

# Capital and risk management report

## Capital management

### Objective

Responsible capital management and allocation are an essential component of meeting the Group's strategic objective of shared value creation for all stakeholders, including maximising shareholder value. The capital value used by the Group as the primary performance measurement base is Group Equity Value (GEV), as reported on page 75 of the Integrated Report. The management of the Group's capital base requires a continuous review of optimal capital levels, including the use of alternative sources of funding, to maximise return on GEV (RoGEV) and ensure appropriate solvency levels as a safeguard to clients and regulators. The Group has an integrated capital and risk management approach. The amount of capital required by the various businesses is directly linked to their exposure to financial and operational risks. Accordingly, risk management is an important component of responsible capital management and allocation.

### Capital allocation methodology

Group businesses are each allocated an optimal level of capital and are measured against appropriate return hurdles.

The methodology used to determine the allocation of required capital to South African covered business changed at the end of 2016 to allow for the anticipated introduction of the new Solvency Assessment and Management (SAM) regime, which will replace the current Financial Soundness Valuation (FSV) regime.

At the end of 2016 the Group set an appropriate level of required capital for Sanlam Life's covered business under SAM, based on a SAM Solvency Capital Requirement (SCR) targeted cover range of between 1,7 times and 2,1 times over a 10-year projection period. At the lower end of the range, Sanlam Life's covered business should be able to withstand two economic shock scenarios before reaching the minimum 1 times SCR cover. A similar methodology was followed to set ranges for the other South African life insurers. The revised approach remains aligned with the overarching principle to set the level and nature of the supporting capital taking cognisance of minimum regulatory capital requirements, as well as economic, risk and growth considerations. For the non-South African life insurers, the Group sets supporting capital levels as a multiple of their respective regulatory capital adequacy requirements.

The fair value of other Group operations includes the working capital allocated to the respective operations.

The Group's approach to ensure appropriate working capital levels in these operations is twofold:

- The Group's internal dividend policy is based on the annual declaration of all discretionary capital by subsidiaries that is not required for normal operations or expansion; and
- Performance targets are set for other Group operations based on an expected return on the fair value of the businesses, equal to their internal hurdle rates. This ensures that all non-productive working capital is declared as a dividend to the Group.

### Capital management

#### Covered business (life insurance operations)

The Group's covered business requires significantly higher levels of allocated capital than the other Group operations. The optimisation of long term required capital is accordingly a primary focus area of the Group's capital management philosophy given the significant potential to enhance shareholder value, while maintaining appropriate solvency levels. The following main strategies are used to achieve this objective:

- Appropriate matching of assets and liabilities for policyholder solutions. This is especially important for long-duration policyholder solutions that expose the Group to interest rate risk, such as non-participating annuities.
- Managing the impact of new business on capital requirements by limiting volumes of capital-intensive new business.
- The asset mix of the long-term required capital, as well as estate reserves in the policyholder portfolios also impact the overall capital requirement. An increased exposure to hedged equity and interest-bearing instruments reduces the volatility of the capital base and accordingly also the capital requirement. Over the longer term, the expected investment return on these instruments is, however, lower than equity with a potential negative impact on RoGEV. Consequently, there is a trade-off between lower capital levels and the return on capital. The Group's balance sheet management function uses stochastic modelling and the impact on required capital to determine the optimal asset mix in this regard.
- The optimal use of long-term debt in the life insurance operations' capital structure.
- Utilisation of capital diversification benefits, when deemed necessary, whereby the capital requirements of insurance entities can be partly covered by investments

in other Group operations, within the limits available in the particular regulatory regime.

- Management of operational risk: internal controls and various other operational risk management processes are used to reduce operational risk and commensurately the allowance for this risk in the calculation of required capital.

The Group continues to improve and further develop its capital management models and processes in line with international best practice.

### Other Group operations

The performance measurement of other Group operations is based on the return achieved on the fair value of the businesses. Risk-adjusted return targets are set for the businesses to ensure that each business' return target takes cognisance of the inherent risks of the business. This approach ensures that the management teams are focused on operational strategies that will optimise the return on fair value, thereby contributing to the Group's main objective of optimising RoGEV.

### Group Estate committee

The Group Estate committee, an internal management committee, is responsible for reviewing and overseeing the management of the Group's shareholders capital base (inclusive of the estate reserves) in terms of the specific strategies approved by the Board.

### Discretionary capital

Any capital in excess of requirements, and not optimally utilised, is identified on a continuous basis. The pursuit of structural growth initiatives has been set as the preferred application of Group capital, subject to such initiatives yielding the applicable hurdle rate and being complementary to or in support of Group strategy. Any discretionary capital not efficiently redeployed will be returned to shareholders in the most effective form.

### Capital adequacy – current FSV regime

For regulatory purposes, capital adequacy for the South African operations is measured with reference to the cover provided by the Group's prudential regulatory capital in relation to the Capital Adequacy Requirements as specified by the FSV regime. It is expected that the current FSV regime will be replaced by the SAM regime during the course of 2018. The capital adequacy of Sanlam Investments and Pensions, the Group's life insurance operations in the United Kingdom (UK), is measured in terms of the Prudential Regulation Authority's guidelines in the UK, which are materially in line with SAM.

The valuation of assets and policy liabilities for prudential capital adequacy purposes is generally in line with the methodology for the published results. Some adjustments are, however, required, as set out below.

### Reinsurance

Policy liabilities are valued net of reinsurance and the reinsurance asset is eliminated.

### Investment contracts with investment management services

The liabilities are set equal to the retrospectively accumulated fair value of the underlying assets less the deferred acquisition cost (DAC) asset in the case of individual business. These retrospective liabilities are higher than the prospective liabilities calculated as the present value of expected future benefits and expenses less future premiums at the relevant discount rates. The DAC asset is disregarded for prudential capital adequacy purposes.

### Group undertakings and inadmissible assets

The value of assets is reduced by taking into account the prescribed valuation bases for Group undertakings and to eliminate inadmissible assets (as defined in the relevant prudential regulations).

### Capital Adequacy Requirements (CAR)

The excess of assets over liabilities of life insurance operations on the prudential regulatory basis should be sufficient to cover the CAR in terms of the relevant local regulations, as well as professional practice notes issued by the Actuarial Society in South Africa and the Board of Actuarial Standards in the UK. The CAR provides a buffer against experience worse than that assumed in the valuation of assets and liabilities.

On the valuation date, the ordinary CAR was used for the South African operations as they exceeded the termination and minimum CAR.

The largest element of the CAR relates to stabilised bonus business. Consistent with an assumed fall in the fair value of the assets (the "resilience scenario"), which is prescribed in the actuarial practice notes, the calculation of the CAR takes into account a reduction in non-vesting bonuses and future bonus rates and for the capitalisation of some expected future profits (resulting from discretionary margins in the valuation basis and held as part of the liabilities).

At 31 December 2017, the resilience scenario assumes that:

- equity values decline by 30%;
- property values decline by 15%;

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(continued)

- fixed-interest yields and inflation-linked real yields increase or decrease by 25% of the nominal or real yields (whichever gives the highest total capital adequacy requirements); and
- assets denominated in foreign currencies decline by at least 20% on the valuation date,

and do not subsequently recover within the short-term.

Provision is made for credit and operational risk in the calculation of the CAR.

The excess of the actuarial values of assets over liabilities is disclosed in the table below. The values disclosed for Sanlam Life capture the material solvency position of the entire Sanlam Life Group, including its subsidiaries. Sanlam Investments and Pensions is the only life insurance company in the Group that is not a subsidiary of Sanlam Life, and its solvency position is therefore shown separately. All subsidiaries of Sanlam Life were adequately capitalised.

R million	Sanlam Life Insurance Limited		Sanlam Investments and Pensions UK Limited	
	2017	2016	2017	2016
<b>Assets</b>				
Fair value of assets	514 397	469 894	46 766	44 065
Less: Liabilities	421 021	386 028	46 276	43 628
Actuarial value of policy liabilities	401 332	370 414	45 470	42 827
Investment contracts	263 776	232 587	41 158	38 483
Insurance contracts	137 556	137 827	4 312	4 344
Long-term and current liabilities	19 689	15 614	806	801
<b>Excess of assets over liabilities for financial reporting</b>	<b>93 376</b>	<b>83 866</b>	<b>490</b>	<b>437</b>
Adjustment for prudential regulatory purposes	(46 685)	(39 127)	673	598
Adjustment for Group undertakings				
Sanlam Investment Management	(3 839)	(3 890)	-	-
Santam	(11 612)	(10 136)	-	-
SDM Limited	(8 270)	(7 228)	-	-
SEM Pty Limited	(9 331)	(6 191)	-	-
Capital requirements of life insurance subsidiaries, adjusted for minority interests	(1 426)	(2 408)	-	-
Inadmissible assets	(798)	(807)	-	-
Other	(11 409) <sup>(1)</sup>	(8 467) <sup>(1)</sup>	673	598
Unsecured subordinated debt	2 216	2 198	-	-
Excess of assets over liabilities for prudential regulatory purposes	48 907	46 937	1 163	1 035
<b>Capital adequacy requirements</b>				
Capital adequacy requirements (CAR) before management actions	15 650	16 250	815	770
Management actions assumed	(7 275)	(8 100)	-	-
Reduction in future bonus rates	(4 398)	(4 996)	-	-
Reduction in non-vested bonuses	(783)	(751)	-	-
Capitalisation of a portion of expected future profits held as discretionary margins	(960)	(610)	-	-
Reduction in grossing up of the assets covering CAR and other	(1 134)	(1 743)	-	-
<b>CAR after management actions assumed</b>	<b>8 375</b>	<b>8 150</b>	<b>815</b>	<b>770</b>
Times CAR covered by excess of assets over liabilities for prudential regulatory purposes	5,8	5,8	1,4	1,3

<sup>(1)</sup> Includes write-down of Sanlam Limited treasury shares of R10 124 million (2016: R7 319 million).

## Capital adequacy under SAM

The following table summarises the SAM solo position for Sanlam Life Insurance Limited as at 31 December 2017.

### SAM solo solvency position

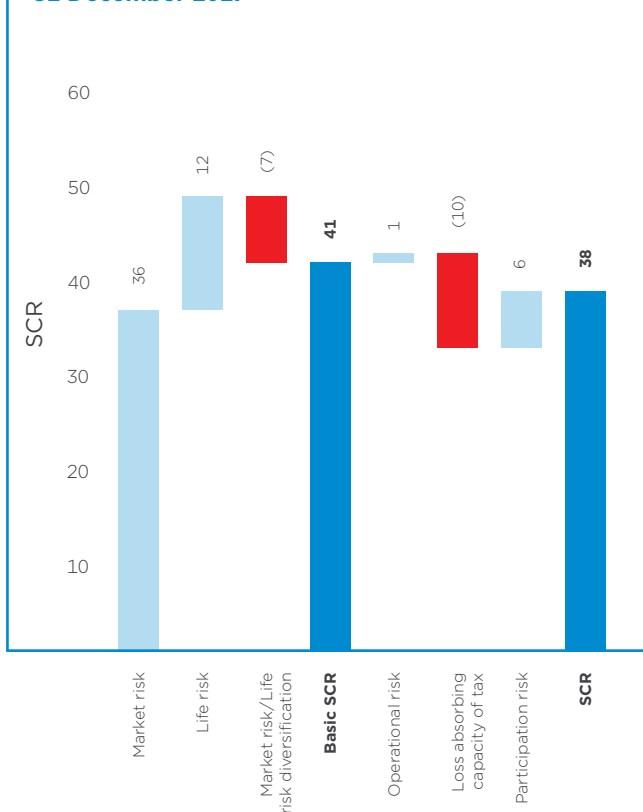
R million	Sanlam Life Insurance Limited			
	2017		2016	
	IFRS <sup>(4)</sup>	SAM	IFRS	SAM
Total assets	511 494	502 450	469 238	461 043
Total liabilities	(418 118)	(387 912)	(385 372)	(358 033)
Shareholders' fund/basic own funds	93 376	114 538	83 866	103 010
Adjustments	-	(10 124)	-	(10 248)
Investment in financial and credit institutions	-	-	-	(2 929)
Treasury shares	-	(10 124)	-	(7 319)
<b>Own funds eligible to meet SCR</b>	<b>93 376</b>	<b>104 414</b>	83 866	92 762
<b>SCR</b>		<b>38 113</b>		30 298
<b>SCR cover</b>		<b>2,74</b>		3,06

<sup>(4)</sup> The valuation of IFRS total assets and liabilities is disclosed in accordance with the SAM Financial Soundness Standards.

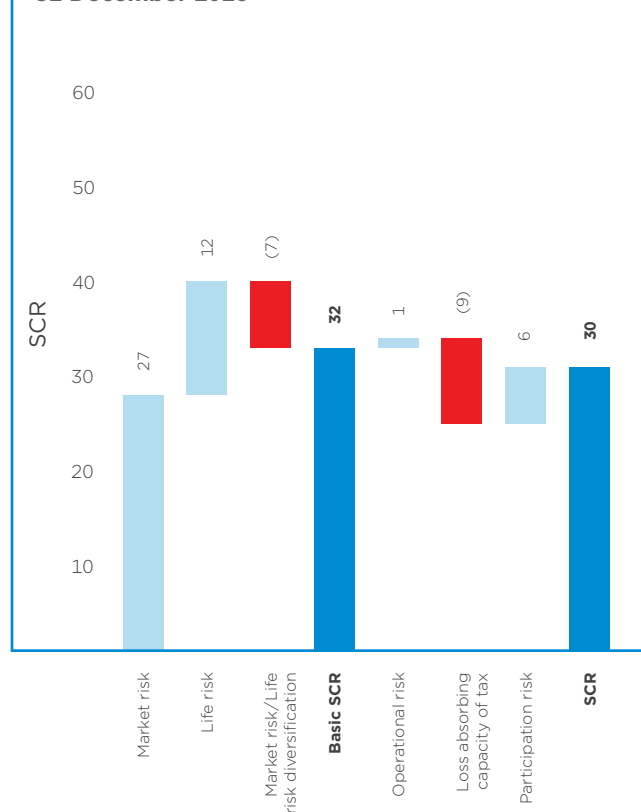
The Group uses the Standard Formula SCR calculation to determine Sanlam Life's solo solvency cover. Although the SAM subordinate legislation has not been promulgated, Sanlam has been submitting solo results to the FSB on a quarterly basis since the second half of 2014. The decline in the SCR cover ratio in 2017 is attributable to changes in the specifications on how participations (subsidiaries, associates, joint ventures) are treated for own funds purposes, as well as a more severe shock scenario for equities and participations based on the higher level of equity markets at the end of 2017 relative to 31 December 2016. The table below shows Sanlam Life's solo SCR under SAM as at 31 December 2017. The calculations have been based on Sanlam's interpretation of the latest available SAM technical specifications

#### Sanlam Life SCR components (R billion)

##### 31 December 2017



##### 31 December 2016



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(continued)

The following table includes a build-up of Sanlam Life's solo SCR cover between covered business and non-covered business as at 31 December 2017.

