Framework for Dealing with Domestic Systemically Important Banks (D-SIBs)

Introduction

Some banks, due to their size, cross-jurisdictional activities, complexity, lack of substitutability and interconnectedness, become systemically important. The disorderly failure of these banks has the potential to cause significant disruption to the essential services they provide to the banking system, and in turn, to the overall economic activity. Therefore, the continued functioning of Systemically Important Banks (SIBs) is critical for the uninterrupted availability of essential banking services to the real economy.

Lessons from recent global financial crisis

- 2. It was observed during the recent global financial crisis that problems faced by certain large and highly interconnected financial institutions hampered the orderly functioning of the financial system, which in turn, negatively impacted the real economy. Government intervention was considered necessary to ensure financial stability in many jurisdictions. Cost of public sector intervention and consequential increase in moral hazard required that future regulatory policies should aim at reducing the probability of failure of SIBs and the impact of the failure of these banks.
- 3. As a response to the recent crisis, a series of reform measures were unveiled, broadly known as Basel III, to improve the resiliency of banks and banking systems. Basel III reform measures include: increase in the quality and quantity of regulatory capital of the banks, improving risk coverage, introduction of a leverage ratio to serve as a backstop to the risk-based capital regime, capital conservation buffer and countercyclical capital buffer as well as a global standard for liquidity risk management. These policy measures will cover all banks including SIBs. However, these policy measures are not adequate to deal with risks posed by SIBs. Therefore, additional policy measures for SIBs are necessary to counter the systemic risks and moral hazard issues posed by these banks, which other policy reforms do not address adequately.

Additional risks posed by SIBs

4. SIBs are perceived as banks that are 'Too Big To Fail (TBTF)'. This perception of TBTF creates an expectation of government support for these banks at the time of distress. Due to this perception, these banks enjoy certain advantages in the funding markets. However, the perceived expectation of government support amplifies risk-taking, reduces market discipline, creates competitive distortions, and increases the probability of distress in the future. These considerations require that SIBs should be subjected to additional policy measures to deal with the systemic risks and moral hazard issues posed by them.

5. In October 2010¹, the Financial Stability Board (FSB) recommended that all member countries needed to have in place a framework to reduce risks attributable to Systemically Important Financial Institutions (SIFIs) in their jurisdictions. The FSB asked the Basel Committee on Banking Supervision (BCBS) to develop an assessment methodology comprising both quantitative and qualitative indicators to assess the systemic importance of Global SIFIs (G-SIFIs), along with an assessment of the extent of going-concern loss absorbency capital which could be provided by various proposed instruments. In response, BCBS came out with a framework in November, 2011 (since up-dated in July, 2013) for identifying the Global Systemically Important Banks (G-SIBs) and the magnitude of additional loss absorbency capital requirements applicable to these G-SIBs.

6. The BCBS is also considering proposals such as large exposure restrictions and liquidity measures which are referred to as "other prudential measures" in the FSB Recommendations and Time Lines. The G20 leaders had asked the BCBS and FSB in November 2011 to extend the G-SIBs framework to Domestic Systemically Important Banks (D-SIBs) expeditiously.

¹http://www.financialstabilityboard.org/publications/r_101111a.pdf

Identification of G-SIBs

BCBS methodology for identification of G-SIBs

- 7. The BCBS has developed a methodology for assessing the systemic importance of G-SIBs. The methodology is based on an indicator-based measurement approach. The indicators capture different aspects that generate negative externalities, and make a bank systemically important and its survival critical for the stability of the financial system. The selected indicators are size, global (cross-jurisdictional) activity, interconnectedness, lack of substitutability or financial institution infrastructure, and complexity of the G-SIBs. The advantage of the multiple indicator-based measurement approach is that it encompasses many dimensions of systemic importance, it is relatively simple and more robust than currently available model-based measurement approaches and methodologies that rely on only a small set of indicators or market variables. The methodology gives an equal weight of 20% to each of the five categories of systemic importance indicators. Except the size category, the BCBS has identified multiple indicators in each of the other four categories, with each indicator equally weighted within its category. That is, where there are two indicators in a category, each indicator is given a weight of 10%; where there are three, the indicators are each weighted 6.67% (i.e. 20/3). For each bank, the score for a particular indicator is calculated by dividing the individual bank amount (expressed in EUR) by the aggregate amount for the indicator summed across all banks in the sample.
- 8. The indicator-based measurement approach is based on a large sample of banks, which works as a proxy for the global banking sector. The banks fulfilling any of the following three criteria are included in the sample:
 - i) 75 largest global banks (based on the Basel III leverage ratio exposure measure at the end of the financial year);
 - ii) Banks that have been designated as G-SIBs in the previous year (unless supervisors agree that there is a compelling reason to exclude them); and

