the BCBS, in addition to the additional capital requirement, institutions classified as D-SIBs shall be subject to greater scrutiny by supervisory authorities, and, occasionally, to stricter regulations. This is true for requirements in terms of corporate governance and other related provisions, mainly those targeting group A institutions. Moreover, the SEFyC will continue implementing its supervisory scheme based on risk, systemic importance, and complexity of financial institutions.

### Explanatory note on the classification of financial institutions

This document describes the main aspects of the ranking scheme used to classify institutions falling within the scope of the Argentine financial system. The score established thereby enables to subsequently determine the degree of systemic importance of each institution.

Pursuant to the methodology suggested by the BCBS, the score assigned to each domestic financial institution considers the following individual factors: a) size; b) interconnectedness between financial institutions; c) substitutability; and d) business complexity. The quantitative variables (components) used to calculate the scores and their weights are described below:

#### A. Size

- i. *Volume of assets*. Weight: 20%;
- ii. *Number of branches*. Weight: 15%;
- iii. *Number of ATMs*. Weight: 15%;

#### B. Interconnectedness between financial institutions

- i. *Inter-financial assets*. Weight: 6.66%;
- ii. *Inter-financial liabilities*. Weight: 6.66%;
- iii. *Wholesale funding*. Weight: 6.66%;

#### C. Substitutability

- i. *Security custody services*. Weight: 6.66%;
- ii. *Payment system services*. Weight: 6.66%;
- iii. *Origination and administration of securitisations*. Weight: 6.66%;

#### D. Business complexity

- i. *Trading in derivatives*. Weight: 5%;
- ii. *Holdings of marked-to-market securities*. Weight: 5%.

The values set for the quantitative variables above are the result of data gathered by several Information Systems available to the BCRA, featuring the following additional characteristics:

#### A. Size

- i. *Volume of assets*. Balance of total banking assets, net of liquid assets in a broad sense (including cash in banks, financial institutions' deposits with the BCRA, reverse repos with the BCRA against LEBACs and NOBACs, and their own holdings of LEBACs and NOBACs).
- ii. *Number of branches*. Including all types of banking offices.
- iii. *Number of ATMs*. All ATMs that banks make available to the public, including self-service terminals.

#### B. Interconnectedness between financial institutions

- i. *Inter-financial assets*. Balance of loans to other financial institutions and reverse repos transactions where the counterparty is a financial institution.

- ii. *Inter-financial liabilities.* Balance of deposits from other financial institutions and repo transactions where the counterparty is a financial institution.
- iii. *Wholesale funding.* Balance of financial loans borrowed.

C. Substitutability

- i. *Security custody services.* Balance of custody service activities (including securities and other financial assets) carried out by each institution.
- ii. *Payment system services.* Checks debited from (issuance), and credited to, (receipt) each financial institution.
- iii. *Origination and administration of securitisations.* It includes the activity performed by each institution as originator or administrator of securitisations having bank loans as underlying assets.

D. Business complexity

- i. *Trading in derivatives.* Notional amount of forward and swap transactions traded at the MAE and OTC transactions.
- ii. *Holdings of marked-to-market securities.* Sovereign bonds recorded at fair value, excluding LEBAC and NOBAC holdings.

The steps involved in assigning a score to each institution are described below. For illustration purposes, the table below contains a simple numeric example. This table features the methodology applied to a hypothetical financial system.

First, in the case of each one of the above mentioned variables (taking into account their relevant scale and unit; see in the table, the first column of each variable) the relative share of each institution in the total financial system is estimated (second column of each variable). Subsequently, the relative share of each variable is multiplied by the weight coefficient established for each one of them (third column of each variable).

A special comment should be made on the “Wholesale Funding” variable. Following the BIS methodology, this variable is computed on the basis of the indicator for each bank, and then it is standardized by adding all financial institutions’ indicators. The corresponding weighting factor is subsequently included, as previously noted.

The final score of each institution —established for classification purposes— is the result of adding up all weighted values of each variable included in the analysis (see the last column of the table). The summation of the resulting score is “1”.