## Analysis of SAM solvency position

R million	31 December 2017		SCR	SCR cover times
	IFRS	SAM		
<b>Covered business</b>	<b>9 709</b>	<b>37 829</b>	<b>16 212</b>	<b>2,3</b>
Policyholders' fund	-	25 904		
Assets backing policyholder liabilities	402 064	400 180		
<i>Net investment assets</i>	401 664	400 180		
<i>Deferred acquisition cost - policyholders</i>	400	-		
Policyholder liabilities	(402 064)	(374 276)		
<i>Long-term policy liabilities</i>	(401 332)	(363 470)		
<i>Deferred tax - policyholders' fund</i>	(732)	(10 806)		
Required capital	9 500	9 500		
Net subordinated debt	43	2 259		
<i>Subordinated debt liabilities</i>	(2 216)	-		
<i>Assets backing subordinated debt</i>	2 259	2 259		
Working capital and other	166	166		
<i>Working capital assets</i>	4 332	6 713		
<i>Deferred acquisition cost - shareholders</i>	2 381	-		
<i>Working capital liabilities</i>	(6 547)	(6 547)		
<b>Participations</b>	<b>78 586</b>	<b>62 198</b>	<b>19 257</b>	<b>3,2</b>
Financial and credit institutions	7 806	3 633		
<i>Sanlam Investment Management</i>	4 633	887		
<i>Sanlam Personal Loans</i>	1 228	801		
<i>Shriram Transport Finance Company</i>	1 942	1 942		
<i>Other</i>	3	3		
Strategic insurance participations	31 406	30 050		
<i>Santam</i>	18 108	18 108		
<i>Sanlam Developing Markets</i>	10 550	9 885		
<i>Sanlam Namibia<sup>(1)</sup></i>	-	-		
<i>Other</i>	2 748	2 057		
Other strategic participations	29 250	28 515		
<i>Sanlam Emerging Markets<sup>(1)</sup></i>	27 750	27 750		
<i>Other</i>	1 500	765		
Treasury shares	10 124	-		
<b>Intangible assets</b>	<b>896</b>	<b>-</b>		
Goodwill	753	-		
Other intangible assets	143	-		
<b>Other net assets</b>	<b>4 185</b>	<b>4 387</b>	<b>2 644</b>	<b>1,7</b>
Deferred tax - shareholders' fund	(1)	201		
Discretionary capital	1 074	1 074		
Dividend allowance	2 651	2 651		
Other capital	461	461		
<b>Shareholders' fund/Own funds eligible to meet SCR</b>	<b>93 376</b>	<b>104 414</b>	<b>38 113</b>	<b>2,7</b>

<sup>(1)</sup> Sanlam Namibia transferred from Sanlam Life Insurance Limited to Sanlam Emerging Markets.

## Analysis of SAM solvency position

R million	31 December 2016		SCR	SCR cover times
	IFRS	SAM		
<b>Covered business</b>	10 034	35 204	15 977	2,2
Policyholders' fund	-	22 972		
Assets backing policyholder liabilities	371 082	369 116		
<i>Net investment assets</i>	370 682	369 116		
<i>Deferred acquisition cost – policyholders</i>	400	-		
Policyholder liabilities	(371 082)	(346 144)		
<i>Long-term policy liabilities</i>	(370 414)	(336 543)		
<i>Deferred tax – policyholders' fund</i>	(668)	(9 601)		
Required capital	10 000	10 000		
Net subordinated debt	36	2 234		
<i>Subordinated debt liabilities</i>	(2 198)	-		
<i>Assets backing subordinated debt</i>	2 234	2 234		
Working capital and other	(2)	(2)		
<i>Working capital assets</i>	3 820	6 172		
<i>Deferred acquisition cost – shareholders</i>	2 352	-		
<i>Working capital liabilities</i>	(6 174)	(6 174)		
<b>Participations</b>	64 468	48 900	12 785	3,8
Financial and credit institutions	7 074	-		
<i>Sanlam Investment Management</i>	4 592	-		
<i>Sanlam Personal Loans</i>	1 161	-		
<i>Shriram Transport Finance Company</i>	1 162	-		
<i>Other</i>	159	-		
Strategic insurance participations	30 399	29 797		
<i>Santam</i>	15 868	15 868		
<i>Sanlam Developing Markets</i>	9 383	9 269		
<i>Sanlam Namibia</i>	3 175	3 175		
<i>Other</i>	1 973	1 485		
Other strategic participations	19 676	19 103		
<i>Sanlam Emerging Markets</i>	18 437	18 437		
<i>Other</i>	1 239	666		
Treasury shares	7 319	-		
<b>Intangible assets</b>	909	-		
Goodwill	753	-		
Other intangible assets	156	-		
<b>Other net assets</b>	8 455	8 658	1 536	5,6
Deferred tax – shareholders' fund	-	203		
Discretionary capital	550	550		
Dividend allowance	2 610	2 610		
Other capital	5 295	5 295		
<b>Shareholders' fund/Own funds eligible to meet SCR</b>	<b>83 866</b>	<b>92 762</b>	<b>30 298</b>	<b>3,1</b>

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The Sanlam Group solvency ratio was 2,2 times at 31 December 2017, in line with the ratio at the end of 2016.

## Sensitivity analysis: SAM solvency position as at 31 December 2017

<b>Sanlam Life</b> R million	<b>Available capital resources</b>	<b>SCR</b>	<b>Surplus</b>	<b>SCR cover</b>
<b>Base position</b>	104 414	38 113	66 301	274%
Equities -30%	80 693	28 243	52 450	286%
Equities -10%	96 607	33 245	63 362	291%
Interest rates -1%	105 606	38 550	67 056	274%
Credit spreads +1%	104 204	38 482	65 722	271%
ZAR appreciation 10%	103 783	38 327	65 456	271%
Shock scenario <sup>(1)</sup>	77 473	28 344	49 129	273%

<b>Sanlam Group</b> R million	<b>Available capital resources</b>	<b>SCR</b>	<b>Surplus</b>	<b>SCR cover</b>
<b>Base position</b>	83 504	38 260	45 244	218%
Equities -30%	76 202	35 596	40 606	214%
Equities -10%	81 218	36 464	44 754	223%
Interest rates -1%	85 104	38 560	46 544	221%
Credit spreads +1%	82 371	38 293	44 078	215%
ZAR appreciation 10%	81 166	37 600	43 566	216%
Shock scenario <sup>(1)</sup>	72 795	34 558	38 237	211%

<sup>(1)</sup> Equities decline by 30% and implied equity volatility increases by 25%  
 Property values decline by 15%  
 Fixed interest yields and inflation-linked real yields increase or decrease by 25% of the nominal or real yields  
 Emerging market currencies decline by 20% against developed market currencies  
 Credit spreads widening by 1%

## Credit rating

Standard & Poor's (S&P) issued the following ratings for Group companies during 2017:

	<b>Most recent ratings issued</b>
Sanlam Limited	South Africa National Scale: zaA
Sanlam Life Insurance Limited	South Africa National Scale: zaAA+
Subordinated debt issued by Sanlam Life Insurance Limited	South Africa National Scale: zaA
Santam Limited	South Africa National Scale: zaAA+

Group solvency is determined by applying the deduction and aggregation method as specified in the SAM specifications. Entities are included at the following values as per the current SAM specifications:

- South African insurers: Available capital resources (ACR) and SCR are based on SAM values. In respect of Santam, a prudent approach was followed by not including the Santam surplus capital, thereby effectively including it at a 1 times cover ratio.
- Non-South African insurers regulated in an equivalent jurisdiction: Local statutory resources and capital requirements are used (at present only applicable to the United Kingdom for Sanlam).
- Non-South African insurers regulated in a non-equivalent jurisdiction: Adjusted IFRS net asset value for ACR, and the maximum of local and SAP104 capital requirements for SCR.
- Regulated banks and credit institutions: Regulatory capital resources and capital requirements as per the Basel III framework.
- Other regulated entities: Regulated entities (other than insurers, banks and credit institutions) that have regulations prescribing capital resources and capital requirements may be included at these values.
- Where no capital resources and capital requirements are prescribed: Adjusted IFRS net asset value for ACR and a SCR equal to a SAM equity stress on the ACR.

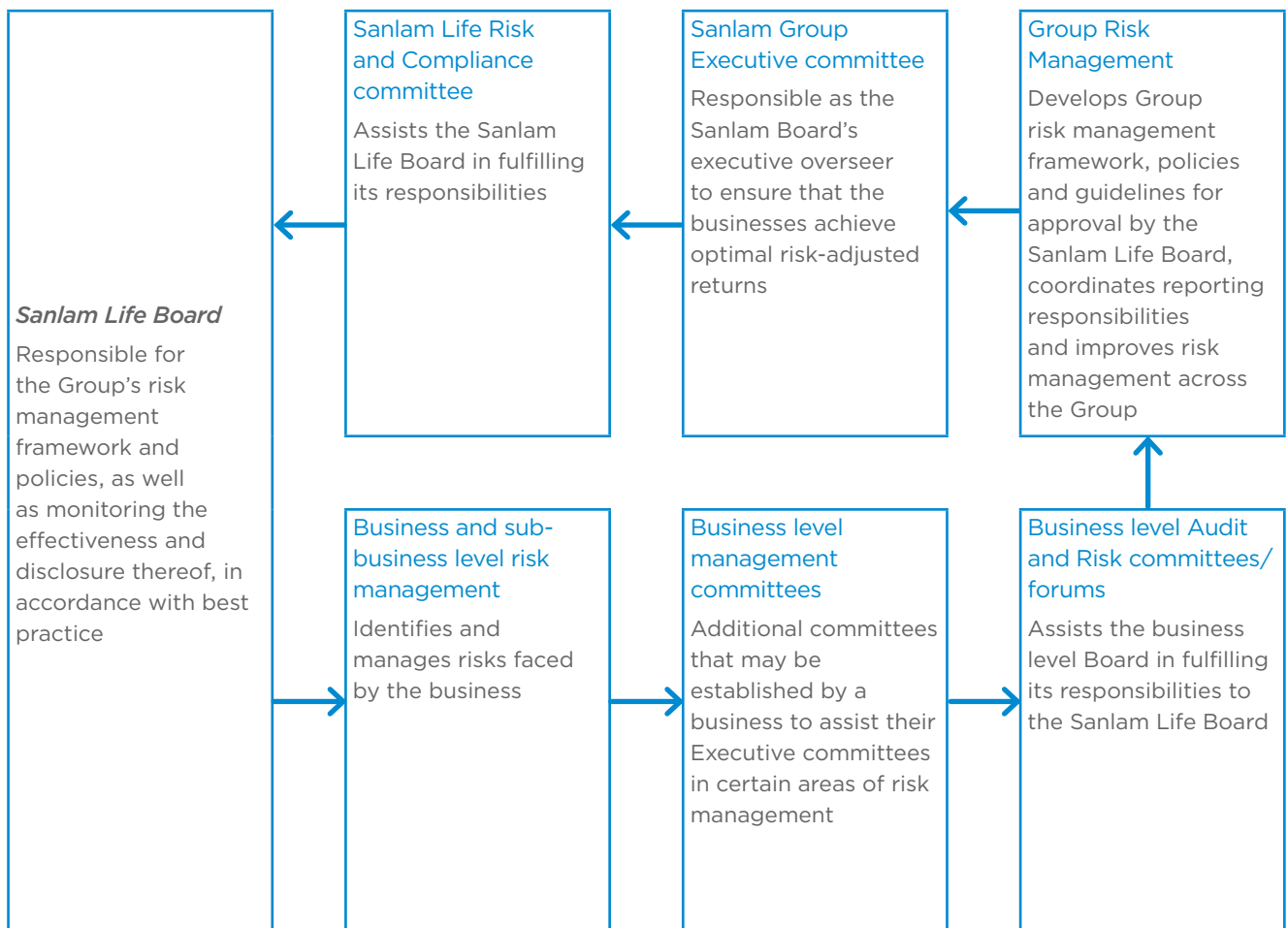
## Risk management

### Governance structure

In terms of the Group's overall governance structure, the meetings of the Sanlam Limited Board (Sanlam Board) and Sanlam Life Board are combined to improve the flow of information and to increase the efficiency of the Boards. The agenda of the Sanlam Board focuses on Group strategy, capital management, accounting policies, financial results, dividend policy, human resource development and corporate governance and JSE requirements. The Sanlam Life Board is responsible for statutory matters across all Sanlam businesses, as well as monitoring operational efficiency and risk issues throughout the Group. In respect

of separately listed subsidiaries, this is done within the limitations of sound corporate governance practices. Refer to the Corporate Governance Report online for further information on the responsibilities of the Sanlam and Sanlam Life Boards and their committees.

The Group operates within a decentralised business model environment. In terms of this philosophy, the Sanlam Life Board sets the Group enterprise risk management policies and frameworks and the individual businesses take responsibility for all operational and risk-related matters on a business level, within the limits set by these policies and frameworks. The following diagram depicts the generic flow of risk management information from the individual businesses to the Sanlam Life Board.





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## Role of Group Risk Management

The role of Group Risk Management is one of setting Group standards and guidelines, coordinating and monitoring risk management practices and ultimately reporting to the Sanlam and Sanlam Life Boards.

Group Risk Management plays an active role with regard to risk management in the Sanlam Group. The involvement includes the following:

- Permanent invitees of business units' Risk and Audit committees;
- Member of the Central Credit committee (see description below);
- Transactional approval incorporated into approval frameworks of business units where appropriate;

- Involvement and approval of corporate activity transactions;
- Chairs the Estate committee and Asset and Liability committee at Group level, as well as the Group risk forum (see descriptions below);
- Chairs the Group IT Steering committee;
- Guidance on risk-related matters at business level; and
- Involvement with specialist risk management issues at business level.

A number of other risk management/monitoring mechanisms operate within the Group as part of the overall risk management structure. The most important of these are illustrated in the following table:

## OTHER RISK MANAGEMENT / MONITORING MECHANISMS

<p><b>Estate committee</b></p> <p>Reviews and oversees the management of the Group's capital base</p>	<p><b>Asset and Liability committee</b></p> <p>Determines appropriate investment policies and guidelines for policyholder portfolios where guarantees are provided</p>	<p><b>Central Credit committee</b></p> <p>Oversees the identification, measurement and control of corporate credit risk exposure</p>
<p><b>Investment committees</b></p> <p>Determine and monitor appropriate investment strategies for policyholder solutions</p>	<p><b>Treasury function</b></p> <p>Manages the liquidity risks in the borrowing functions of Sanlam</p>	<p><b>Non-Listed Asset Controlling Body</b></p> <p>Reviews and approves the valuation of all unlisted assets in the Group for recommendation to the Sanlam Limited and Sanlam Life Boards</p>
<p><b>Group risk forum</b></p> <p>Aids coordination and transfer of knowledge between businesses and the Group, and assists Group Risk Management in identifying risks requiring escalation to the Sanlam Life Board</p>	<p><b>Financial Director</b></p> <p>Ensures that sound financial practices are followed, adequate and accurate reporting occurs, and financial statement risk is minimised</p>	<p><b>Actuarial</b></p> <p>Monitors and reports on key risks affecting the life insurance operations. Determines capital requirements of the life insurance operations and the potential impact of strategic decisions thereon, by using appropriate modelling techniques</p>
<p><b>Forensics</b></p> <p>Investigates and reports on fraud and illegal behaviour in businesses</p>	<p><b>Group Secretariat and Public Officers</b></p> <p>Reviews and reports on corporate governance practices and structures. Reports on applicable legal and compliance matters</p>	<p><b>Group Compliance function</b></p> <p>Facilitates management of compliance through analysing and advising on statutory and regulatory requirements, and monitoring implementation and execution thereof</p>

## OTHER RISK MANAGEMENT / MONITORING MECHANISMS

<p><b>Group Technology and Information</b> Manages and reports Group-wide Technology, Cyber and Information Security risks</p>	<p><b>Risk Officer (per business)</b> Assists business management in their implementation of the Group risk management framework and policies, and to monitor the business's entire risk profile</p>	<p><b>Internal audit</b> Assists the Sanlam Life Board and management by monitoring the adequacy and effectiveness of risk management in businesses</p>
<p><b>Actuarial forum</b> Assists the Audit, Actuarial and Finance and the Risk and Compliance committees on actuarial related matters. It also assists the Actuarial Control Function in providing oversight over first line activities in Group Actuarial, most notably balance sheet management</p>		

### Group risk policies, standards and guidelines

The main policies, standards and guidelines are:

- Sanlam Group enterprise risk management (ERM) policy and plan;
- Sanlam Group risk escalation policy;
- Sanlam Group business continuity management policy;
- Definitions of risk categories standard;
- Risk appetite guidance note;
- Sanlam Group risk appetite statement;
- Sanlam risk management maturity model;
- Sanlam Limited risk and compliance committee charter;
- Sanlam Life risk and compliance committee charter; and
- Group risk forum terms of reference.

