

South African Reserve Bank

Financial Stability Department

A methodology to determine which insurers are systemically important within the South African context

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1. Policy objective

The objective of this paper is to present a methodology for the identification of insurers that might be designated as systemically important financial institutions (SIFIs), in accordance with the requirements set out in the Financial Sector Regulation Act 9 of 2017 (FSR Act).

2. Policy rationale

In terms of section 29 of the FSR Act, the Governor of the South African Reserve Bank (SARB) may, by written notice to a financial institution, designate the institution as a SIFI. Prior to the designation, the Governor must give the Financial Stability Oversight Committee (FSOC) notice and provide reasons for the proposed designation. The FSOC should be invited to provide advice on the proposal within a specified period. If, after considering the FSOC's advice, the Governor proceeds to designate the financial institution as a SIFI, the financial institution should be invited to make submissions on the matter, within a reasonable period. The Governor must consider any submissions by the financial institution before making a final decision on the designation. In accordance with the FSR Act, the designation of a financial institution as a SIFI, or the revocation thereof, must be published.

Designation as a SIFI in terms of the FSR Act is a legally prescribed process of which the outcome is published, and which provides the SARB with the following additional powers and responsibilities to protect financial stability:

i. In terms of section 30 of the FSR Act, the SARB may, after consultation with the Prudential Authority (PA), direct that the PA impose additional requirements on SIFIs to mitigate the risk that systemic events may occur.

ii. Because the failure of institutions designated as SIFIs will, in all probability, have a more significant impact on financial stability, it will require the preparation of a detailed resolution plan (as per section 30 of the FSR Act) that involves more intrusive resolution powers.

iii. Section 31 of the FSR Act puts constraints on regulators when dealing with SIFIs, and the concurrence of the SARB is required prior to actions being taken in respect of a wind-up or similar steps.

The methodology presented in this paper has been developed to assist the Governor in fulfilling the requirements placed on him/her in designating an insurer[1] as a SIFI and to ensure consistency in designation, especially due to the potential impact that the designation as a SIFI could have on a financial institution.

The quantitative indicators included in the methodology do not capture all the considerations and potential risks, and the Governor may also apply judgement to designate an institution as a SIFI. In addition, if, in terms of section 29(4) of the FSR Act, the Governor has determined that a systemic event[2] has occurred or is imminent, he/she may designate a financial institution as a SIFI without complying, or without fully complying, with the requirements set out in section 29 of the FSR Act.

3. International approaches

The significant economic, financial and social costs associated with macroeconomic shocks (such as the global financial crisis and the COVID-19 pandemic), the resulting interventions, as well as the resulting increase in moral hazard have necessitated the implementation of additional measures to deal with the challenges that arose from the failure, or possible failure, of SIFIs.

The Financial Stability Board (FSB) has developed several policy measures to improve the resilience of the global financial system. Some of these policy measures are specifically aimed at SIFIs due to the negative externalities associated with these institutions, which have stemmed from the fact that the failure of SIFIs had significant negative impacts on the financial sector.

[1] The methodology described in this paper relates only to insurers. The methodology to determine which banks are SIFIs was published on the SARB website in June 2019. Methodologies for market infrastructures will be developed in due course, as international best practice and guidance are finalised.
[2] This is defined in section 14 of the FSR Act.

The objective of the enhanced policy measures is firstly aimed at reducing the probability that a SIFI will fail (e.g. through prudential regulation), and secondly ensuring that measures are in place to enable the effective resolution of a SIFI without having to use taxpayers' money while supporting the resilience of the financial system.

Because of the heightened potential systemic risk posed by SIFIs in instances where they either take on excessive risk or become non-viable, it is important that they are subject to enhanced supervision and have sufficient loss absorbency buffers and resolution plans in place.