	Size - Total weight 50%: 20% assets, 15% branches, and 15% ATMs -									Interconnectedness between financial institutions - Total weight 20%, each one of the 3 variables weighted by 6.66% -								
	Volume of assets			Number of branches			Number of ATMs			Inter-financial assets			Inter-financial liabilities			Wholesale funding		
	1. Amount in million \$	2. Share in total (%)	3. Share weighted by 20% (2. * 0.2)	4. Amount in million \$	5. Share in total (%)	6. Share weighted by 15% (5. * 0.15)	7. Amount in million \$	8. Share in total (%)	9. Share weighted by 15% (8. * 0.15)	10. Amount in million \$	11. Share in total (%)	12. Share weighted by 6.66% (11. * 0.066)	13. Amount in million \$	14. Share in total (%)	15. Share weighted by 6.66% (14. * 0.066)	16. Wholesale Funding Indicator	17. Wholesale funding Indicator divided by the sum of all indicators	18. Indicator weighted by 6.66% (17. * 0.066)
Bank 1	1,000	0.1	0.017	20	0.1	0.021	1	0.0	0.003	150	0.1	0.01	75	0.1	0.006	0.150	0.316	0.021
Bank 2	500	0.0	0.008	5	0.0	0.005	5	0.1	0.017	25	0.0	0.00	20	0.0	0.002	0.020	0.042	0.003
Bank 3	3,000	0.3	0.050	30	0.2	0.032	10	0.2	0.035	200	0.2	0.01	150	0.2	0.012	0.300	0.633	0.042
Bank 4	7,000	0.6	0.117	80	0.6	0.086	25	0.6	0.087	800	0.7	0.04	550	0.7	0.044	0.003	0.006	0.000
Bank 5	450	0.0	0.008	5	0.0	0.005	2	0.0	0.007	15	0.0	0.00	45	0.1	0.004	0.001	0.002	0.000
<b>Total</b>	<b>11,950</b>	<b>1.0</b>	<b>0.200</b>	<b>140</b>	<b>1.0</b>	<b>0.150</b>	<b>43</b>	<b>1.0</b>	<b>0.150</b>	<b>1,190</b>	<b>1.0</b>	<b>0.067</b>	<b>840</b>	<b>1.0</b>	<b>0.067</b>		<b>1.0</b>	<b>0.067</b>

(continued)

	Substitutability - Total weight 20%, each one of the 3 variables weighted by 6.66% -									Business complexity - Total weight 10%, each one of the 2 variables weighted by 5% -						SCORE by institution  Summation of the score obtained in columns: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 and 33
	Security custody services			Payment system services			Origination & admin. of securitisations			Trading in derivatives			Holdings of marked-to-market securities			
	19. Amount in million \$	20. Share in total (%)	21. Share weighted by 6.66% (20. * 0.066)	22. Amount in million \$	23. Share in total (%)	24. Share weighted by 6.66% (23. * 0.066)	25. Amount in million \$	26. Share in total (%)	27. Share weighted by 6.66% (26. * 0.066)	28. Amount in million \$	29. Share in total (%)	30. Share weighted by 5% (29. * 0.05)	31. Amount in million \$	32. Share in total (%)	33. Share weighted by 5% (32. * 0.05)	
Bank 1	100	0.2	0.010	1000	0.3	0.022	10	0.2	0.013	250	0.1	0.006	5	0.0	0.002	0.13
Bank 2	5	0.0	0.001	500	0.2	0.011	15	0.3	0.019	800	0.4	0.021	20	0.2	0.008	0.10
Bank 3	20	0.0	0.002	1500	0.5	0.033	20	0.4	0.026	750	0.4	0.019	2	0.0	0.001	0.26
Bank 4	500	0.8	0.051	20	0.0	0.000	5	0.1	0.006	100	0.1	0.003	80	0.6	0.030	0.47
Bank 5	30	0.0	0.003	25	0.0	0.001	2	0.0	0.003	50	0.0	0.001	25	0.2	0.009	0.04
<b>Total</b>	<b>655</b>	<b>1.0</b>	<b>0.067</b>	<b>3,045</b>	<b>1.0</b>	<b>0.067</b>	<b>52</b>	<b>1.0</b>	<b>0.067</b>	<b>1,950</b>	<b>1.0</b>	<b>0.050</b>	<b>132</b>	<b>1.0</b>	<b>0.050</b>	<b>1.00</b>