A policy sets out the mandatory minimum requirements for the businesses.

A standard endeavours to ensure consistent use of terminology.

A guidance note is aimed at providing information.

The following also cover aspects with linkage to risk management:

- Sanlam Life combined assurance model;
- Sanlam Group internal control policy;
- Sanlam Group outsourcing policy;
- Sanlam Group information and information technology (I and IT) risk management policy;
- Representations from Group businesses to the Sanlam and Sanlam Life Audit, Actuarial and Finance committees;
- Sanlam corporate credit risk strategy and policy;
- Sanlam reinsurance and other risk mitigation policy;
- Sanlam Life underwriting risk management policy;
- Sanlam investment policy;
- Sanlam financial crime combating policy;
- Sanlam human resources policies;
- Sanlam Group governance framework;
- Sanlam Group high-level authorisation framework; and
- Sanlam Life Insurance Audit, Actuarial and Finance committee charter.

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## Sanlam Group Enterprise Risk Management policy and plan

The Group ERM policy and plan include the following main components:

- The broad objectives and philosophy of risk management in the Group;
- The roles and responsibilities of the various functionaries in the Group tasked with risk management; and
- The Group's minimum standards for implementation of risk management in the businesses.

## Sanlam Group risk escalation policy

The risk escalation policy defines the circumstances under which risk events and emerging risks should be escalated to the Sanlam Group level. This includes quantitative and qualitative measures.

## Summary of Sanlam Group risk appetite

- The Sanlam Group consists of a number of decentralised businesses. These businesses have different risk profiles and appetites. They are capitalised appropriately based on these risk profiles.
- The Group determines the hurdle rates required from these businesses. These hurdle rates are set out for each business in accordance with its risk profile. The higher the risk profile of a business, the higher the required return will be set. On average, the Sanlam Group aims to yield a RoGEV equal to at least 400bps above the reference rate, with the reference rate being set at the nine-year point on the relevant yield curve.

Each decentralised business needs to operate within the restrictions of its allocated capital. For businesses using value at risk (VaR) as measurement, a 99,5% confidence level is required over a one-year time horizon. For insurance businesses regulated under SAM (or similar regimes) the level of allocated capital for covered business is set to ensure that Own Funds attributable to in-force covered business maintains a SAM SCR ratio within a specified range, e.g. between 1,7 and 2,1 times for Sanlam Life, over the next 10 years. For businesses using capital adequacy (risk-based capital) techniques, a 95% confidence level over a 10-year time horizon is required.

- Each business needs to manage their risks within the Group ERM framework.

## Independent assurance reviews

In collaboration with an external assurance provider, the Group developed a risk management maturity model against which the risk management processes across the Group are assessed. Annually, internal audit (in conjunction with Group risk management) prepares risk management process audit plans for approval by the Sanlam Life risk and compliance committee. The assurance reviews comprise self-assessments and independent reviews. All businesses conduct self-assessments with the independent assessments done either by an external assurance provider or internal audit. Typically, the larger businesses are assessed by an external assurance provider once every three years. Internal audit, on the other hand, tends to focus on the assessments for the smaller businesses which are done on a rolling basis. The overall results of both the self-assessments and the independent reviews are presented to the Sanlam Life Risk and Compliance committee.

## Risk types

The Group is exposed to the following main risks:

	Risk category (primary)	Risk type (secondary) and description	Potential significant impact
General risks	1. Operational	<p>Operational risk is the risk that there is a loss as a result of inadequate or failed internal processes, people or systems and external events. Operational risk includes:</p> <p><b>Information and technology risk:</b> the risk of obsolescence of infrastructure, deficiency in integration, failures/inadequacies in systems/networks and the loss of confidentiality, availability and integrity of information, which includes cyber risks and its knock-on effects. Information risk also includes the loss of quality of information.</p> <p><b>Going concern/business continuity risk:</b> the risk that inadequate processes, people, financial controls and resources exist to continue business in the foreseeable future.</p> <p><b>Legal risk:</b> the risk that the Group's operations or its condition are disrupted or adversely affected by legal proceedings against it, adverse judgements from courts, contracts that turn out to be unenforceable or contractual obligations which have not been provided for.</p> <p><b>Compliance risk:</b> the risk of not complying with laws, regulations, rules, related self-regulatory organisation standards and codes of conduct including acceptable market conduct practices<sup>(1)</sup>, investment management mandates, as well as the failure to uphold the Group's core values and Code of Ethical Conduct.</p> <p><b>Human resources risk:</b> the risk that the Group does not have access to appropriate skills and staff complement to operate and effectively manage other operational risk.</p> <p><b>Fraud risk:</b> the risk of financial crime and unlawful conduct impacting on the Group. It includes both internal and external fraud.</p> <p><b>Taxation risk:</b> the risk of financial loss owing to changes in tax legislation that result in the actual tax on shareholders' fund earnings being higher than expected, with a corresponding reduction in RoGEV; or the actual policyholder tax being higher than that assumed in the determination of premium rates and guaranteed policy benefits.</p> <p><b>Regulatory risk:</b> the risk that new Acts or regulations will result in the need to change business practices that may lead to financial loss.</p> <p><b>Process risk:</b> the risk of loss as a result of failed or inadequate internal processes.</p> <p><b>Project risk:</b> the risk that is inherent in major projects.</p>	All Group businesses

<sup>(1)</sup> Market conduct involves the behaviour of an organisation and of those that act on its behalf towards various stakeholders (including potential and current clients, regulators or supervisors, investors, and other market participants). Market conduct comprises market discipline (including transparency and corporate governance) and consumer protection (including treating clients fairly).

# Capital and risk management report

(continued)

	Risk category (primary)	Risk type (secondary) and description	Potential significant impact
General risks	<b>1. Operational (continued)</b>	<b>Outsourcing provider risk:</b> the risk arising from the inability or unwillingness of an outsourcing service provider to discharge its contractual obligations; and from concentration with an individual outsourcing service provider (which exacerbates the former).	All Group businesses
	<b>2. Reputational</b>	Reputational risk is the risk that adverse publicity regarding a Group's business practices, associations and market conduct, whether accurate or not, will cause a loss of confidence in the integrity of the institution. The risk of loss of confidence relates to stakeholders, which include, <i>inter alia</i> , potential and existing clients, investors, suppliers and supervisors.	All Group businesses
	<b>3. Strategic</b>	Strategic risk is the risk that the Group's strategy is inappropriate or that the Group is unable to implement its strategy.	All Group businesses
Financial and business-specific risks	<b>1. Market</b>	<p>Market risk is the risk arising from the level or volatility of market prices of financial instruments which have an impact upon the value of assets and liabilities of the organisation. Market risk includes:</p> <p><b>Equity risk:</b> the risk resulting from the sensitivity of values of assets, liabilities and financial instruments to changes in the level or volatility of market prices of equities.</p> <p><b>Interest rate risk:</b> the risk of loss or adverse change in the value of assets and liabilities due to unanticipated changes in the level or volatility of interest rates.</p> <p><b>Currency risk:</b> the risk of loss or adverse change in the value of assets and liabilities owing to unanticipated changes in the level or volatility of currency exchange rates.</p> <p><b>Property risk:</b> the risk that the value of investment properties will fluctuate as a result of changes in the environment (i.e. the risk of loss or adverse change in the value of assets and liabilities due to unanticipated changes in the level or volatility of market prices of property).</p> <p><b>Asset liability mismatching (ALM) risk:</b> the risk of a change in value as a result of a deviation between asset and liability cash-flows, prices or carrying amounts. ALM risk originates from changes in market risk factors.</p> <p><b>Concentration risk:</b> the risk of loss associated with inadequately diversified asset portfolios. This may arise either from a lack of diversification in the asset portfolio, or from large exposure to default risk by a single issuer of securities or a group of related issuers (market risk concentrations).</p> <p><b>Market liquidity risk</b> (also known as trading liquidity risk or asset liquidity risk): the risk stemming from the lack of marketability of a financial instrument that cannot be bought or sold timeously to prevent or minimise a loss (or realise the required profit).</p>	<ul style="list-style-type: none"> <li>→ Life insurance</li> <li>→ Credit and structuring</li> <li>→ General insurance</li> <li>→ Investment management</li> </ul>

	Risk category (primary)	Risk type (secondary) and description	Potential significant impact
Financial and business-specific risks	1. Market (continued)	<b>Credit spread risk:</b> the risk resulting from the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or volatility of credit spreads over the risk-free interest rate term structure.	
	2. Credit	<p>Credit risk is the risk of default and deterioration in the credit quality of issuers of securities, counterparties and intermediaries to whom the Company has exposure. Credit risk includes:</p> <p><b>Default risk:</b> the credit risk arising from the inability or unwillingness of a counterparty to a financial instrument to discharge its contractual obligations.</p> <p><b>Downgrade or migration risk:</b> the risk that changes in the possibility of a future default by an obligator will adversely affect the present value of the contract with the obligator.</p> <p><b>Settlement risk:</b> the risk arising from the lag between the transaction and settlement dates of securities transactions.</p> <p><b>Reinsurance counterparty risk:</b> the concentration risk with individual reinsurers, owing to the nature of the reinsurance market and the restricted range of reinsurers that have acceptable credit ratings.</p>	<ul style="list-style-type: none"> <li>→ Life insurance</li> <li>→ General insurance</li> <li>→ Credit and structuring</li> <li>→ Corporate</li> </ul>
	3. Funding liquidity	Funding liquidity risk is the risk relating to the difficulty/inability to access/raise funds to meet commitments associated with financial instruments or policy contracts.	<ul style="list-style-type: none"> <li>→ Life insurance</li> <li>→ General insurance</li> <li>→ Credit and structuring</li> <li>→ Corporate</li> </ul>
	4. Insurance risk (life business)	<p><b>Insurance risk (life business)</b> is the risk arising from the underwriting of life insurance contracts, in relation to the perils covered and the processes used in the conduct of business. Insurance risk, in life business includes:</p> <p><b>Underwriting risk:</b> the risk that the actual experience relating to mortality, longevity, disability and medical (morbidity) will deviate negatively from the expected experience used in the pricing of solutions and valuation of policy liabilities.</p> <p><b>Persistency risk:</b> the risk of financial loss owing to negative lapse, surrender and paid-up experience. It covers the risk of loss or adverse change in insurance liabilities due to unanticipated change in the rate of policy lapses, terminations, renewals and surrenders.</p>	<ul style="list-style-type: none"> <li>→ Life insurance</li> </ul>

# Capital and risk management report

(continued)

	Risk category (primary)	Risk type (secondary) and description	Potential significant impact
Financial and business-specific risks	<b>4. Insurance risk (life business) (continued)</b>	<p><b>Expense risk:</b> the risk of loss owing to actual expense experience being worse than that assumed in premium rates and the valuation of policy liabilities. It covers the risk of loss or adverse change in insurance liabilities due to adverse variation in the expenses incurred in servicing insurance and reinsurance contracts.</p> <p><b>Concentration risk:</b> the risk of financial loss due to having written large proportions of business with policyholders of the same/similar risk profile (including catastrophe risk).</p>	→ Life insurance
	<b>5. Insurance risk (general insurance business)</b>	<p><b>Insurance risk (general insurance business)</b> is the risk arising from the underwriting of non-life insurance contracts, in relation to the perils covered and the processes used in the conduct of business. Insurance risk, in general insurance business includes:</p> <p><b>Claims risk (premium and reserve risk):</b> the risk associated with a change in value caused by the ultimate costs for full contractual obligations varying from those assumed when these obligations were estimated. Claims risk is often split into reserve risk (relating to incurred claims) and premium risk (relating to future claims).</p> <p><b>Non-life catastrophe risk:</b> the risk of loss, or of adverse change in the value of insurance liabilities, resulting from significant uncertainty relating to the pricing and provisioning assumptions for extreme or exceptional events.</p>	→ General insurance

## Risk management: general risks

### 1. Operational risk

The Group mitigates this risk through its culture and values, a comprehensive system of internal controls, internal audit, forensic and compliance functions in addition to other measures such as back-up facilities, contingency planning and insurance. The initiation of transactions and their administration is conducted on the basis of the segregation of duties, designed to ensure the correctness, completeness and validity of all transactions.

The management of risks associated with human resources is not addressed in this report. A discussion of the aforementioned is included in the Resilience Report available online.

The following functionaries assist in mitigating operational risk:

#### Internal audit

A Board-approved internal audit charter governs internal audit activity within the Group. Regular risk-focused

reviews of internal control and risk management systems are carried out. The Chief Audit Executive of Sanlam is appointed in consultation with the chairman of the Audit, Actuarial and Finance committee and has unrestricted access to the chairman of the committee. The authority, resources, scope of work and effectiveness of the functions are reviewed regularly.

#### External audit

The Group's external auditors are Ernst & Young Inc. The report of the independent auditors for the year under review is included on page 146 of the Integrated Report and page 7 of the Annual Financial Statements. The external auditors assess certain systems of internal financial control for the purpose of expressing an independent opinion on the Annual Financial Statements. Non-audit services rendered by the external auditors are strictly governed by a Group policy in this regard. The Group applies a policy of compulsory rotation of audit partners.

#### *Technology, cyber and information security ("IT") risk*

Technology, Cyber and Information Security (collectively referred to as IT) risks are managed across the Group in an integrated manner following the ERM framework. Group Technology and Information (GTI) is the custodian of the Group's IT policy framework and ensures explicit focus on, and integration with the Group's IT governance framework, which includes the governance of cyber resilience and information security.

The Group IT Governance department and Group Cyber Security Centre in GTI report to the Group Chief Information Officer (CIO) who facilitates the process of identifying emerging IT risks as well as unpacking significant IT risks with Group-wide impact. The Group IT Steering committee (a sub-committee of the Group Exco) provides guidance to the Group CIO regarding his/her duties, such as the definition and execution of the Group's IT strategy and the establishment of policy in response to IT risks.

The quarterly IT Risk and CIO reports, summarising the Group-wide IT risk and IT strategy position, are delivered to the Group IT Steering committee and the Risk and Compliance committee.

#### *Going concern/business continuity risk*

The Board regularly considers and records the facts and assumptions on which it relies to conclude that Sanlam will continue as a going concern. Reflecting on the year under review, the Directors considered a number of facts and circumstances and are of the opinion that adequate resources exist to continue business and that Sanlam will remain a going concern in the foreseeable future. The Board's statement to this effect is also contained in the statement on the responsibility of directors in the Annual Financial Statements.

#### *Legal risk*

During the development stage of any new product and for material transactions entered into by the Group, the legal resources of the Group monitor the drafting of the contract documents to ensure that the rights and obligations of all parties are clearly set out. Sanlam seeks to minimise uncertainties through continuous consultation with internal and external legal advisers, to understand the nature of risks and to ensure that transactions are structured and documented appropriately.