The International Association of Insurance Supervisors (IAIS) has developed an indicator-based methodology to determine the global systemically important insurers (G-SIIs). The last G-SII designation was performed in 2016. Subsequently, the IAIS proposed to replace this methodology with a Holistic Framework to assess and mitigate systemic risk in the global insurance sector, recognising that systemic risk may arise from the collective activities or exposures of insurers at a sector-wide level, as well as from the distress or disorderly failure of individual insurers.

The key elements of the Holistic Framework include:

(i) Supervisory material

This is an enhanced set of supervisory policy measures for macroprudential purposes, designed to increase the overall resilience of the insurance sector and help prevent insurance sector vulnerabilities and exposures from developing into systemic risk. When a potential systemic risk is detected, supervisory powers of intervention enable a prompt and appropriate response.

(ii) Global monitoring exercise

An IAIS global monitoring exercise is designed to assess global insurance market trends and developments, and to detect the possible build-up of systemic risk in the global insurance sector. This includes a discussion at

the IAIS on the assessment of potential systemic risks and appropriate supervisory responses, at both an individual insurer and sector-wide level. The outcomes of the global monitoring exercise are reported to the FSB.

(iii) Implementation assessment

This refers to an IAIS assessment of the implementation of enhanced supervisory policy measures and powers of intervention.

The Holistic Framework, if consistently implemented, is expected to provide an enhanced basis for assessing and mitigating systemic risk in the insurance sector. The IAIS will share with the FSB an annual update of the outcomes of the global monitoring exercise, including the IAIS assessment of systemic risk in the global insurance sector and the supervisory response to identified risks, if any.

In light of the finalised Holistic Framework, the FSB, in consultation with the IAIS and national authorities, has decided to suspend G-SII identification from the beginning of 2020. In November 2022, the FSB will review whether to re-establish the annual identification of G-SIIs, based on the outcomes of the initial years of implementation of the Holistic Framework, and in consultation with the IAIS and national authorities.

It should, however, be recognised that the IAIS still uses an assessment methodology to measure systemic risk. The indicators used in this assessment methodology are consistent with the indicators used in the global systemically important banks (G-SIBs) methodology, although they have been adapted for insurance business.

4. South Africa's approach

The methodology presented in this paper is based on the requirements of the FSR Act, guidance by the FSB and the IAIS, as well as the approach followed to identify G-SIBs[3].

[3] G-SIB revised assessment methodology

In terms of the FSR Act, specifically section 29(3)(a)-(g), the Governor must take the following indicators into account:

i. the size of the financial institution;
ii. the complexity of the financial institution and its business affairs;
iii. the interconnectedness of the financial institution with other financial institutions, both within and outside the Republic;
iv. whether there are readily available substitutes for the financial products and services that the financial institution provides;
v. the recommendations made by the FSOC;
vi. any submissions made by or for the financial institution concerned; and
vii. any other matters prescribed by the Regulations made in terms of the FSR Act.

The IAIS indicators utilised to assist in the evaluation of systemic risk are in line with the Basel Committee on Banking Supervision's (BCBS) G-SIB methodology. The approach presented in this paper uses categories similar to those used to determine G-SIBs, but the sub-indicators of each category have been aligned to better fit the insurance business in South Africa.

The following weights are applied to the indicators specified in the FSR Act:

Table 1: Indicators and weightings

Indicator	Weighting
Size	40%
Interconnectedness	30%
Substitutability	20%
Complexity	10%

Each broad indicator is composed of various sub-indicators. Due to the differences in their business models, the indicators distinguish between life and non-life insurers. The weightings of the sub-indicators have been adapted to reflect their relevance to either life or non-life insurers. In cases where certain indicators are irrelevant to a business model, their weightings have been reduced to zero.

Each broad indicator and its sub-indicators are discussed below.

4.1 Indicator 1: Size (weighting: 40%)

The larger an institution:

- the more likely that its failure will negatively impact on the economy, financial markets and confidence in the insurance industry;
- the more likely it is interconnected to other financial institutions, increasing the risk of contagion;
- the more difficult it will be to transfer its book(s) of business to other insurers (i.e. any one insurer might not have the capacity to absorb a whole book); and
- the higher the number of policyholders and employees that may be detrimentally affected by its failure.