- iii) Banks that have been added to the sample by national supervisors using their supervisory judgement.
- 9. The banks with score (produced by the indicator-based measurement approach) that exceeds a cutoff level set by the BCBS are classified as G-SIBs. Supervisory judgement may also be used to add banks with scores below the cut-off to the list of G-SIBs. This judgement will be exercised according to the principles set out by BCBS. Based on the scores produced using the end-2011 data supplied by the sample banks, the tentative cutoff point set by the BCBS and use of supervisory judgement, 29 banks were classified as G-SIBs in November 2013 by the FSB. The FSB had identified 28 banks as G-SIBs in November 2012.
- 10. The banks identified as G-SIBs would be plotted in four different buckets depending upon their systemic importance scores in ascending order and they would be required to maintain additional capital in the range of 1% to 2.5% of their risk weighted assets depending upon the order of the buckets. The additional capital (higher loss absorbency requirement) is to be met with Common Equity Tier 1 (CET1) capital. An empty bucket at the top (fifth bucket) with a CET1 capital requirement of 3.5% has been provided to take care of banks, in case their systemic importance scores increase in future beyond the boundary of the fourth bucket. If this bucket gets populated in the future, a new bucket will be added. The bucketing system provides disincentive for adding to the systemic importance scores and incentives for banks to avoid becoming systemically more important. The higher loss absorbency (HLA) capital requirement would be phased-in parallel with the capital conservation buffer and countercyclical capital buffer.
- 11. The implementation of these measures will help reduce the probability and impact of failure of a SIB on the real economy and will also create a level playing field between the SIBs and non-SIBs by reducing competitive advantages of SIBs in funding markets. These policies will thus endeavour to curb amplification of risk taking and reduce competitive distortions.

BCBS framework for dealing with the D-SIBs

12. The BCBS finalized its framework for dealing with D-SIBs in October 2012. The D-SIB framework focuses on the impact that the distress or failure of banks will have on the domestic economy. As opposed to G-SIB framework, D-SIB framework is based on the assessment conducted by the national authorities, who are best placed to evaluate the impact of failure on the local financial system and the local economy. D-SIB framework is based on a set of principles, which complement the G-SIB framework, address negative externalities and promote a level-playing field. The principles developed by the BCBS for D-SIBs provide national discretion in identifying D-SIBs and additional loss absorbency requirements applicable to them. A list of BCBS principles for D-SIBs is given in Appendix 1.

The methodology to be adopted by RBI to identify D-SIBs

13. The process of assessment of systemic importance of banks will be a two-step process. In the first step, sample of banks to be assessed for their systemic importance will be decided. It is felt that systemic importance of all the banks need not be computed as many smaller banks would be of lower systemic importance and burdening these banks with onerous data requirements on a regular basis may not be prudent. Hence, the sample of banks for identification of D-SIBs may exclude many smaller banks. Once the sample of banks is selected, detailed study to compute their systemic importance could be initiated. Based on a range of indicators, a composite score of systemic importance for each bank in the sample will be computed. The banks having systemic importance above a threshold will be designated as D-SIBs. D-SIBs would be segregated into different buckets based on their systemic importance scores, and subject to loss absorbency capital surcharge in a graded manner depending on the buckets, in which they are placed. A D-SIB in lower bucket will attract lower capital charge and a D-SIB in higher bucket will attract higher capital charge.

Sample of banks

14. The banks will be selected for computation of systemic importance based on the analysis of their size (based on Basel III Leverage Ratio Exposure Measure) as a

percentage of GDP. Banks having a size beyond 2% of GDP will be selected in the sample. For this purpose, latest GDP figure at market prices, released by Central Statistical Office, Government of India will be used. As foreign banks in India have smaller balance sheet size, none of them would automatically get selected in the sample. However, foreign banks are quite active in the derivatives market and the specialized services provided by these banks might not be easily substituted by domestic banks. It is, therefore, appropriate to include a few large foreign banks also in the sample of banks to compute the systemic importance.