#### *Compliance risk*

##### *Laws and regulations:*

Sanlam considers compliance with applicable laws, industry regulations and codes an integral part of doing business. The Group Compliance Office, together with the compliance functions of the Group businesses, facilitates the management of compliance through the analysis of statutory and regulatory requirements, and monitoring the implementation and execution thereof.

##### *Compliance with client mandates:*

Automated pre-compliance rules for clients' investment guidelines are loaded on the investment management operations' order management system. This means that a system rule will generally prevent any transaction that may cause a breach. Apart from this continuous monitoring, post-trade compliance reports are produced from the order management systems. Reporting of compliance monitoring with investment guidelines is done on a monthly basis, although the monitoring activities happen continuously. When a possible breach is detected, the portfolio manager is requested to confirm whether a breach has taken place, to explain the reason for the breach and to indicate when it will be rectified. When a breach is confirmed, the portfolio manager must generally rectify the breach as soon as possible. The action taken may vary depending on the type of breach. The detailed results of the mandate monitoring process are discussed with the head of investment operations on a monthly basis.

Derivative exposures are monitored on a daily basis for compliance with approval framework limits, as well as client investment guidelines where the guidelines are more restrictive than the investment manager's own internal limits.

##### *Fraud risk*

The Sanlam Group recognises that financial crime and unlawful conduct are in conflict with the principles of ethical behaviour, as set out in the Group's code of ethics, and undermines the organisational integrity of the Group. The financial crime combating policy for the Sanlam Group is designed to counter the threat of financial crime and unlawful conduct. A zero-tolerance approach is applied in combating financial crime and all offenders are prosecuted. The forensic services function at Group level oversees the prevention, detection and investigation of incidents of unlawful conduct that are of such a nature that they may have an impact on the Group or the executive of a business



# Capital and risk management report

(continued)

cluster. Group forensic services are also responsible for the formulation of Group standards in respect of the combating of unlawful conduct and the implementation of measures to monitor compliance with these standards.

The Chief Executive of each business cluster is responsible for the implementation of the policy in his or her respective business and is accountable to the Group Chief Executive and the Sanlam and Sanlam Life Boards. Quarterly reports are submitted by Group forensic services to the Sanlam and Sanlam Life Risk and Compliance committees on the incidence of financial crime and unlawful conduct in the Group and on measures taken to prevent, detect, investigate and deal with such conduct.

## *Taxation risk*

The risk is addressed through clear contracting to ensure that policy contracts entitle policyholders to after-tax returns, where applicable. The Group's internal tax resources monitor the impact of changes in tax legislation, participate in discussions with the tax legislator to comment on changes in legislation and are involved in the development of new products. External tax advice is obtained as required.

## *Regulatory risk*

Regulatory risk is mitigated by ensuring that the Group has dedicated personnel that are involved in and therefore informed of relevant developments in legislation.

The Group takes a proactive approach in investigating and formulating views on all applicable issues facing the financial services industry. The risk is also managed as far as possible through clear contracting. The Group monitors and influences events to the extent possible through participation in discussions with legislators, predominantly through industry organisations.

## *Process risk*

The risk of failed or inadequate internal processes is addressed through a combination of the following:

- A risk-based approach is followed in the design of operational processes and internal controls;
- Operational processes are properly documented;
- Staff training and the employment of a performance-based remuneration philosophy; and
- Internal audit review of key operational processes.

## *Project risk*

A formalised, risk-based approach is followed for the management of major projects to ensure that projects are effectively implemented and the project hurdle rate is achieved. Key deliverables, progress and risks are monitored on a continuous basis throughout the project life cycle. Internal specialists and external consultants are used as required to provide specialist knowledge and experience.

## *Outsourcing provider risk*

A Group outsourcing policy is in place and aims to provide clear direction and policy regarding the strategic management (e.g. assessment of outsourcing options, establishment of agreements, the ongoing management of and reporting on outsourcing) of all outsourcing arrangements, whether external or internal within the Sanlam Group.

## **2. Reputational risk**

Risks with a potential reputational impact are escalated to the appropriate level of senior management. The Audit, Actuarial and Finance and the Risk and Compliance committees are involved as required. Events with an industry-wide reputational impact are addressed through industry representative groups.

## **3. Strategic risk**

The Group's governance structure and various monitoring tools ensure that any events that affect the achievement of the Group's strategy are escalated and addressed at the earliest opportunity. The Board has no tolerance for any breach of guidance.

Group strategy is addressed on a continuous basis at various forums within the Group, the most important of which are:

- The Group's strategic direction and success are discussed and evaluated at an annual special strategic session of the Sanlam Board as well as at the scheduled Board meetings during the year;
- As part of the annual budgeting process, the Group businesses present their strategic plans and budgets to the Sanlam Group Executive committee, which ensures that the businesses' strategies are aligned with the overall Group strategy; and
- The Sanlam Group Executive committee, which includes the Chief Executives of the various Group clusters, meets on a regular basis to discuss, among others, the achievement of the clusters' and Group's strategies.

Any strategic issues are identified at these meetings and corrective actions are immediately implemented.

### **Risk management: by business area**

#### ***Investment management***

The Group's investment management operations are primarily exposed to operational risks, as they have limited on-balance sheet exposure to financial instruments. Investment risk is borne principally by the client. The investment management operations are, however, exposed to market risk owing to the impact of market fluctuations on revenue levels, as investment fees are generally linked to the level of assets under management. This exposure is reduced through asset class and product diversification.

#### **Investment performance**

One of the key risks inherent to the investment management operations relates to the risk of consistently poor investment decisions i.e. incorrect asset allocation views and/or stock selection resulting in investment underperformance and impairment of the track record relative to benchmarks and/or peer groups. In order to mitigate this risk, the following areas are focused on:

- Recruitment and retention of high quality investment professionals and support staff who are organised into stable teams, with a performance culture that receive pertinent training and development and regular employee appraisals;

- Optimisation of a robust investment process to affect good investment decisions;
- Rigour of the procedures for portfolio implementation;
- Effectiveness of the dealing desk; and
- Analyses of fund performance.

The above interventions are implemented with due cognisance of Sanlam Investments' fiduciary responsibility to, at all times, act in the best interest of the clients and in accordance with the investment mandate directives.

#### ***Life insurance***

The Group's life insurance businesses are exposed to financial risk through the design of some policyholder solutions, and in respect of the value of the businesses' capital. Non-participating policyholder solutions and those that provide investment guarantees (such as market-related business, stable and reversionary bonus business, and non-participating annuity business), expose the life insurance businesses to financial risk. Other business, such as linked policies (where the value of policy benefits is linked directly to the fair value of the supporting assets) does not expose the life insurance businesses to direct financial risk as this risk is assumed by the policyholder. The life insurance businesses' capital is invested in financial instruments, which also exposes the businesses to financial risk, in the form of market, credit and liquidity risk.

# Capital and risk management report

(continued)

The table below summarises the various risks associated with the different policyholder solutions as well as with the capital portfolio. Please refer to the 'Policy liabilities and profit entitlement section' on page 70 for a description of the different policyholder solutions; as well as to note 14 on page 111, which discloses the monetary value of the Group's exposure to the various solutions.

Life insurance businesses exposed to risk via:	Market risk				Credit risk	Liquidity risk	Insurance risk	
	Equity	Interest rate	Currency	Property			Persis-tency	Other insurance risks
Policyholder solutions								
Linked and market-related Smoothed-bonus business:	✓ <sup>(1)</sup>	✓ <sup>(1)</sup>	✓ <sup>(1)</sup>	✓ <sup>(1)</sup>	✓ <sup>(1)</sup>	✓ <sup>(3)</sup>	✓	✓
Stable bonus	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(3)</sup>	✓	✓
Reversionary bonus	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(3)</sup>	✓	✓
Participating annuities	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(2)</sup>	✓ <sup>(3)</sup>	✓	✓
Non-participating annuities	✗	✓	✗ <sup>(4)</sup>	✗ <sup>(4)</sup>	✓	✓ <sup>(5)</sup>	✗	✓
Other non-participating liabilities								
Guarantee plans	✗	✓	✗ <sup>(4)</sup>	✗	✓	✓ <sup>(6)</sup>	✓	✓
Other	✓	✓	✗ <sup>(4)</sup>	✓	✓	✓ <sup>(5)</sup>	✓	✓
Capital portfolio	✓	✓	✓	✗ <sup>(4)</sup>	✓	✓	✗	✗

(1) Only market-related policies (not linked policies) expose the life insurance businesses to this risk, due to these policies providing guaranteed minimum benefits at death or maturity.

(2) The life insurance businesses are exposed to this risk, only if the assets backing these policies have underperformed to the extent that there are negative bonus stabilisation reserves that will not be recovered by declaring lower bonuses in the subsequent years.

(3) Although liquidity risk is present, it is not a significant risk for the savings businesses due to an appropriate amount of liquid assets held in respect of expected outflows.

(4) An immaterial amount of assets are exposed to this risk.

(5) Liabilities are matched, as far as possible, with interest-bearing assets to ensure that the duration of assets and liabilities are closely aligned. This may also include derivatives.

(6) Liabilities are matched with assets that have similar maturity profiles.

✓ Risk applicable to item

✗ Risk not applicable to item

The management of these risks is described on the next page.

## 1. Market risk

Life insurance businesses exposed to risk via:	Market risk			
	Equity	Interest rate	Currency	Property
Policyholder solutions				
Linked and market-related	✓	✓	✓	✓
Smoothed-bonus business:				
Stable bonus	✓	✓	✓	✓
Reversionary bonus	✓	✓	✓	✓
Participating annuities	✓	✓	✓	✓
Non-participating annuities	x	✓	x	x
Other non-participating liabilities				
Guarantee plans	x	✓	x	x
Other	✓	✓	x	✓
Capital portfolio	✓	✓	✓	x

✓ Risk applicable to item

x Risk not applicable to item

### *Linked and market-related*

Linked and market-related business relates to contracts where there is a direct relationship between the returns earned on the underlying portfolio and the returns credited to the contract. Policyholders carry the full market risk in respect of linked business. Market-related policies, however, provide for guaranteed minimum benefits at death or maturity, and therefore expose the life insurance businesses to market risk. The risk relating to guaranteed minimum benefits is managed

by appropriate investment policies, determined by the Asset Liability committee (ALCO), and by adjusting the level of guarantees for new policies to prevailing market conditions. These investment policies are then reflected in the investment guidelines for the policyholder portfolios. The Group's long-term policy liabilities include a specific provision for investment guarantees. The current provision for investment guarantees in insurance contracts has been calculated on a market-consistent basis in accordance with professional practice notes issued by the Actuarial Society of South Africa.

# Capital and risk management report

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## *Smoothed-bonus business*

These policies provide for the payment of an after-tax and after-cost investment return to the policyholder, in the form of bonuses. The use of bonuses is a mechanism to smooth returns to policyholders in order to reduce the effects of volatile investment performance, and bonus rates are determined in line with the product design, policyholder reasonable expectations, affordability and the approved bonus philosophy. Any returns not yet distributed are retained in a policyholder bonus stabilisation reserve, for future distribution to policyholders. In the event of adverse investment performance, this reserve may become negative. Negative bonus stabilisation reserves are allowed for in the valuation of these liabilities to the extent that the shortfall is expected to be recovered by declaring lower bonuses in the subsequent three years. The funding level of portfolios is bolstered through loans from the capital portfolio in instances where negative stabilisation reserves will not be eliminated by these management actions. At 31 December 2017, all stable and reversionary bonus business portfolios had a funding level in excess of the minimum reporting level of 92,5%.

Market risk is borne by policyholders to the extent that the after-tax and after-cost investment returns are declared as bonuses. The capital portfolio is, however, exposed to some market risk as an underperformance in investment markets may result in an underfunded position that would require financial support from the capital portfolio. The Group manages this risk through an appropriate investment policy. ALCO oversees the investment policy for the various smoothed-bonus portfolios. The aim is to find the optimum balance between high investment returns

(to be able to declare competitive bonus rates) and stable investment returns given the need to meet guaranteed benefits and to support the granting of stable bonus rates. The requirements for the investment management of each portfolio are set out in investment guidelines, which cover, *inter alia*, the following:

- Limitations on exposure to volatile assets;
- Benchmarks for the performance measurement of each asset class and limits on deviations from these benchmarks;
- Credit risk limits;
- Limits on asset concentration – with regard to strategic investments, the exposure of policyholders' portfolios to these investments is based on portfolio investment considerations and restricted with reference to a specific counter's weight in the benchmark portfolio;
- Limits on exposure to some particular types of assets, such as unlisted equities, derivative instruments, property and hedge funds; and
- Regulatory constraints.

Feedback on the investment policy and its implementation and the performance of the smoothed-bonus portfolios are provided quarterly to the Sanlam Life Board and the Sanlam Customers Interest committee.

#### *Non-participating annuities*

Non-participating annuity business relates to contracts where income is paid to an annuitant for life or for a fixed term, in return for a lump sum consideration paid on origination of the policy. The income may be fixed, or increased at a fixed rate or in line with inflation. The Group guarantees this income and is therefore subject to interest rate risk. Liabilities are matched as far as possible with assets, mostly interest-bearing, as well as derivatives to ensure that the change in value of assets and liabilities is closely matched for a change in interest rates. The impact of changes in interest rates is tested continuously, and for a 1% parallel movement in interest rates the impact on profit will be immaterial.

#### *Guarantee plans*

These single premium policies provide for guaranteed maturity amounts. The life insurance businesses are therefore exposed to interest rate risk, if the assets backing these liabilities do not provide a comparable yield to the guaranteed value. Interest rate risk is managed by matching the liabilities with assets that have similar investment return profiles as the liabilities.

#### *Other non-participating business*

The Group is exposed to market risk to the extent of the investment of the underlying assets in interest-bearing, equity and property investments. The risk is managed through investments in appropriate asset classes. A number of the products comprising this business are matched using interest-bearing instruments, similar to non-participating annuities.

#### *Policyholder solutions' exposure to currency risk*

The majority of currency exposure within the policyholder portfolios results from offshore assets held in respect of linked and smoothed-bonus business. Offshore exposure within these portfolios is desirable from a diversification perspective.

#### *Capital*

Comprehensive measures and limits are in place to control the exposure of the Group's capital to market and credit risks. Continuous monitoring takes place to ensure that appropriate assets are held in support of the capital and investment return targets. Limits are applied in respect of the exposure to asset classes and individual counters.

# Capital and risk management report

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The exposure of the Group's capital portfolio to currency risk is analysed in the table below:

R million	Euro	United States dollar
<b>31 December 2017</b>		
Investment properties	-	-
Equities and similar securities	210	637
Equity-accounted investments <sup>(1)</sup>	-	-
Interest-bearing instruments	-	127
Government interest-bearing investments	-	-
Corporate interest-bearing investments	-	88
Mortgages, policy and other loans	-	38
Structured transaction assets	-	1
Investment funds	-	276
Cash, deposits and similar securities	5	1 534
Net working capital and other liabilities	(9)	540
Structured transaction liabilities <sup>(3)</sup>	-	(660)
<b>Foreign currency exposure</b>	<b>206</b>	<b>2 492</b>
<b>Exchange rates (rand):</b>		
Closing rate	14,87	12,38
Average rate	15,00	13,30
<b>31 December 2016</b>		
Investment properties	-	-
Equities and similar securities	147	441
Equity-accounted investments <sup>(1)</sup>	-	-
Interest-bearing instruments	-	57
Government interest-bearing investments	-	-
Corporate interest-bearing investments	-	55
Mortgages, policy and other loans	-	-
Structured transaction assets	-	2
Investment funds	-	190
Cash, deposits and similar securities	3	3 174
Net working capital and other liabilities	(14)	337
Structured transaction liabilities <sup>(3)</sup>	-	(1)
<b>Foreign currency exposure</b>	<b>136</b>	<b>4 198</b>
<b>Exchange rates (rand):</b>		
Closing rate	14,43	13,68
Average rate	16,22	14,65

<sup>(1)</sup> Equity-accounted investments only include significant entities that have foreign currency exposure.