The sub-indicators used to measure size are:

(i) Total assets

The value of total assets is a relevant indicator of size for life insurers, as it reflects the amount of assets that the insurer invests in to meet its future insurance obligations. However, this indicator is not used for non-life insurers, because non-life insurers do not build up an asset base the same way as life insurers do, and would therefore never score high in terms of size compared to the life industry. This does not imply that asset size is irrelevant for non-life insurers; it simply means that premiums constitute a better measure of size for non-life insurers. The methodology was built in such a way that it can measure the two vastly different businesses, being life and non-life insurers.

(ii) Gross written premiums

Total gross written premiums (GWP) is a measure of size more appropriately used for non-life insurers, since such insurers do not build up much of an asset base compared to life insurers, and because the

premiums written can fluctuate more from year to year and thus reflect the changes in the size of non-life insurers. GWP is also considered to be more reflective of systemic importance as it is a proxy for the risk accepted by a financial institution. For life insurance, a lump-sum premium (single non-recurring premium) can be paid which provides cover for a substantial period, and this might result in the insurer having a large premium included in its Solvency Assessment and Management (SAM) income during one period and little to no premiums the following period, thus influencing profitability. For this reason, GWP and profit is not used as a measure of size for life insurers.

(iii) Profit before tax (in terms of SAM)

Profitability is an indicator supplemental to GWP to determine the size of non-life insurers. Profitability adds another dimension to the determination of the size of a non-life insurer by considering the significance of its earnings, which ultimately contribute to the financial position of its shareholders. This sub-indicator is not utilised when determining the size component for life insurers for the same reason as stated under point (ii).

(iv) Number of individual policies

The number of policies is an indication of size. An insurer's size should not only be measured by assets or GWP, but also by how many policies it holds. This indicator is appropriate for both life and non-life insurers.

(v) Number of group schemes

A group scheme is a single policy providing cover for a number of individuals. It is therefore necessary to assess the number of group schemes as a separate indicator of size for life insurers only, as non-life insurers do not have group policies.

4.2 Indicator 2: Interconnectedness (weighting: 30%)

The degree to which a financial institution is interconnected or interlinked to other parts of the financial system determines the channels through which, and the speed at which, any distress can spread to the rest of the system. Interconnectedness is measured through the insurer's exposure to other financial institutions.

The sub-indicators used to measure interconnectedness are:

(i) Derivatives

This measure indicates the degree of the financial institution's interconnectedness with the financial system based on the value of derivatives with no offsetting between positive and negative values.

(ii) Gross written premiums ceded / outwards reinsurance

GWP ceded, or outwards reinsurance, is when the insurance company mitigates the insurance risk by obtaining insurance from a third party, in other words from a reinsurer or another insurer. Premiums ceded to reinsurers indicate the interconnectedness within the insurance industry, where reinsurers could be locally domiciled or outside of the Republic.

(iii) Intra-financial system assets

The amounts of lending to financial institutions and holding of securities issued by financial institutions indicate the possible impact on the financial system should an insurer fail, for example as a result of a possible fire sale of assets.

(iv) Intra-financial system liabilities

The amounts owed to other financial institutions indicate the degree to which the failure of, or a default by, an insurer could impact on those with

exposures to it. These liabilities include loans, overdrafts, and derivatives with negative values.

(v) Reinsurance

This indicator measures the degree of interconnectedness within the insurance sector through reinsurance transactions. Both the ceded premiums (see above) and the reinsurance recoverables are used to measure interconnectedness, using a similar rationale as for the size indicator. This indicator captures the reinsurance interconnectedness based on the size of the asset that is created as a result of these arrangements.