Assessment methodology

- 15. The methodology to be used to assess the systemic importance is largely based on the indicator based approach being used by BCBS to identify G-SIBs. The indicators to be used to assess domestic systemic importance of the banks are as follows:
- i) Size;
- ii) Interconnectedness;
- iii) Lack of readily available substitutes or financial institution infrastructure; and
- iv) Complexity.
- 16. The BCBS methodology for identification of G-SIBs gives equal weight for each of the indicators used to compute systemic importance with a cap assigned to the weight of substitutability indicator. However, methodology that will be adopted by RBI would give more weight to the size as it is felt that size is the most important indicator of systemic importance. Interconnectedness, substitutability and complexity indicators would be divided further into multiple indicators. Details of the data requirements for computation of systemic importance scores are given in Appendix 2. A description of indicators, sub-indicators and their relative weights is as under:

S.	Indicator	Sub-indicator	Indicator
No.			weight
1	Size (total exposure as defined		40%
	for use in Basel III Leverage		
	Ratio)		
		Intra-financial system assets	6.67%
2	Interconnectedness	Intra-financial system liabilities	6.67%
		Securities outstanding	6.67%
3	Substitutability	Assets Under Custody	6.67%
		Payments made in INR using	6.67%
		RTGS and NEFT systems	
		Underwritten transactions in	6.67%
		debt and equity markets	
		Notional amount of OTC	6.67%
4	Complexity	Derivatives	
		Cross Jurisdictional Liabilities	6.67%
		Securities in Held For Trading	6.67%
		and Available for Sale	
		categories	

Size Indicator

- 17. The impairment or failure of a bank will more likely damage the domestic economy if its activities constitute significantly large share of domestic banking activities. Therefore, there is a greater chance that impairment or failure of a larger bank would cause greater damage to the financial system and domestic real economy. The impairment or failure of a bank with large size is also more likely to damage confidence in the banking system as a whole. Size is a more important measure of systemic importance than any other indicators and therefore, size indicator will be assigned more weight than the other indicators.
- 18. The size indicator takes into account both on- and off-balance sheet items. In order to be consistent with the BCBS methodology, size of a bank will be measured by using the same definition for total exposure measure used for calculation of leverage ratio of Basel III capital framework. The score for each bank will be calculated as its amount of total exposure divided by the sum total of exposures of all banks in the sample.

Interconnectedness Indicator

- 19. Impairment or failure of one bank may have the potential to increase the probability of impairment or failure of other banks if there is a high degree of interconnectedness (contractual obligations) with other banks. This chain effect operates on both sides of the balance sheet. There may be interconnections on the funding side as well as on the asset side of the balance sheet. The larger the number of linkages and size of individual exposures, the greater is the potential for the systemic risk getting magnified.
- 20. Interconnectedness indicator is divided into three sub-indicators: intra-financial system assets held by the bank, intra-financial system liabilities of the bank and total marketable securities issued by the bank. Intra-financial system assets comprise lending to financial institutions (including undrawn committed lines), holding of securities issued by other financial institutions, gross positive current exposure of Securities Financing Transactions and exposure value of those OTC derivatives which have positive current market value. Intra-financial system liabilities comprise deposits by other financial institutions (including undrawn committed lines), gross negative current exposure of Securities Financing Transactions and exposure value of those OTC derivatives which have negative current market value. The total marketable securities issued by the bank comprise debt securities, commercial paper, certificate of deposit and equity issued by the bank. The total marketable securities issued by the bank with the data on maturity structure of these securities will give an indication of the reliance of the bank on wholesale funding markets. This may also be one of the indicators of the interconnectedness.

Substitutability/financial institution infrastructure indicator

21. The impairment or failure of a bank will inflict greater damage to the financial system and real economy if certain critical services provided by the bank cannot be easily substituted by other banks. The greater the role of a bank as a service provider in underlying market infrastructure, e.g., payment systems, the larger the disruption it is likely to cause in terms of availability and range of services and infrastructure liquidity following its failure. Also, the costs to be borne by the customers of a failed bank to

seek the same service at another bank would be much higher if the failed bank had a greater market share in providing that particular service.