<sup>(2)</sup> Saham Finances. Sanlam has increased the shareholding in Saham Finances from 30% to 46,6% in the current year.

<sup>(3)</sup> Due to the increase in value of the structured transaction liabilities, further disclosure has been provided in the current year along with the relevant comparatives.

The capital portfolio has limited exposure to investment properties and accordingly the related property risk.

## Sensitivities

Refer to page 179 of the Integrated Report online for an analysis of the Group's sensitivity to market risk.

	British pound	Botswana pula	Indian rupee	Moroccan dirham <sup>(2)</sup>	Other currencies	Total
	-	43	-	-	763	806
	144	(87)	-	-	2 512	3 416
	-	1 704	8 652	9 544	593	20 493
	289	88	-	-	889	1 393
	41	-	-	-	442	483
	78	-	-	-	356	522
	170	88	-	-	91	387
	-	-	-	-	-	1
	-	322	-	-	97	695
	362	708	-	-	517	3 126
	9	(116)	-	-	(565)	(141)
	-	-	-	-	-	(660)
	804	2 662	8 652	9 544	4 806	29 128
	16,75	1,28	0,19	1,33		
	17,13	1,30	0,20	1,39		

	-	176	-	-	645	821
	363	34	-	-	408	1 393
	-	1 842	8 068	4 810	777	15 497
	91	95	-	-	779	1 022
	59	-	-	-	424	483
	32	-	-	-	276	363
	-	95	-	-	79	174
	-	-	-	-	-	2
	1	157	-	-	281	629
	379	698	-	-	597	4 851
	(290)	(470)	-	-	(494)	(931)
	-	-	-	-	-	(1)
	544	2 532	8 068	4 810	2 993	23 281
	16,92	1,30	0,20	1,36		
	19,69	1,37	0,22	1,49		



# Capital and risk management report

(continued)

## 2. Credit risk – policyholder solutions & capital

<b>Life insurance businesses exposed to risk via:</b>	<b>Credit risk</b>
Policyholder solutions	✓
Capital portfolio	✓

✓ Risk applicable to item

Sanlam recognises that a sound credit risk policy is essential to minimise the effect on the Group as a result of loss owing to a major corporate failure and the possible systemic risk such a failure could lead to. The Sanlam Corporate Credit Risk policy and strategy has been established for this purpose. Credit risk occurs owing to trading, investment, structured transactions and lending activities. These activities in the Group are conducted mostly by either Sanlam Capital Markets (SCM), including the recently established Central Credit Manager (CCM) activities, or Sanlam Investment Management (SIM) in terms of the investment guidelines granted to them by the life insurance operations. The boards of SIM and SCM have delegated responsibility for credit risk management to the Central Credit committee. On a smaller scale, Botswana Insurance Fund Management (BIFM) also performs investment activities in the Group.

The governance structures ensure that an appropriate credit culture and environment is maintained, such that no transactions are concluded outside areas of competence, or without following normal procedures. This credit culture is the product of a formal credit risk strategy and credit risk policy.

The credit risk strategy stipulates the parameters for approval of credit applications, such as: economic sector; risk concentration; maximum exposure per obligor, group and industry; geographical location; product type; currency; maturity; anticipated profitability or excess spread; economic capital limits; and cyclical aspects of the economy.

The credit risk policy highlights the processes and procedures to be followed in order to maintain sound credit granting standards, to monitor and manage credit risk, to properly evaluate new business opportunities and to identify and administer problem credits. Credit analysis is a structured process of investigation and assessment, involving identifying the obligor, determining whether a group of connected obligors should be consolidated as a Group exposure, and analysing the financial information of the obligor. A credit rating, being a ranking of creditworthiness, is allocated to the obligor. In addition to external ratings, internal rating assessments are conducted, whereby the latest financial and related information is analysed in a specified and standardised manner, and to ensure a consistent and systematic evaluation process. External ratings (e.g. Moody's Investor Services, Standard & Poor's, Fitch Ratings and Global Credit Ratings) are taken into account when available.

All facilities are reviewed on at least an annual basis by the appropriate approval authority. Where possible, Sanlam's interest is protected by obtaining acceptable security. Covenants are also stipulated in the loan agreements, specifying actions that are agreed to. A credit administration and reporting department is in place to implement risk control measures and maintain ongoing review of the credit reports and conditions, and to ensure overall compliance with the credit risk strategy and policy.

In addition to the above measures, the portfolios are also managed in terms of the investment guidelines of the life insurance operations, which place limits in terms of the lowest credit quality that may be included in a portfolio, the average credit quality of instruments in a portfolio as well as limits on concentration risk.

The Group is also exposed to credit risk in respect of its working capital assets. The following are some of the main credit risk management actions:

- Unacceptable concentrations of credit risk to groups of counterparties, business sectors and product types are avoided by dealing with a variety of major banks and spreading debtors and loans among a number of major industries, customers and geographic areas;
- Long term insurance business debtors are secured by the underlying value of the unpaid policy benefits in terms of the policy contract;
- General insurance premiums outstanding for more than 60 days are not accounted for in premiums, and an appropriate level of provision is maintained; and
- Exposure to external financial institutions concerning deposits and similar transactions are monitored against approved limits.

The Group has considered the impact of changes in credit risk on the valuation of its liabilities. Credit risk changes will only have an impact in extreme situations and are not material for the 2017 and 2016 financial years. Given the strong financial position and rating of the Group, the credit rating of its liabilities remained unchanged.

# Capital and risk management report

(continued)

The tables below provide an analysis of the ratings attached to the Group's life insurance businesses' exposure, including the exposure managed by SCM, to instruments subject to credit risk.

## Credit risk concentration by credit rating<sup>(1)</sup>

	AAA %	AA+ %	AA %	AA- %	A+ %
<b>Assets backing policy liabilities</b>					
<b>31 December 2017</b>					
Government interest-bearing investments	66	11	1	-	4
Corporate interest-bearing investments	6	29	11	5	7
Mortgages, policy and other loans	-	2	-	9	7
Structured Transactions	13	45	13	-	2
Cash, deposits and similar securities	26	37	24	-	2
Net working capital	-	-	-	-	-
<b>Total</b>	<b>26</b>	<b>24</b>	<b>9</b>	<b>3</b>	<b>5</b>
<b>31 December 2016<sup>(2)</sup> Restated</b>					
Government interest-bearing investments	67	7	-	-	4
Corporate interest-bearing investments	7	10	26	4	14
Mortgages, policy and other loans	-	5	2	5	14
Structured Transactions	11	16	38	-	1
Cash, deposits and similar securities	20	18	44	2	4
Net working capital	-	-	-	-	-
<b>Total</b>	<b>31</b>	<b>10</b>	<b>19</b>	<b>2</b>	<b>8</b>

## Credit risk concentration by credit rating<sup>(1)</sup>

	AAA %	AA+ %	AA %	AA- %	A+ %
<b>Capital portfolio</b>					
<b>31 December 2017</b>					
Government interest-bearing investments <sup>(3)</sup>	20	7	1	-	5
Corporate interest-bearing investments	6	28	12	5	7
Mortgages, policy and other loans	-	-	-	-	-
Structured Transactions	44	13	-2	-	13
Cash, deposits and similar securities	42	9	5	-	1
Net working capital	5	18	28	3	1
<b>Total</b>	<b>17</b>	<b>18</b>	<b>13</b>	<b>3</b>	<b>3</b>
<b>31 December 2016<sup>(2)</sup></b>					
Government interest-bearing investments <sup>(3)</sup>	11	20	-	-	9
Corporate interest-bearing investments	5	11	30	5	13
Mortgages, policy and other loans	-	-	-	-	-
Structured Transactions	56	5	7	1	-
Cash, deposits and similar securities	57	5	13	1	2
Net working capital	16	15	35	-	-
<b>Total</b>	<b>29</b>	<b>9</b>	<b>21</b>	<b>2</b>	<b>5</b>

<sup>(1)</sup> Rated externally or by using internationally recognised credit rating techniques.

<sup>(2)</sup> Sanlam has changed the process by which ratings are derived to align with the SAM disclosure process and as such are now derived principally from the internally assessed rating for issuers as opposed to external ratings.

<sup>(3)</sup> The not-rated Government interest-bearing investments relate mainly to not-rated Government paper held by some of the Group's life businesses outside of South Africa in their local markets.

The majority of the counterparties to structured transactions are institutions with at least an AA- rating. The Group's short-term positions are included in the above table under the counterparties' long-term rating where Sanlam has both a long-term and short-term exposure to the entities.

	A	A-	BBB	Not rated	Other	Total	Carrying value
	%	%	%	%	%	%	R million
	2	1	-	10	5	100	45 754
	10	8	5	4	15	100	68 548
	8	7	4	20	43	100	11 478
	2	6	8	1	10	100	13 052
	1	1	-	8	1	100	20 033
	-	-	-	100	-	100	869
	6	5	3	7	12	100	159 734

1	2	-	9	10	100	55 824
8	8	4	4	15	100	57 592
7	5	10	26	26	100	6 979
3	9	2	4	16	100	11 136
-	1	1	10	-	100	19 858
-	-	-	100	-	100	835
3	5	2	8	12	100	152 224

	A	A-	BBB	Not rated	Other	Total	Carrying value
	%	%	%	%	%	%	R million
	11	-	-	35	21	100	820
	17	9	2	1	13	100	4 589
	-	2	10	81	7	100	720
	2	1	21	-	8	100	337
	2	-	2	37	2	100	3 674
	2	1	-	42	-	100	3 825
	7	3	2	26	8	100	13 965

5	-	-	40	15	100	772
8	13	2	1	12	100	5 109
3	-	20	55	22	100	420
3	8	-	-	20	100	817
-	-	-	21	1	100	5 866
-	-	-	34	-	100	2 893
3	5	1	19	6	100	15 877

# Capital and risk management report

(continued)

## Maximum exposure to credit risk

The life insurance businesses' maximum exposure to credit risk is equivalent to the amounts recognised in the statement of financial position as there are no financial guarantees provided to parties outside the Group. There are also no loan commitments provided that are irrevocable over the life of the facility or revocable only in adverse circumstances.

The credit quality of each class of financial asset that is neither past due nor impaired has been assessed as acceptable within the parameters used to measure and monitor credit risk, as described above. There were no material financial assets that would have been past due or impaired had the terms not been renegotiated.

## Reinsurance credit risk

Sanlam makes use of reinsurance to:

- Access underwriting expertise;
- Access product opportunities;
- Enable it to underwrite risks greater than its own risk appetite; and
- Protect its mortality/risk book against catastrophes.

The use of reinsurance exposes the Group to credit risk. The counterparty risks of reinsurers are managed under the Group's credit risk framework. The Group's reinsurance arrangements include proportionate, excess

and catastrophe coverage. All risk exposures in excess of specified monetary limits are reinsured. Catastrophe insurance is in place for single-event disasters. Credit risk in respect of reinsurance is managed by placing the Group's reinsurance only with subsidiaries of companies that have high international or similar credit ratings.

## 3. Liquidity risk

Life insurance businesses exposed to risk via:	Liquidity risk	Note
Policyholder solutions		3.1
Linked and market-related	✓	3.2
Other non-participating liabilities	✓	3.2
Smoothed-bonus business:		
Participating annuities	✓	3.2
Stable bonus	✓	3.3
Reversionary bonus	✓	3.3
Non-participating annuities	✓	3.4
Other non-participating liabilities:		
Guarantee plans	✓	3.5
Capital portfolio	✓	3.6

✓ Risk applicable to item

3.1 The following table summarises the overall maturity profile of the policyholder business:

## 31 December 2017

R million

	< 1 year	1-5 years	> 5 years	Open ended	Total
Insurance contracts	8 246	27 809	65 306	77 507	178 868
Investment contracts	11 794	47 375	72 524	213 880	345 573
<b>Total policy liabilities</b>	<b>20 040</b>	<b>75 184</b>	<b>137 830</b>	<b>291 387</b>	<b>524 441</b>
Properties	321	-	-	9 703	10 024
Equities and similar securities	-	-	507	83 857	84 364
Government interest-bearing investments	2 366	2 375	41 561	-	46 302
Corporate interest-bearing investments	9 476	42 790	15 697	586	68 549
Mortgages, policy and other loans	1 504	6 353	3 650	995	12 502
Structured transaction assets	4 242	6 122	1 007	1 681	13 052
Investment funds <sup>(1)</sup>	-	-	-	272 198	272 198
Cash, deposits and similar securities	10 952	8 874	242	-	20 068
Deferred acquisition costs	-	-	-	633	633
Long-term reinsurance assets	46	137	749	130	1 062
Term finance	-	-	(158)	-	(158)
Structured transactions liabilities	(2 303)	(539)	(183)	(7)	(3 032)
Net working capital	(1 123)	-	-	-	(1 123)
<b>Total policyholder assets</b>	<b>25 481</b>	<b>66 112</b>	<b>63 072</b>	<b>369 776</b>	<b>524 441</b>

<b>31 December 2016 Restated R million</b>	<b>&lt; 1 year</b>	<b>1-5 years</b>	<b>&gt; 5 years</b>	<b>Open ended</b>	<b>Total</b>
Insurance contracts	8 788	27 427	59 693	81 767	177 675
Investment contracts	8 682	42 472	88 701	166 218	306 073
<b>Total policy liabilities</b>	<b>17 470</b>	<b>69 899</b>	<b>148 394</b>	<b>247 985</b>	<b>483 748</b>
Properties	655	-	-	8 752	9 407
Equities and similar securities	-	-	474	81 099	81 573
Government interest-bearing investments	913	2 754	51 347	809	55 823
Corporate interest-bearing investments	9 176	33 931	13 445	1 041	57 593
Mortgages, policy and other loans	367	2 645	2 933	1 033	6 978
Structured transaction assets	2 245	4 655	1 942	2 294	11 136
Investment funds <sup>(1)</sup>	-	-	-	241 356	241 356
Cash, deposits and similar securities	10 972	8 644	238	-	19 854
Deferred acquisition costs	-	-	-	631	631
Long-term reinsurance assets	70	135	708	45	958
Term finance	-	-	(248)	-	(248)
Structured transactions liabilities	(472)	(564)	(244)	-	(1 280)
Net working capital	(33)	-	-	-	(33)
<b>Total policyholder assets</b>	<b>23 893</b>	<b>52 200</b>	<b>70 595</b>	<b>337 060</b>	<b>483 748</b>

<sup>(1)</sup> The effects of consolidating investment funds are not taken into account in the above analysis and controlled funds are reflected as 'investment funds'.