4.3 Indicator 3: Substitutability (weighting: 20%)

The degree of substitutability of the products and services that a financial institution provides affects its systemic importance. The lower the substitutability of its products and services, the more systemically important a financial institution becomes, especially if the products and services are deemed to be critical to the functioning of the wider economy.

For the sub-indicators of substitutability, the methodology measures the number of lines of business where the insurer has more than 20% of the market share for that specific line of business.

The sub-indicators used to measure substitutability are:

(i) Gross written premiums per business line
This indicates the degree of a lack of substitutability of insurers using premiums as a measure.

(ii) Best-estimate liabilities per business line
This indicates the degree of a lack of substitutability of insurers using liabilities as a measure.

4.4 Indicator 4: Complexity (weighting: 10%)

The systemic impact of an insurer's failure is influenced by the complexity of its business model, organisational and group structure, and operating model. The greater a financial institution's complexity, the more difficult it becomes to resolve it in failure, and the disruption to the financial sector could therefore be more severe.

The sub-indicators used to measure complexity are:

(i) Number of lines of business for life insurance

The more business lines an insurer writes, the more complex it will be, for various reasons, such as a wider variety of risk exposures, risk appetites and system requirements.

(ii) Number of lines of business for non-life insurance

The same reasoning as above applies, separated for non-life insurers.

(iii) Number of cells

An insurer can be licensed as a cell captive insurance company where the insurance business is conducted through cell structures. A cell structure is a contractual ring-fenced arrangement whereby the insurance business in the cell is contractually ring-fenced from any other business of the insurer for as long as the insurer is a going concern. The cell owner holds specific shares in the insurer (i.e. for this cell structure arrangement), and shares in the profit and losses of the cell structure. As these cell structures are operationally ring-fenced and treated as independent 'small insurers', the more of these there are to administer by the cell captive insurer, the more complex it is likely to be.

The tables below indicate which sub-indicators were used for the different types of insurance business.

Table 2: Sub-indicators for the size, interconnectedness and substitutability categories

Category	Indicator	Composite	Life	Non-life
Size (40%)	Total assets	✓	✓	
	IFRS profit before tax	✓		✓
	Gross written premiums	✓		✓
	Number of individual policies		✓	✓
	Number of group schemes	✓	✓	
Interconnectedness (30%)	Derivatives	✓	✓	✓
	Gross written premiums ceded	✓	✓	✓
	Intra-financial system assets	✓	✓	✓
	Intra-financial system liabilities	✓	✓	✓
	. Reinsurance life	✓	✓	
	. Reinsurance non-life	✓		✓
Substitutability (20%)	. Gross written premiums per business line	✓	✓	✓
	Best-estimate liabilities per business line	✓	✓	✓

Table 3: Sub-indicators for the complexity category

Complexity (10%)	Indicator	Comp. reins.	Life cell cap.	Life micro-insurer	Life primary	Life reinsurer	Non-life cap.	Non-life cell cap.	Non-life Lloyd's	Non-life primary	Non-life reins.
	Number of lines of business for life insurance	✓	✓	✓	✓	✓					
	Number of lines of business for non-life insurance	✓					✓	✓	✓	✓	✓
	Number of cells		✓					✓			

The reasons for not using some of the sub-indicators for different types of insurance business are briefly discussed below, per main category.

(i) Size

This indictor has a number of sub-indicators, as shown in Table 2 above, where different sub-indicators apply to different types of insurance business. The usage of the sub-indicators is indicative of the differences between the various types of insurance business, where scoring life and non-life insurance together for the size indicator will not produce the desired outcome due to the inherent differences in the characteristics of the businesses. For example, non-life insurers have much fewer assets than life insurers in general, and will therefore typically not score high for this indicator, which might misrepresent the insurer's systemic importance in relation to the type of insurance it writes.

(ii) Interconnectedness

In this category, there are two sub-indicators for reinsurance: one makes reference to life insurance and the other to non-life insurance. The one referencing life insurance will thus not be used for non-life insurers, and vice versa.