22. The BCBS methodology for G-SIB identification has three sub-indicators for substitutability indicator: assets under custody; payment activity and total amount of debt and equity instruments underwritten. The indicators used for this category in our methodology would be assets under custody, the payment made by a bank in INR using Real Time Gross Settlement (RTGS) and National Electronic Fund Transfer (NEFT) systems and value of underwritten transactions in debt and equity markets over a period of last one year.

Complexity Indicator

23. Complexity of a bank is also an indicator of systemic importance. The more complex a bank is, the greater are the costs and time needed to resolve its problems. Three indicators of complexity have been considered to measure complexity of a bank: (i) notional amount of over-the-counter (OTC) derivatives; (ii) cross jurisdictional liabilities; and (iii) trading and available-for-sale securities.

Differences between BCBS methodology for identification of G-SIB and RBI methodology for identification of D-SIB

24. The major difference between BCBS methodology for G-SIB identification and RBI methodology for D-SIB identification is as follows:

S. No.	Point of	BCBS G-SIB identification	RBI D-SIB identification	
	difference	methodology	methodology	
1	Sample of banks	75 largest global banks based on financial year end Basel III leverage ratio exposure measure. National supervisors have the discretion to add any bank in the sample apart from 75 largest banks.	Banks having size (Basel III leverage ratio exposure measure) as a percentage of GDP equal to or more than 2%. Additionally five largest foreign banks, based on their size, will also be added in the sample.	
2	Indicators	Five broad indicators: 1. Cross jurisdictional activity 2. Size 3. Interconnectedness	Four broad indicators as mentioned in BCBS's framework for D-SIBs will be used:	

		Substitutability and Complexity	Size Interconnectedness Substitutability and Complexity
3.	Indicator weights	All indicators given equal weight with a cap to substitutability category weight	Size will be given a weight of 40% and other three indicators will be given a weight of 20% each
4.	Sub-indicators	Three sub-indicators for Complexity indicator: 1. Notional amount of OTC derivatives 2. Level 3 assets and 3. Trading and Available For Sales Securities	Level 3 assets for complexity indicator dropped and instead cross jurisdictional liabilities added.

The role of regulatory/supervisory judgements

25. The multiple indicator based approach discussed above provides a general structure for assessment of systemic significance of banks. However, it is not a precise quantitative instrument and the final decision for designating a bank as D-SIB will also factor qualitative regulatory and supervisory judgements.

Annual Assessment

26. The computation of systemic importance scores of all the banks in the sample will be performed annually based on the end-March data in the months of June-July every year.

Allocation of banks into buckets

27. Based on the data received from banks in the sample on the above indicators, systemic importance score will be calculated. For each bank, the score for a particular indicator will be calculated by dividing the individual bank amount by the aggregate amount for the indicator summed across all banks in the sample. The score for each category will be multiplied by 1000 in order to express the indicator scores in basis points. Overall systemic importance of a bank will be computed as weighted average scores of all indicators. Thus, the systemic importance score of a bank would represent

its relative importance with respect to the other banks in the sample. Banks that have scores above a threshold score will be classified as D-SIBs. However, the process of classification of a bank as D-SIB will also be guided by qualitative analysis and regulatory/supervisory insights about different banks. Banks will be allocated to different buckets based on their systemic importance score.

Higher Capital Requirements for D-SIBs

28. The quantum of additional capital requirements for D-SIBs has been based on a mix of quantitative calibration exercise and consideration of country-specific factors. The quantitative calibration exercise was based on two approaches. The first approach for calibration was the Expected Impact (EI) approach. The rationale behind EI approach is that the calibration of systemic risk capital surcharge should ensure that the expected loss to the financial system, consequent upon the failure of a SIB, equals the expected loss from the failure of a non-SIB. The expected loss is defined as the multiplication of the probability of default (PD) by Loss Given Default (LGD). As the failure of a SIB will have larger impact (higher LGD) on the financial system than a non-SIB (lower LGD), the PD of a SIB needs to be sufficiently lower than a non-SIB, so that the expected loss of failure of a SIB and non-SIB is equalised. This approach suggests that in the case of our banking system, the PD of the D-SIB with the highest systemic importance score should be reduced by imposing an additional CET1 of 0.88% of its risk weighted assets, so that the EI of failure of this bank is comparable to a reference non-SIB.