- 3.2 Policyholder portfolios supporting linked and market-related business, participating annuities and other non-participating life business are invested in appropriate assets, taking expected cash outflows into account. Please refer to the liquidity section on page 50 describing the liquidity risk management framework.
- 3.3 These policyholder solutions do not expose the Group to significant liquidity risks. Expected cash flows are taken into account in determining the investment guidelines and asset spread of the portfolios. Limits are also placed on the exposure to illiquid investments.
- 3.4 Liabilities are matched, as far as possible, with interest-bearing assets, to ensure that the duration of assets and liabilities are closely aligned. This may also include derivatives.
- 3.5 Liquidity risk is managed by matching the liabilities with assets that have similar maturity profiles as the liabilities.
- 3.6 The life insurance businesses' capital is not subject to excessive levels of liquidity risk but assets could be realised in a short timeframe if need be. The publicly issued unsecured bonds issued by Sanlam Life are managed on a corporate level (refer to page 62 for more information).

# Capital and risk management report

(continued)

## 4. Insurance risk

Life insurance businesses exposed to risk via:	Insurance risk	
	Persis- tency	Other insurance risks
Policyholder solutions		
Linked and market-related	✓	✓
Smoothed-bonus business:		
Stable bonus	✓	✓
Reversionary bonus	✓	✓
Participating annuities	✓	✓
Non-participating annuities	x	✓
Other non-participating liabilities		
Guarantee plans	✓	✓
Other	✓	✓
Capital portfolio	x	x

✓ Risk applicable to item

x Risk not applicable to item

Insurance risk arises primarily from the writing of non-participating annuity and other non-participating life business, as these products expose the Group to risk if actual experience relating to expenses, mortality, longevity, disability and medical (morbidity) differs from that which is assumed. The Group is, however, also exposed to persistency risk in respect of other policyholder solutions and insurance risk in respect of universal life solutions.

### Persistency risk

Distribution models are used by the Group to identify high-risk clients. Client relationship management programs are aimed at managing client expectations and relationships to reduce lapse, surrender and paid-up rates. The design of insurance products excludes material lapse, surrender and paid-up value guarantees, subject to regulatory constraints, to limit financial loss at surrender. Persistency experience is monitored to ensure that negative experience is timeously identified and corrective action taken. The Group's reserving policy is based on actual experience, adjusted for expected future changes in experience, to ensure that adequate provision is made for lapses, surrenders and paid-up policies.

### Other insurance risk

#### Underwriting risk

The Group manages underwriting risk through:

- its product development process and underwriting policy to prevent anti-selection and ensure appropriate premium rates (loadings) for sub-standard risks;
- adequate reinsurance arrangements to limit exposure per individual and manage concentration of risks;
- claims handling policy; and
- adequate pricing and reserving.

Quarterly actuarial valuations and the Group's regular profit reporting process assist in the timely identification of experience variances. The following policies and practices are used by the Group as part of its underwriting strategy to mitigate underwriting risk:

- All long-term insurance product additions and alterations are required to pass through the approval framework that forms part of the life insurance business's governance process. The statutory actuaries approve the policy conditions and premium rates of new and revised products;
- A risk based approach is followed towards testing for HIV/Aids, smoking and other underwriting factors, to balance the cost of testing with managing underwriting risk. Product pricing and reserving policies also include specific allowance for the risk of HIV/Aids;
- Applications for risk cover are reviewed by experienced underwriters and evaluated against established standards. Retention limits are applied to limit the exposure per individual life;
- Appropriate income replacement levels apply to disability insurance;
- The experience of reinsurers is used where necessary for the rating of sub-standard risks;
- The risk premiums for Group risk business and some of the in-force individual risk business can be adjusted within 12 months should claims experience deteriorate to the extent that such an adjustment is considered necessary. Most of the individual new business is sold with a guarantee that risk premiums would not be increased for the first five to 15 years;
- Risk profits are determined on a regular basis; and
- Regular investigations into mortality and morbidity experience are conducted to ensure that corrective action, for example re-rating of premiums, is taken where necessary.

#### Expense risk

Expenses are managed through the Group's budgeting process and continuous monitoring of actual versus budgeted unit expenses is conducted and reported on.

#### Concentration risk

The Group writes a diverse mix of business, and continually monitors this risk and the opportunities for mitigating actions through reinsurance. The Group's life insurance

businesses are focused on different market segments, resulting in a mix of individual and institutional clients, as well as entry-level, middle income market and high net worth clients.

The tables below provide an analysis of the exposure to the value of benefits insured in respect of non-participating life business by the major life insurance companies as well as the annuity payable per policy in respect of non-participating annuities for the Group's operations.

#### Non-participating annuity payable per annum per life insured

R'000	Number of lives		Before reinsurance		After reinsurance	
	2017	2016	2017 %	2016 %	2017 %	2016 %
0 - 20	213 965	217 232	31	33	32	33
20 - 40	25 911	23 435	16	16	16	16
40 - 60	9 258	8 583	9	9	9	9
60 - 80	5 520	5 069	7	7	7	7
80 - 100	3 119	3 042	5	5	5	5
> 100	9 159	9 253	32	30	31	30
	266 932	266 614	100	100	100	100

#### Value of benefits insured: non-participating life business

Benefits insured per individual life R'000	Number of lives <sup>(1)</sup>		Before reinsurance		After reinsurance	
	2017	2016	2017 %	2016 %	2017 %	2016 %
0 - 500	7 871 580	7 623 938	17	20	23	25
500 - 1 000	271 327	233 756	11	12	13	13
1 000 - 5 000	371 718	305 313	44	44	44	43
5 000 - 8 000	27 751	20 750	10	9	9	8
> 8 000	20 466	14 590	18	15	11	11
	8 562 842	8 198 347	100	100	100	100

<sup>(1)</sup> Excludes funeral policies.

The tables above indicate that the Group's exposure is spread over a large number of lives insured, thereby mitigating concentration risk.

The geographical exposure of the Group's consolidated life insurance operations is illustrated in the table below, based on the value of policy liabilities in each region. The majority of life insurance exposure is to the South African market.

	2017		2016	
	R million	%	R million	%
South Africa	433 925	83	398 382	82
Rest of Africa	32 467	6	30 356	6
Other International	58 049	11	55 010	12
<b>Total policy liabilities</b>	<b>524 441</b>	<b>100</b>	<b>483 748</b>	<b>100</b>



# Capital and risk management report

(continued)

## Retail credit

Retail credit business relates mainly to loan business provided by Sanlam Personal Loans (SPL) and to the retail credit businesses in the Sanlam Emerging Markets (SEM) cluster.

### Sanlam Personal Loans

The balance of loans advanced by SPL to clients at 31 December 2017 is shown below:

R million	2017	2016
Gross balance	4 690	4 398
Provisions	(289)	(287)
<b>Net balance</b>	<b>4 401</b>	4 111

The main risk emanating from the retail credit operations is credit risk. The Group's maximum exposure to credit risk comprises the following:

- As SPL is a joint venture that has been equity accounted based on Sanlam's percentage interest in its net asset value, the Group is exposed to credit risk to the value of the investment, which is disclosed in note 2 on page 41.
- The Group Treasury function has also provided financing to SPL of R3 520 million at 31 December 2017 (2016: R3 103 million). This exposure is managed by the Capital Management operations. The maximum approved limit of financing that can be advanced to SPL is R4,9 billion.

Credit risk consists of credit standing and default risk. It is the company's policy to subject its potential customers to credit rating procedures. In addition, balances of advances are monitored on an ongoing basis. Collection strategies are in place to mitigate credit risk and all accounts that are in arrears are given due priority.

### Sanlam Emerging Markets

Retail credit and structuring profits are a significant part of SEM's operating earnings. The majority of the Group's exposure to retail credit is made up of an investment in Shriram Capital (which has indirect holdings in Shriram Transport Finance Company and Shriram City Union Finance) and a direct holding in Shriram Transport Finance Company. The carrying value of these investments on the Group Statement of Financial Position is R7 301 million (2016: R6 894 million), of which approximately 77% (2016: 78%) is attributed to credit business and the majority of the remainder to general insurance business. Other significant retail credit and structuring investments include Letshego which is owned by Botswana Insurance Holdings and has a carrying value of R1 704 million (2016: R1 842 million), and

Capricorn Investment Holdings in Namibia (which has a stake in Bank Windhoek Holdings) and a carrying value of R1 159 million (2016: R1 020 million).

The main risk emanating from the retail credit and structuring operations is credit risk. These investments have been equity-accounted to reflect SEM's percentage interest in the net asset value of the respective investments. SEM's exposure to credit risk in these investments is limited to the value of SEM's investment in these businesses.

SEM's credit risk management process entails the monitoring of key drivers in each of the significant retail credit and structuring businesses, including an analysis of trends. Risk parameters have been set for each of these key drivers and performance against these targets is monitored and reported to the SEM Retail Credit committee on a quarterly basis.

The primary role of the SEM Retail Credit committee is to:

- Review SEM's exposure to its portfolio of associate investments into retail credit and banking businesses, as well as identify, measure and review key risk drivers;
- Propose appropriate risk appetite measures and monitor SEM's exposure against these measures as well as advise on appropriate actions to take with regards to breaches of the risk appetite;
- Assess the performance of the retail credit portfolio; and
- Liaise with the CCM as and when necessary to form a Group wide view on relevant counterparties.

SEM benefits from the diversification provided by the geographic spread of its operations (throughout Africa, India and South-East Asia), types of credit provided (secured and unsecured lending) and range of market segments targeted. This inherently reduces the overall level of credit risk exposure.

## Capital markets

SCM is a financial engineering business within the Sanlam Group which primarily focuses on managing credit risk for the Sanlam Group. In addition to this, SCM also focuses on originating and structuring transactions to provide customised financing solutions to its clients. SCM, which is housed within the Sanlam Investments cluster, consists of Sanlam Capital Markets (Pty) Limited and its core subsidiaries and the CCM operating on the Sanlam Life Insurance balance sheet. The CCM was established in 2016 and is the business that houses the credit assets of Sanlam Life, thereby enabling centralised management of credit using banking principles.

Within SCM, the Asset Liability and Risk Management committee (ALaRMCO) is responsible for the implementation and monitoring of risk management processes to ensure that the risks arising from proprietary positions are within the approved risk parameters. Where possible, risk measurements are calculated through the application of various statistical techniques, including VaR, and are measured against pre-approved exposure limits. These risk measurements are supplemented with stress testing and scenario analysis. While VaR models are relatively sophisticated, the quantitative market risk information generated is limited by the assumptions and parameters established when creating the related models. Sanlam believes that statistical models alone do not provide a reliable method of monitoring and controlling market risk. Therefore, such models are tools and inputs in the decision-making process, but do not substitute for the experience or judgement of senior management.

If no market data is available for a specific business or investment, the risk management is qualitative by nature. The exposure and riskiness of such types of investments are typically managed by monitoring covenants and by taking the appropriate actions as agreed with the counterparty initially.

Business-wide risk levels are reported to senior management, while desk risk levels are reported to the relevant managers and operators. Limit breaches are escalated for approval in terms of an approval framework. The risk information is summarised, reported to, and discussed by the ALaRMCO at two-weekly meetings.

The mandates for existing businesses are reviewed and submitted for ALaRMCO approval and Risk committee notification on at least an annual basis or more frequently if it was changed through the course of a financial year.

An initial mandate development process is undertaken for each new business ventured into by SCM. Based on the business mandates, quantifiable risks are measured and reported on a daily basis. Any new type of business or product is subjected to a comprehensive review process before initiation to ensure that all of the risks associated with new businesses or products have been identified and can be appropriately managed.

SCM is also exposed to credit risk in respect of its working capital assets and loans extended as part of its debt finance, property finance and equity structuring activities. Collateral is placed or received for transactions entered into by SCM, including (but not limited to) securities lending and derivative exposures.

## 1. Market risk

SCM uses VaR to calculate market risk capital for listed instruments. VaR measures the maximum loss over a given horizon with a specified level of confidence. VaR is computed as follows:

- At a 99,5% confidence level (to be consistent with Sanlam's risk appetite relating to SCM's business);
- Over a 10-day holding period (which takes account of market liquidity risk in the VaR calculation through setting the liquidity period at 10 days);
- Multiplied by a factor of three (to allow for uncertainty in estimating VaR at high confidence levels); and
- VaR is calculated on a diversified basis for SCM as a whole and takes the diversification of portfolios into account.

### Equity risk

For listed equity, price stress tests are performed on the SCM portfolios. The scenarios used in the stress tests incorporate a combination of equity price movements of between -30% and +20%. In the equity price stress test results, the maximum loss is R46 million (2016: insignificant).

R million	Maximum net loss	
	2017	2016
<b>Incremental change in price:</b>		
-5% to 5%	7	-
-10% to 10%	14	-
-15% to 15%	21	-
-30% to 20%	46	-

### Interest rate risk

Various interest rate stress tests are performed on the SCM portfolios. The relative parallel interest rate stress test calculates the market exposure based on interest rate movements of between +50% and -20%, all else being equal.

The market exposure that was calculated at 31 December for these tests was as follows:

R million	Maximum net loss	
	2017	2016
<b>Incremental change in yield:</b>		
-10% to 10%	22	5
-20% to 20%	41	9
-20% to 50%	92	18

# Capital and risk management report

(continued)

## 2. Credit risk

For credit risk capital, SCM utilises the concept of unexpected losses. Based on historical default data, expected losses are computed on a portfolio of credits. Economic principles dictate that a provision should be created for expected losses, although this is not the approach taken from an accounting perspective. An unexpected loss, on the other hand, is the maximum amount over and above the expected loss that SCM could incur over the particular time horizon with a certain level of confidence. In SCM's economic capital model, an unexpected loss over a one-year time horizon at a 99,5% confidence level is used to compute the credit risk capital. This is consistent with the one-year 99,5% VaR used for market risk capital.

At the end of the financial year, SCM's maximum unexpected loss (credit risk capital) was R1 034 million (2016: R659 million). The increase in the maximum unexpected loss from 2016 is due to the implementation of the CCM.

Credit spread stress tests are calculated for all instruments sensitive to credit spread changes. The profit or loss from changes in credit spreads on both the assets and funding are calculated in these stress tests. The stress test results are determined as follows:

- Credit ratings for credit assets and funding are deteriorated by 1, 2 and 3 rating notches;
- Impact of these deteriorations on credit spreads is determined with reference to a predefined credit spread matrix;
- Changed credit spreads are used to revalue credit assets and funding; and
- Resultant net changes in the valuations of credit assets and funding are seen as the test results.

The table below shows the possible effect of a 1, 2 and 3 notch deterioration in credit rating. The total impact on the valuation of the assets is slightly offset by the impact on the valuation of the funding that is used to acquire the positions in the market.

R million	2017	2016
Stress Results 1 (1 Notch)	(133)	(152)
Stress Results 2 (2 Notch)	(279)	(325)
Stress Results 3 (3 Notch)	(452)	(502)

## Maximum exposure to credit risk

SCM's maximum exposure to credit risk is equivalent to the amounts recognised in the statement of financial position, as there are no financial guarantees provided to parties outside the Group that is expected to result in an outflow of resources, nor are there any loan commitments provided that are irrevocable over the life of the facility or revocable only in adverse circumstances.

Credit risk exposures are reported on a netted basis, therefore after taking collateral and netting agreements into account. Appropriate haircuts to collateral and add-ons to exposures are implemented in line with the formulated Credit Exposure Quantification policy. Credit risk exposures are mitigated through several measures, including physical collateral (e.g. mortgage bonds) considered on a case-by-case basis, the use of netting agreements, or guarantees issued by third parties.

The credit quality of each class of financial asset that is neither past due nor impaired, has been assessed as acceptable within the parameters used to measure and monitor credit risk, as described above. There are no assets that would have been past due or impaired, had the terms not been renegotiated.