(iii) Complexity

The complexity indicator has three sub-indicators broken down into different types of insurance companies. The split allows for the calculation of the complexity score for an insurer relative to similar insurers. Different sub-indicators are used for different types of insurers, for example: a primary insurer does not conduct cell business, and the number of cells sub-indicator will therefore not be used for primary insurers.

5. The Governor's judgement

No quantitative methodology is able to capture all the potential elements of systemic risk posed by a financial institution. Regulators and supervisors have qualitative information available about the industry and/or the insurers that cannot be quantified in a methodology. For example, insurers may perform functions that are not easily substitutable or transferable, and without these functions there would be a spillover effect to the wider economy to the extent that these are deemed to be systemic. Yet, in the overall aggregated score, these specific risks may not show. Alternatively, there may be potential sources of systemic risk for which there are no quantitative indicators readily available, for example the degree of social, industry or geographic concentration of activities that may be high enough to have a systemic impact.

Because the weightings and aggregation used in a numerical methodology can never accurately reflect the real world, there may be instances where the overall score for an institution underestimates its actual systemic importance. Therefore, there should be room for the Governor to apply judgement to ensure that all areas and risks are sufficiently considered. It is important to note that the FSR Act neither prescribes that the Governor should develop a methodology nor suggests that the Governor, in making his/her decision, should make a determination according to a methodology. The methodology merely serves as a guide for decision making. Section 29 of the FSR Act provides the Governor with the ability to use his/her discretion when making the determination.

However, the judgement applied by the Governor cannot be fully discretionary and should still be economically justifiable. For example, an institution might be identified as systemically important due to a single factor, such as interconnectedness. However, when combined with a variety of other indicators, the overall score might not indicate systemic significance. If the Governor is of the view that a single indicator carries sufficient weight to justify designation as a SIFI, judgement may be applied accordingly.

Some of the additional elements that might be considered when applying judgement as to whether or not to designate an institution as a SIFI include, but are not limited to, the following:

i. the complexity of the group structure and the possible contagion effect that the failure of the insurer might have on the wider group and ultimately on financial stability;
ii. being owned by, or owning, a designated institution, as defined in the Financial Sector Laws Amendment Bill;
iii. the reaction of investors, policyholders and the broader financial system in the event of a failure;
iv. possible reputational impact which might influence the wider financial sector;
v. the geographical area serviced and the possibility of a suitable substitute;
vi. the products provided and the possibility of a suitable substitute;
vii. the services provided and the possibility of a suitable substitute;
viii. the number of clients and employees of the institution; and
ix. possible negative perception from an international market perspective.

6. Methodologies adopted by other jurisdictions

No other country has, to date, disclosed a methodology to determine domestic systemically important insurers (D-SIIs), mainly because the process to identify G-SIIs has not been finalised and international standard-setters have not issued firm guidance on a methodology to identify D-SIIs.

The main reason why South Africa has developed a methodology is to support the SARB's responsibilities in terms of the FSR Act. The methodology can also expanded once other jurisdictions disclose their approaches.

7. Periodic review and refinement

The methodology will be reviewed whenever there is a significant change in the international guidance or in the information made available to the SARB. There is no fixed interval at which a designation by the Governor should be made.

8. Public disclosure

In terms of the FSR Act, both the designation and the revocation of a designation as a SIFI must be published.

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Abbreviations

BCBS	Basel Committee on Banking Supervision
D-SII	domestic systemically important insurer
FSB	Financial Stability Board
FSOC	Financial Sector Oversight Committee
FSR Act	Financial Sector Regulation Act 9 of 2017
G-SIB	global systemically important bank
G-SII	global systemically important insurer
GWP	gross written premiums
IAIS	International Association of Insurance Supervisors
IFRS	International Financial Reporting Standards
PA	Prudential Authority
SAM	Solvency Assessment and Management
SARB	South African Reserve Bank
SIB	systemically important bank
SIFI	systemically important financial institution