29. The other approach used for the calibration is Return on Risk Weighted Assets (RORWA) approach. This approach defines risk in banking in terms of earnings volatility. Earnings volatility creates the potential for loss. Losses, in turn, need to be funded, and it is the potential for loss that imposes a need for banks to hold capital. The link between earnings volatility and capital is central to this approach. This approach thus measures risk in terms of economic capital – the amount of capital needed to protect against earnings volatility at a prescribed confidence interval. This approach defines earnings as mean adjusted RORWA. The historical distribution of bank earnings is then used to estimate how much additional capital is needed to absorb extreme negative realisations and avoid failure. This approach suggests that in case of our

banking system, the D-SIB with the highest systemic importance score should have additional CET1 of 2% of risk weighted assets compared to a reference non-SIB.

30. The calibration of additional CET1 requirements for D-SIBs was also contingent on the country-specific factors which should form the basis for exercise of supervisory judgement. A mechanical reliance on output of models was sought to be avoided due to possibility of significant model risk involved. Supervisory judgement was based on two country specific factors - degree of concentration in the banking sector and size of banking sector relative to GDP. Degree of concentration in the banking sector was measured by computing Herfindahl-Hirschman Index (HHI). HHI of Indian banking sector using square of on-balance sheet market share of all banks in the system is 518.53. A HHI score of 1000 or less shows an un-concentrated banking system. HHI score of India indicates that the banking system in India is not concentrated. Size of banking sector compared to the size of economy was assessed with respect to domestic credit provided by the banking system as a percentage of GDP. Compared to other major countries, this percentage is on the lower side.

31. Based on a mix of quantitative analysis and country-specific factors as above, and as per the supervisory judgement of RBI, a bank with highest systemic importance score should be required to have 0.8% of its risk weighted assets as additional capital charge in the form of CET1 capital. Other buckets have been calibrated accordingly. A table showing the additional CET1 capital requirement for D-SIBs is presented below:

Bucket	Additional CET1 requirement (as a
	percentage of risk weighted assets)
5 (Empty)	1.00%
4	0.80%
3	0.60%
2	0.40%
1	0.20%

32. The additional CET1 requirements will be applicable at the level of both solo as well as consolidated level of the D-SIB, in line with extant capital adequacy provisions.

- 33. The systemic importance score will be calibrated in such a manner that the bucket 5 does not have any banks initially. An empty bucket with higher CET1 requirement will incentivize D-SIBs with higher scores not to increase their systemic importance in future. In the event of the fifth bucket getting populated, an additional empty (sixth) bucket would be added with same range and same differential additional CET1.
- 34. Presently, foreign banks operating in India as branches maintain capital in their Indian books as mandated by RBI. Similarly, foreign banks as Wholly Owned Subsidiaries (WOS) of their parent bank will maintain capital in the local subsidiary as mandated by RBI. The maintenance of additional CET1 by a foreign bank in India whether as a branch or a WOS, and as a G-SIB or D-SIB, will be guided by following rules:
 - i. In case a foreign bank having branch presence in India is a G-SIB, it has to maintain additional CET1 capital surcharge in India as applicable to it as G-SIB, proportionate to its Risk Weighted Assets (RWAs) in India. Additional CET1 requirement for such banks in India may be computed as additional CET1 buffer prescribed by the home regulator multiplied by (India RWA as per consolidated global Group books/Total consolidated global Group RWA). Additional CET1 may be phased in India in accordance with the phase-in prescribed by the home regulator.
 - ii. In case a foreign bank having branch presence in India is not a G-SIB, but a D-SIB in India, it has to maintain D-SIB additional capital surcharge in India.
 - iii. In case a foreign bank having branch presence in India is both a G-SIB and a D-SIB in India, it has to maintain capital surcharge in India, at a rate which is higher of the two (G-SIB additional CET1 surcharge or D-SIB additional CET1 surcharge).
 - iv. In case of a foreign bank having presence in India as a WOS of its parent bank which is a G-SIB, it will not be required to maintain G-SIB capital surcharge in India as it will have the status of a domestic bank. However, if the WOS is designated as a D-SIB in India, it will be required to maintain D-SIB capital surcharge in India.

Other regulatory requirements applicable to D-SIBs

35. One of the recommendations of the FSB in their October 2010 paper² was that further regulatory measures including liquidity surcharges, tighter large exposure restrictions, etc. may also be effective in dealing with SIBs. RBI will consider implementing these measures for D-SIBs as and when international frameworks on these aspects are agreed to by BCBS. The implementation of these additional measures will depend on the internationally agreed timeline.