## Concentration risk

Management determines concentrations by counterparty, with reference to the proportion of total credit risk capital held in respect of that counterparty compared to the overall credit risk capital of the entire portfolio. The 10 largest contributors to credit risk capital make up 29% (2016: 31%) of total credit risk capital, but only 11% (2016: 20%) of the total exposure. SCM is therefore not exposed to significant concentration risk.

## 3. Liquidity risk

Within SCM, the maximum available facilities of R7 billion (2016: R9 billion) exceed the amount utilised of R4,6 billion (2016: R7,2 billion), indicating available unutilised funding sources. In order to keep commitment fees within the Sanlam Group, facilities are negotiated with Sanlam at market-related terms, before external facilities are sought.

Undrawn committed facilities granted by SCM to various counterparties were R190 million (2016: R223 million). A significant portion of trading account assets and liabilities is due within one year.

Hedging of long term liabilities within the CCM is achieved by investing in shorter dated credit instruments in combination with bond forwards and bond futures to match the interest rate sensitivity of the liabilities as

closely as possible. This introduces roll-over risk at futures close out and/or forward maturity dates, additional cash requirements emanating from collateral and margin calls during periods of market stress events, as well as decreasing cash amounts raised from bond carries roll-overs as bond values fall. To manage these additional liquidity risks in the Group, a Liquidity Risk Management policy has been developed and has been approved by the Board. The policy is based on the principles of Basel III (including the need for High Quality Liquid Assets to be held to cover liquidity requirements during periods of market and liquidity stress events), with specific attention given to the management of hedge roll-over risk. However, different to banks, a life company's balance sheet has an inherent ability to absorb illiquidity due to the nature, term and structure of its liabilities. This ability to absorb illiquidity is used to mitigate the liquidity risks within the CCM. It is anticipated that the Liquidity Risk Management policy will be enhanced over time as further work is completed in relation to the illiquidity absorption capability of the Sanlam Life balance sheet.

### **General Insurance**

#### **Santam**

Santam analyses quantifiable risks by using an internally developed economic capital model. The model covers the following risk categories:

- Insurance risk;
- Reinsurance risk;
- Credit risk;
- Market risk; and
- Operational risk.

The model is also used to aggregate the individual risk modules into a single economic capital requirement amount.

A number of risks faced by Santam are not modelled in the internal model, namely: strategic, liquidity, conduct, reputational, political, regulatory, compliance, sovereign downgrade, legal and outsourcing risks. These risks are analysed individually by management and appropriate measures are implemented to monitor and mitigate these risks.

Once the relevant risks are better understood, the risk appetite framework governs how the risks should be managed. Santam has formulated a risk appetite policy which aims to quantify the amount of capital the business is willing to put at risk in the pursuit of value creation. It is within this risk appetite framework that Santam has

selected its asset allocation and reinsurance programmes which are among the most important determinants of risk and hence capital requirements within the organisation. The internal model allows for the measurement of Santam's expected performance relative to the risk appetite assessment criteria agreed to by Santam's Board. The risk appetite process also includes the assessment of non-financial measures in determining the overall capital requirements.

#### *Insurance risk*

Santam issues contracts that transfer insurance risk or financial risk or both. Santam manages insurance risks through its underwriting strategy, adequate reinsurance arrangements and proactive claims handling. This section summarises these risks and the way Santam manages them.

In general, Santam issues personal, commercial and cell insurance policies that include the following terms and conditions:

*Engineering* – Provides cover for risks relating to:

- the possession, use or ownership of machinery or equipment, other than a motor vehicle, in the carrying on of a business;
- the erection of buildings or other structures or the undertaking of other works; and
- the installation of machinery or equipment.

*Guarantee* – A contract whereby the insurer assumes an obligation to discharge the debts or other obligations of another person in the event of the failure of that person to do so.

*Liability* – Provides cover for risks relating to the incurring of a liability other than relating to a risk covered more specifically under another insurance contract.

*Motor* – Covers risks relating to the possession, use or ownership of a motor vehicle. This cover can include risks relating to vehicle accident, theft or damage to third-party property or legal liability arising from the possession, use or ownership of the insured vehicle.

*Accident and health* – Provides cover for death, disability and certain health events. This excludes the benefits to the provider of health services, and is linked directly to the expenditure in respect of health services.

*Property* – Covers risks relating to the use, ownership, loss of or damage to movable or immovable property other than a risk covered more specifically under another insurance contract.

# Capital and risk management report

(continued)

*Transportation* – Covers risks relating to the possession, use or ownership of a vessel, aircraft or other craft or for the conveyance of persons or goods by air, space, land or water. It also covers risks relating to the storage, treatment or handling of goods that are conveyed.

*Crop* – Provides indemnity for crops while still on the field against hail, drought and excessive rainfall. Cover ceases as soon as harvesting has taken place.

*Alternative risk transfer (ART)* – The use of techniques, other than traditional insurance, that include at least an element of insurance risk, to provide entities with risk coverage or protection.

Insurance risk results from fluctuations in the timing, frequency and severity of insured events. Insurance risk also includes the risk that premium provisions turn out to be insufficient to compensate claims as well as the risk resulting from the volatility of expense payments. Expense risk is implicitly included as part of the insurance risk.

In order to quantify the insurance risk faced by Santam, a stochastic simulation of Santam's claims is performed at a line of business level within Santam's internal economic capital model. Assumptions for each line of

business are determined based on more than 15 years' worth of historic data. The expected claims liabilities are modelled for specific lines of business, which are then split into the appropriate sub-classes. For each sub-class of business, three types of losses are modelled, namely attritional losses, individual large losses and catastrophe losses. Each of the sub-classes is modelled based on its own assumptions whose methodology and calibration are thoroughly documented in the internal model documentation.

The attritional losses are modelled as a percentage of the premium. The large losses are modelled by fitting separate distributions to the claims frequency and the claim severity.

Santam also models various catastrophes and the losses from each catastrophe are allocated to multiple classes of business. The following catastrophes are modelled: Earthquake, Storm (small), Storm (large), Hail (excluding crop damage), Marine (cargo), Aviation (hull/liability), Conflagration (property), Conflagration (liability), Utility Failure, Latent Liability and Economic Downturn.

The net claims ratio for Santam, which is important in monitoring insurance risk, has developed as follows over the past seven years:

Loss history	2017	2016	2015	2014	2013	2012	2011
Claims paid and provided %*	65,9	65,1	62,1	63,1	69,3	68,3	64,2

\*Expressed as a percentage of net earned premiums.

Pricing for Santam's products is generally based upon historical claims frequencies and claims severity averages, adjusted for inflation and modelled catastrophes trended forward to recognise anticipated changes in claims patterns. While claims remain the businesses' principal cost, Santam also makes allowance in the pricing procedures for acquisition expenses, administration expenses, investment income, and the cost of reinsurance, as well as for a profit loading that adequately covers the cost of the capital.

Underwriting limits are set for business units, underwriting managers and intermediaries to ensure that this policy is consistently applied. Underwriting performance is monitored continuously and the pricing policy is revised accordingly. Risk factors considered as part of the review would typically include factors such as the age of the insured person, past loss experiences, past insurance history, type and value of asset covered, security measures taken to protect the asset and major use of the covered item. Santam has the right to reprice and change the conditions for accepting risks on renewal and/or 30 days.

Expenses are monitored by each business unit based on an approved budget and business plan.

The underwriting strategy aims to ensure that the risks underwritten are well diversified in terms of type and amount of risk, size and geography. The Santam group has a sufficiently diversified portfolio based on insurance classes. Santam is currently focusing on obtaining international geographical diversification through the business written by Santam Re and the Santam Specialist business.

Insurance risk is further mitigated by ensuring that reserve and reinsurance risk is adequately managed.

### Claims development tables

The presentation of the claims development tables for Santam is based on the actual date of the event that caused the claim (incident year basis). The claims development tables, represent the development of actual claims paid.

### Payment development

#### General insurance claims – gross

R million	Total actual claims cost	Claims paid in respect of (i.e. incident year)							
		2017	2016	2015	2014	2013	2012	2011	2010 and prior
<b>Reporting year</b>									
- 2017	18 823	13 623	4 032	534	438	104	68	16	8
- 2016	16 112	-	11 087	3 909	506	380	111	93	26
- 2015	14 019	-	-	9 786	3 388	354	247	112	132
- 2014	13 556	-	-	-	9 031	3 578	493	173	281
- 2013	13 148	-	-	-	-	9 152	3 411	250	335
- 2012	11 340	-	-	-	-	-	8 176	2 366	798
- 2011	10 327	-	-	-	-	-	-	7 767	2 560
- 2010	9 999	-	-	-	-	-	-	-	9 999
Cumulative payments to date	107 324	13 623	15 119	14 229	13 363	13 568	12 506	10 777	14 139

#### General insurance claims – net

R million	Total actual claims cost	Claims paid in respect of (i.e. incident year)							
		2017	2016	2015	2014	2013	2012	2011	2010 and prior
<b>Reporting year</b>									
- 2017	13 819	10 852	2 359	242	196	91	68	10	1
- 2016	12 809	-	9 866	2 386	212	153	98	85	9
- 2015	11 476	-	-	8 734	2 239	171	172	75	85
- 2014	11 040	-	-	-	7 927	2 489	323	131	170
- 2013	11 335	-	-	-	-	8 423	2 493	168	251
- 2012	9 904	-	-	-	-	-	7 616	1 743	545
- 2011	8 989	-	-	-	-	-	-	7 082	1 907
- 2010	8 710	-	-	-	-	-	-	-	8 710
Cumulative payments to date	88 082	10 852	12 225	11 362	10 574	11 327	10 770	9 294	11 678

# Capital and risk management report

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## Reporting development

### General insurance claims provision – gross

R million	Total provision raised	Financial year during which claim occurred (i.e. incident year)							2010 and prior
		2017	2016	2015	2014	2013	2012	2011	
Reporting year									
- 2017	8 348	5 240	1 541	493	506	201	125	132	110
- 2016	6 814	-	3 870	1 143	895	297	171	135	303
- 2015	6 279	-	-	3 100	1 577	758	208	193	443
- 2014	6 240	-	-	-	4 069	844	410	206	711
- 2013	5 523	-	-	-	-	3 267	788	376	1 092
- 2012	4 948	-	-	-	-	-	3 133	599	1 216
- 2011	4 192	-	-	-	-	-	-	2 448	1 744
- 2010	3 777	-	-	-	-	-	-	-	3 777
	<b>46 121</b>	<b>5 240</b>	5 411	4 736	7 047	5 367	4 835	4 089	9 396

### General insurance claims provision – net

R million	Total provision raised	Financial year during which claim occurred (i.e. incident year)							2010 and prior
		2017	2016	2015	2014	2013	2012	2011	
Reporting year									
- 2017	4 442	3 031	451	252	170	171	104	169	94
- 2016	3 973	-	2 334	512	312	234	157	173	251
- 2015	4 056	-	-	2 291	581	348	197	257	382
- 2014	3 968	-	-	-	2 337	448	325	239	619
- 2013	4 207	-	-	-	-	2 459	568	331	849
- 2012	3 971	-	-	-	-	-	2 550	466	955
- 2011	3 273	-	-	-	-	-	-	1 919	1 354
- 2010	2 896	-	-	-	-	-	-	-	2 896
	<b>30 786</b>	<b>3 031</b>	2 785	3 055	3 400	3 660	3 901	3 554	7 400

### *Reserving*

Reserve risk relates to the risk that the claim provisions held for both reported and unreported claims as well as their associated expenses may prove insufficient.

Santam currently calculates its technical reserves on two different methodologies, namely the 'percentile approach' and the 'cost of capital approach'. The 'percentile approach' is used to evaluate the adequacy of technical reserves for financial reporting purposes, while the 'cost of capital approach' is used as one of the inputs for regulatory reporting purposes.

#### *Percentile approach*

Under this methodology, reserves are held to be at least sufficient at the 75th percentile of the ultimate loss distribution.

The first step in the process is to calculate a best-estimate reserve. Being a best-estimate, there is an equally likely chance that the actual amount needed to pay future claims will be higher or lower than this calculated value.

The next step is to determine a risk margin. The risk margin is calculated such that there is now at least a 75% probability that the reserves will be sufficient to cover future claims.

#### *Cost of capital approach*

The cost of capital approach to reserving is aimed at determining a market value for the liabilities on the statement of financial position. This is accomplished by calculating the cost of transferring the liabilities, including their associated expenses, to an independent third party.

The cost of transferring the liabilities off the statement of financial position involves calculating a best-estimate of the expected future cost of claims, including all related run-off expenses, as well as a margin for the cost of capital that the independent third-party would need to hold to back the future claims payments.

Two key differences between the percentile and cost of capital approaches are that under the cost of capital approach, reserves must be discounted using a term-dependent interest-rate structure and that an allowance must be made for unallocated loss adjustment expenses.

The cost of capital approach will result in different levels of sufficiency per class underwritten so as to capture the differing levels of risk inherent within the different classes. This is in line with the principles of risk-based solvency measurement.

Santam is not significantly exposed to seasonality due to the broad range of insurance contracts that Santam writes. Motor and Property contain an element of seasonality e.g. hail storms in the summer, however, there may not be a direct correlation between that seasonality and Santam's financial results. There is an element of seasonality attached to Crop, however, Santam's exposure is limited.

### *Reinsurance risk*

Reinsurance risk is the risk that the reinsurance cover placed is inadequate and/or inefficient relative to Santam's risk management strategy and objectives. Santam obtains third-party reinsurance cover to reduce risks from single events or accumulations of risk that could have a significant impact on the current year's earnings or capital. Santam has an extensive reinsurance programme that has developed over a number of years to suit the risk management needs of the business.

The internal model is used to evaluate the type and quantum of reinsurance to purchase within Santam's risk appetite framework. The reinsurance programme is placed into both the local and international reinsurance markets. Reinsurance arrangements in place include proportional, excess of loss, stop loss and catastrophe coverage.

The core components of the reinsurance programme comprise:

- Individual excess-of-loss cover for property, liability, engineering, aviation and marine risks, which provides protection to limit losses to the range of R25 million to R50 million per risk, excluding reinstatement premiums due as a result of the claim against the cover. In 2016 the range was increased to a maximum of R85 million per risk through participations by Santam Re on selected Group reinsurance programmes;
- Catastrophe cover to the extent of 1,1% of the total exposure of the significant geographical areas, amounting to protection of up to R8,8 billion (2016: R8,8 billion) per event with an attachment point of R100 million. These balances include catastrophe cover of R1,2 billion for each year included in the alternative risk transfer quota share arrangement as described below. At the same time catastrophe protection for an aggregate of losses from events above R10 million where such aggregated losses exceed R300 million was put in place in 2017. This cover expires on 30 April 2018 and Santam will purchase this cover subject to acceptable commercial terms. The cover is for an amount of R200 million in excess of a R300 million aggregate deductible;



# Capital and risk management report

(continued)

- Santam's agriculture portfolio is protected through a 60% proportional and a non-proportional reinsurance arrangement with non-proportional cover set at levels offering protection from extreme loss events; and
- Santam Re purchases retrocession protection on its international portfolio. This protection is in the form of a 50% quota share on specified territories and catastrophe excess of loss with a gross attachment point of US\$10 million. There is, in addition, per risk protection for individual exposures in excess of R25 million.

Santam has implemented arrangements to support growth in territories outside South Africa in situations where this is dependent on Santam's S&P international rating scale rating. In 2016, Santam entered into an agreement with Munich Reinsurance Company of Africa Ltd (Munich Re of Africa) in terms of which selected Santam business units will be able to use the reinsurer's S&P AA- credit rating to write inwards international reinsurance business on Munich Re of Africa's licence where an international credit rating of A- or better is required. The agreement between Santam and Munich Re of Africa became effective 1 January 2017.