Interaction with the other elements of Basel III framework

Group treatment

36. For domestic banks, the computation of systemic importance scores will be done based on the data that relates to global consolidated balance sheet. For the purpose of consolidation, the provisions of regulatory consolidation will be used as required in the <u>circular DBOD. No. BP. BC. 72/21.04.018/2001-02 dated February 25, 2003</u>. However, for foreign banks, the computation of systemic importance will be done on the basis of data that relates to local consolidated balance sheet.³

Interaction with the capital conservation buffer

37. The higher CET1 requirements will be made applicable as an extension of capital conservation buffer. If a D-SIB is not able to meet the additional CET1 requirement, it will be subjected to restrictions on distribution of profits and other restrictions as applicable under the Basel III framework. For example, after the full implementation of D-SIB framework, a D-SIB falling in bucket 1 will be required to maintain a CET1 capital of 8.2% of RWAs if it does not want to have any restrictions on it with regard to dividend / capital distribution applicable under the capital buffer regime.

³ Para 16B(ii) of <u>circular DBOD. No. FSD.BC.46/24.01.028/2006-07 dated December 12, 2006.</u>

² http://www.financialstabilityboard.org/publications/r_101111a.pdf

Interaction with Pillar 2 requirements

38. To the extent a D-SIB has incorporated its systemic importance in its Internal Capital Adequacy Assessment Process (ICAAP); it will not be required to hold capital twice for the same risk during the Supervisory Review and Evaluation Process (SREP). However, additional capital by D-SIBs would not be counted towards non-systemic risks (for example, Interest Rate Risk in Banking Book, Credit Concentration Risk, etc.), which are normally captured under Pillar 2.

Supervisory Implications

39. One of the recommendations of the FSB in their October 2011 paper was that all national supervisory authorities should have the power to apply differentiated supervisory requirements and intensity of supervision to SIFIs based on the risks they pose to the financial system. The banks designated as D-SIBs will be subjected to more intensive supervision in the form of higher frequency and higher intensity of on- and off-site monitoring. It is also important that these banks should adopt sound corporate governance of risk and risk management culture.

Effective date of implementation

40. The higher capital requirements applicable to D-SIBs will be applicable from April 1, 2016 in a phased manner and would become fully effective from April 1, 2019. The phasing-in of additional common equity requirement will be as follows:

Bucket	April 1, 2016	April 1, 2017	April 1, 2018	April 1, 2019
5 (Empty)				
4	0.20%	0.40%	0.60%	0.80%
3	0.15%	0.30%	0.45%	0.60%
2	0.10%	0.20%	0.30%	0.40%
1	0.05%	0.10%	0.15%	0.20%

Disclosures

41. The names of the banks classified as D-SIBs will be disclosed in the month of August every year starting from 2015. RBI will also disclose the denominators for each category of indicators every year so that each and every bank is able to calculate its systemic importance score. RBI would also disclose the systemic importance score ranges of each bucket. This will help banks to compute their own systemic importance scores and would help in capital planning exercise. All banks forming part of the sample will be required to disclose the values for various indicators on an annual basis starting from financial year ending March, 2016 onwards in their annual reports.

Review of the Assessment Methodology

42. The assessment methodology for assessing the systemic importance of banks and identifying D-SIBs will be reviewed on a regular basis. However, this review will be at least once in three years. The review will take into consideration the functioning of the framework during the last three years, theoretical developments internationally in the field of systemic risk measurement and the experience of other countries in implementing the D-SIB framework and the methodology adopted by them.

BCBS Principles for dealing with Domestic Systemically Important Banks (D-SIBs)

Assessment methodology

Principle 1: National authorities should establish a methodology for assessing the degree to which banks are systemically important in a domestic context.

Principle 2: The assessment methodology for a D-SIB should reflect the potential impact of, or externality imposed by, a bank's failure.

Principle 3: The reference system for assessing the impact of failure of a D-SIB should be the domestic economy.

Principle 4: Home authorities should assess banks for their degree of systemic importance at the consolidated group level, while host authorities should assess subsidiaries in their jurisdictions, consolidated to include any of their own downstream subsidiaries, for their degree of systemic importance.

Principle 5: The impact of a D-SIB's failure on the domestic economy should, in principle, be assessed having regard to bank-specific factors:

- (a) Size;
- (b) Interconnectedness;
- (c) Substitutability/financial institution infrastructure (including considerations related to the concentrated nature of the banking sector); and
- (d) Complexity (including the additional complexities from cross-border activity).

In addition, national authorities can consider other measures/data that would inform these bank-specific indicators within each of the above factors, such as size of the domestic economy.

Principle 6: National authorities should undertake regular assessments of the systemic importance of the banks in their jurisdictions to ensure that their assessment reflects the current state of the relevant financial systems and that the interval between D-SIB assessments not be significantly longer than the G-SIB assessment frequency.

Principle 7: National authorities should publicly disclose information that provides an outline of the methodology employed to assess the systemic importance of banks in their domestic economy.

Higher loss absorbency

Principle 8: National authorities should document the methodologies and considerations used to calibrate the level of HLA that the framework would require for D-SIBs in their jurisdiction. The level of HLA calibrated for D-SIBs should be informed by quantitative methodologies (where available) and country-specific factors without prejudice to the use of supervisory judgement.

Principle 9: The HLA requirement imposed on a bank should be commensurate with the degree of systemic importance, as identified under Principle 5.

Principle 10: National authorities should ensure that the application of the G-SIB and D-SIB frameworks is compatible within their jurisdictions. Home authorities should impose HLA requirements that they calibrate at the parent and/or consolidated level, and host authorities should impose HLA requirements that they calibrate at the subconsolidated/subsidiary level. The home authority should test that the parent bank is adequately capitalised on a stand-alone basis, including cases in which a D-SIB HLA requirement is applied at the subsidiary level. Home authorities should impose the higher of either the D-SIB or G-SIB HLA requirements in the case where the banking group has been identified as a D-SIB in the home jurisdiction as well as a G-SIB.

Principle 11: In cases where the subsidiary of a bank is considered to be a D-SIB by a host authority, home and host authorities should make arrangements to coordinate and cooperate on the appropriate HLA requirement, within the constraints imposed by relevant laws in the host jurisdiction.

Principle 12: The HLA requirement should be met fully by Common Equity Tier 1 (CET1). In addition, national authorities should put in place any additional requirements and other policy measures they consider to be appropriate to address the risks posed by a D-SIB.

Data Requirements for computing the systemic importance score

A. Size

On-Balance sheet and Off-balance sheet size (same as exposure measure used for computing the Basel III leverage ratio)

B. Interconnectedness

Intra-Financial System Assets

- i. Lending to financial institutions (including undrawn committed lines)
 - a. All funds deposited with other financial institutions
 - b. Undrawn committed lines extended to other financial institutions
- ii. Holding of securities issued by other financial institutions
 - a. Debt Securities
 - b. Commercial Paper
 - c. Certificate of Deposit
 - d. Equity holdings
- iii. Gross Positive current exposure of Securities Financing Transactions (SFTs)
- iv. OTC derivatives with financial institutions
 - a. Gross Positive Fair Value
 - b. Potential Future Exposure
 - c. Fair Value of Collateral that is held with other financial institutions

Intra-Financial System Liabilities

- i. Deposits by financial institutions (including undrawn committed lines)
 - a. All funds deposited by banks
 - b. All funds deposited by non-bank financial institutions
 - c. Undrawn committed lines obtained from other financial institutions
- ii. Gross Negative current exposure of SFTs
- iii. OTC derivatives with financial institutions
 - a. Gross Negative Fair Value

- b. Potential Future Exposure
- c. Fair Value of collateral that is provided by other financial institutions

<u>Total Marketable Securities issued by the bank (segregated for residual maturity less</u> than one year and more)

- i. Debt Securities
- ii. Commercial Paper
- iii. Certificate of Deposit
- iv. Equity

C. Substitutability

- i. Assets under Custody
- ii. Payments made in INR using RTGS and NEFT systems
- iii. Value of underwritten transactions in the debt and equity markets

D. Complexity

- OTC Derivatives notional value segregated based on cleared through CCP and bilaterally cleared
- ii. Value of securities held for trading, available for sale and designated as fair value
- iii. Cross jurisdictional liabilities.

Note: For the purpose of data collection, all banks in the sample will be supplied an excel sheet and a document which would describe in detail the data requirements and the manner of reporting of data.