The agreement with Munich Re of Africa replaced the credit rating agreement which expired on 31 December 2016. Santam has decided to retain the ART reinsurance quota share programme, which was linked to the expired credit rating agreement. A number of key international reinsurers participated on the program from 1 January 2017 with an annual reinsurance quota share premium of R1 billion. The agreement also reduces Santam's net catastrophe exposure.

The Santam Board approves the reinsurance renewal process on an annual basis. The major portion of the reinsurance programme is placed with external reinsurers that have an international credit rating of no less than A- from S&P or AM Best, unless specific approval is obtained from the Board to use reinsurers with ratings lower than the agreed benchmark.

## *Insurance-related credit risk*

Key insurance-related areas where Santam is exposed to credit default risk are:

- Failure of an asset counterparty to meet their financial obligations;
- Reinsurer default on presentation of a large claim;
- Reinsurers default on their share of Santam's insurance liabilities; and
- Default on amounts due from insurance contract intermediaries.

Santam continuously monitors its exposure to its counterparties for financial statement as well as regulatory reporting purposes. It has therefore established a number of criteria in its risk appetite statement to monitor concentration risk and provide feedback to management and the Risk Committee on at least a quarterly basis.

Santam determines the credit quality for each of its counterparties by reference to the probability of default on the basis of assessments made by the rating agency over a one-year time horizon and the resulting loss given default. The underlying default probabilities are based on the credit migration models developed by S&P and Moody's which incorporate up to 90 years' worth of credit default information.

For default risk, Santam uses a model which is largely based on the Basel II regulation.

The credit risk, analysis is used by management to determine the level of risk capital that should be held for the following types of exposures:

- Risk-based assets such as bonds and bank deposits;
- Outstanding premiums due from intermediaries and reinsurance receivables due from reinsurers;
- Reinsurance claims provisions; and
- Exposure to potential reinsurance recoveries based on the losses generated by the internal model.

For concentration risk, Santam uses the proposed SAM methodology. The calculation is performed in four steps:

- Determine the exposure by counterparty;
- Calculate the excess exposure above a specified threshold level;
- Apply a charge to this excess exposure; and
- Aggregate the individual charges to obtain an overall capital requirement for concentration risk.

Santam is protected by guarantees provided by the Intermediary Guarantee Facility for the non-payment of premiums collected by intermediaries. Santam Group's protected portion of receivables due from contract holders and intermediaries amounts to 50,3% (2016: 48,3%). For Santam (the Company), this amounts to 49,3% (2016: 48,3%). Debtors falling into the 'Not rated' category are managed by the internal credit control department on a daily basis to ensure recoverability of amounts. Historically, no material defaults occurred on the insurance debtor book.

Santam seeks to avoid concentration of credit risk to groups of counterparties, to business sectors, product types and geographical segments. The financial instruments, except for Santam's exposure to the four large

South African banks, do not represent a concentration of credit risk. In terms of Santam's internal risk appetite framework, no more than 15% of total portfolio assets are generally invested in any one of the four major South African banks. Accounts receivable is spread over a number of major companies and intermediary parties, clients and geographic areas. Santam assesses concentration risk for debt securities, money market instruments and cash collectively. Santam does not have concentrations in these instruments to any one company exceeding 15% of total debt securities, money market instruments or cash, except for Absa where the total exposure amounted to 16,5% (2016: 16,1%) on 31 December 2017 and was managed down to 14,2% on 2 January 2018 in accordance with the risk appetite framework.

Santam uses a large panel of secure reinsurance companies. The credit risk of reinsurers included in the reinsurance programme is considered annually by reviewing their financial strength as part of the renewal process. Santam's largest reinsurance counterparty is SCOR (2016: Allianz). The credit risk exposure is further monitored throughout the year to ensure that changes in credit risk positions are adequately addressed.

# Capital and risk management report

(continued)

The following table provides information regarding the aggregated credit risk exposure for financial and insurance assets. The credit ratings provided in these tables were determined as follows: Sanlam Investment Management (SIM) provided management with reports generated from their credit system on a quarterly basis, detailing all counterparty duration and credit risk. These reports include international, national and internal ratings. SIM also provides management with a conversion table that is then applied to standardise the ratings to standardised international long-term rates. For assets held by subsidiaries and not managed by SIM, a process is agreed with the subsidiaries to align the credit rating analysis with Group requirements.

## 31 December 2017

R million	AA	AA-	A+	A	A-	BBB+
Debt securities - quoted	-	-	-	-	-	-
Debt securities - unquoted	-	15	-	-	-	-
Total debt securities	-	15	-	-	-	-
Total unitised investments	-	-	-	-	-	-
Short-term money market instruments	-	-	2	-	-	-
Receivables due from contract holders/intermediaries	-	-	-	-	-	98
Reinsurance receivable	37	24	118	111	116	-
Other loans and receivables	1	9	2	3	7	10
Cell owners' interest	-	-	-	-	-	-
Deposit with cell owners	-	-	-	-	-	-
Cash and cash equivalents	302	320	29	-	2	101
<b>Total</b>	<b>340</b>	<b>368</b>	<b>151</b>	<b>114</b>	<b>125</b>	<b>209</b>

## 31 December 2016

R million	AA	AA-	A+	A	A-	BBB+
Debt securities - quoted	-	-	-	244	-	61
Debt securities - unquoted	-	15	-	-	-	-
Total debt securities	-	15	-	244	-	61
Total unitised investments <sup>(1)</sup>	-	-	-	-	-	-
Short-term money market instruments	-	-	-	-	-	10
Receivables due from contract holders/intermediaries	41	13	-	33	-	-
Reinsurance receivables	38	28	3	-	12	-
Other loans and receivables	2	1	-	-	-	-
Cell owners' interest	-	-	-	-	-	-
Deposit with cell owners	-	-	-	-	-	-
Cash and cash equivalents	241	47	18	-	-	-
<b>Total</b>	<b>322</b>	<b>104</b>	<b>21</b>	<b>277</b>	<b>12</b>	<b>71</b>

<sup>(1)</sup> Total unitised investments have been included in prior year disclosure to improve comparability.

The carrying amount of assets included in the statement of financial position represents the maximum credit exposure.

There are no material financial assets that would have been past due or impaired had the terms not been renegotiated.

							Carrying value R million
	BBB	BBB-	BB+	BB	BB-	Not rated	
	1 784	3 913	377	1 484	229	624	8 411
	741	2 601	160	41	159	16	3 733
	2 525	6 514	537	1 525	388	640	12 144
	-	151	-	-	-	218	369
	426	1 515	61	79	48	43	2 174
	-	-	-	37	-	3 458	3 593
	-	-	-	-	-	280	686
	48	105	7	34	4	747	977
	-	-	-	-	-	10	10
	-	-	-	-	-	174	174
	1 229	893	1	1 430	-	14	4 321
	4 228	9 178	606	3 105	440	5 584	24 448

							Carrying value R million
	BBB	BBB-	BB+	BB	BB-	Not rated	
	3 399	1 644	256	188	24	164	5 980
	4 193	266	215	20	75	249	5 033
	7 592	1 910	471	208	99	413	11 013
	-	178	-	-	-	90	268
	1 067	259	-	2	18	5	1 361
	-	33	-	-	-	2 776	2 896
	-	-	-	-	-	224	305
	157	25	5	4	-	359	553
	-	-	-	-	-	7	7
	-	-	-	-	-	219	219
	1 340	1 229	-	-	-	12	2 887
	10 156	3 634	476	214	117	4 105	19 509

# Capital and risk management report

(continued)

## *Market risk*

Market risk arises from the level or volatility of the market prices of financial instruments. Exposure to market risk is measured by the impact of movements in the level of financial variables such as interest rates, equity prices and exchange rates. The following financial and insurance assets, disclosed based on similar characteristics, are affected by market risk:

- Equity securities
- Debt securities
- Receivables due from contract holders/intermediaries
- Reinsurance receivables
- Reinsurance assets
- Other loans and receivables
- Cash and cash equivalents
- Short-term money market instruments
- Cell owners' interest
- Derivatives

Santam uses a number of sensitivity or stress-test based risk management tools to understand the impact of the above risks on earnings and capital in both normal and stressed conditions. These stress tests combine deterministic shocks, analysis of historical scenarios and stochastic modelling using the internal economic capital model to inform Santam's decision making and planning process and also for identification and management of risks within the business units. Each of the major components of market risk faced by Santam is described in more detail below.

## *Price risk*

Santam is subject to price risk due to daily changes in the market values of its equity portfolios. Santam is not directly exposed to commodity price risk.

Santam takes a long-term view when agreeing investment mandates with the relevant portfolio managers and looks to build value over a sustained period of time rather than utilising high levels of purchases and sales in order to generate short-term gains from its equity holdings.

Equity price risk arises from the negative effect that a fall in the market value of equities can have on Santam's net asset value. Santam's objective is to earn competitive relative returns by investing in a diverse portfolio of high-quality, liquid securities. Portfolio characteristics

are analysed regularly and equity price risk is actively managed through a variety of modelling methods. Santam sets appropriate risk limits to ensure that no significant concentrations in individual companies arise. Santam's largest investment in any one company comprises 19,0% (2016: 14,7%) of the total quoted equities and 1,0% (2016: 0,7%) of the total assets. The company's largest investment in any one company comprises 22,6% (2016: 14,7%) of the total quoted equities and 1,2% (2016: 0,8%) of the total assets.

Santam makes use of derivative products as appropriate to manage equity exposure and to protect the portfolio from losses outside of its risk appetite.

## *Interest rate risk*

Interest rate risk arises from the net effect on its assets and liabilities of a change in the level of interest rates.

The assets backing the subordinated debt are managed within a mandate to ensure that adequate cover is provided for the related liabilities i.e. the market value of the subordinated debt and the market value of the assets backing the debt react the same way to changes in interest rates.

Exposure to interest rate risk is monitored through several methods that include scenario testing and stress testing using measures such as duration. The bond returns are modelled based on the historic performance of the individual bonds held in the portfolio, and adjusted to reflect the current interest rates and inflation environment. The risk-free rate used for modelling is 9% as at 31 December 2017 (2016: 9%).

Interest rate risk is also managed using derivative instruments, such as swaps, to provide a degree of hedging against unfavourable market movements in interest rates.

General insurance liabilities are not directly sensitive to the level of market interest rates, as they are undiscounted and contractually non-interest-bearing. Interest-bearing instruments with a fixed rate give rise to fair value interest rate risk, while interest-bearing instruments with a floating rate give rise to cash flow interest rate risk.

### *Currency risk*

Foreign currency risk is the risk that Santam will be negatively impacted by changes in the level or volatility of currency exchange rates relative to the South African rand.

In accordance with Santam's international diversification strategy, Santam is entering into various transactions where there is an underlying foreign currency risk such as the SEM target shares and SAN JV. Santam is also expanding its reinsurance offering to predominantly other countries in Africa as well as South-East Asia, India and China. Furthermore, Santam has established an international investment portfolio to ensure adequate asset liability matching in terms of the claims process and capital requirements.

Santam has a well-defined foreign currency management policy which is used to ensure adequate overall asset liability matching. Santam applies hedge accounting only when approved by the Investment committee.

Santam incurs exposure to currency risk in two ways:

- Operational currency risk – by underwriting liabilities in currencies other than the currency of the primary environment in which the business units operate (non-functional currencies); and
- Structural currency risk – by mainly investing in SEM target shares and SAN JV.

These risks affect both the value of Santam's assets as well as the cost of claims, particularly for imported motor parts, directly and indirectly. The fair value of the investments in the SEM target shares and SAN JV is impacted by changes in the foreign exchange rates of the underlying operations. Santam is also pursuing international diversification in underwriting operations through the business written by Santam Re and the specialist underwriting managers.

Santam does not take cover on foreign currency balances, but evaluates the need for cover on transactions on a case-by-case basis.

### *Derivatives risk*

Santam uses derivative financial instruments for the purpose of reducing its exposure to adverse fluctuations in interest rates, foreign exchange rates and equity prices. Santam does not use derivatives to leverage its exposure to markets and does not hold or issue derivative financial instruments for speculative purposes. There is a policy on the use of derivatives that is approved by the Santam Investment committee and the Board.

Over-the-counter derivative contracts are entered into only with approved counterparties, in accordance with Santam policies, effectively reducing the risk of credit loss. Santam applies strict requirements to the administration and valuation process it uses, and has a control framework that is consistent with market and industry practice for the activity that it has undertaken.

### *Liquidity risk*

Santam manages the liquidity requirements by matching the duration of the assets invested to the corresponding liabilities. The net insurance liabilities are covered by cash and very liquid interest-bearing instruments while Santam's subordinated debt obligation is covered by matching cash and interest-bearing instruments (including interest rate swaps).

The cash mandates include market risk limitations (average duration and maximum duration per instrument) to ensure adequate availability of liquid funds to meet Santam's payment obligations.

Santam's shareholders funds are invested in a combination of interest-bearing instruments, preference shares, listed equities and unlisted investments. The listed equity portfolio is a well-diversified portfolio with highly liquid shares.

# Capital and risk management report

(continued)

## *Operational risk*

Operational risk is the risk of direct or indirect losses resulting from human factors, external events and inadequate or failed internal processes and systems. Operational risks are inherent in Santam's operations and are typical of any large enterprise. Major sources of operational risk can include operational process reliability, information security, outsourcing of operations, dependence on key suppliers, implementation of strategic and operational change, integration of acquisitions, fraud, human error such as not placing the necessary facultative reinsurance, client service quality, inadequacy of business continuity arrangements, recruitment, training and retention of employees, and social and environmental impact.

Santam manages operational risk by a comprehensive system of internal controls. From a risk governance perspective, the three lines of defence approach are used to identify the various levels of controls, oversight and assurance, including consideration of role-player independence. Risk management processes for oversight include using a range of techniques and tools to identify, monitor and mitigate its operational risk in accordance with Santam's risk appetite. These tools include Risk and Control Self Assessments and questionnaires, Key Risk Indicators (e.g. fraud and service indicators), Scenario Analyses and Loss Reporting. In addition, Santam has developed a number of contingency plans including Incident Management and Business Continuity Plans. Quantitative analysis of operational risk exposures material to Santam are used to inform decisions on controls and the overall amount of capital held for potential risk exposures. A compulsory annual internal control declaration is completed by senior and executive management and results reported to the Risk and Audit committee. The outcome of the declaration is reviewed to ensure material control breakdowns have been noted and appropriately addressed. The declaration process supports the Board in their assessment of the system of internal controls.

## **Sanlam Emerging Markets**

SEM's exposure to general insurance business includes an investment in Shriram General Insurance (through the holding in Shriram Capital and direct) in India, a holding in Pacific & Orient in Malaysia and a 46,6% holding in Saham Finances in Morocco. In addition to these investments, SEM holds smaller stakes in various other general insurance businesses across Africa.

The main risk emanating from the general insurance operations is insurance risk. This risk is managed through reinsurance, close monitoring of claims and sound underwriting practices.

The general insurance investments have been equity accounted to reflect SEM's percentage interest in the net asset value of the respective investments. SEM's exposure is limited to the value of the investment in these businesses.

## **Group Office**

The Group Office is responsible for areas of financial risk management that are not allocated to individual businesses.

### **1. Liquidity risk**

Term finance liabilities in respect of margin business are matched by assets with an appropriate maturity profile. These assets are managed to ensure that sufficient liquid investments are available to match the cash flow profile of the term finance liabilities. The Group has significant liquid resources and substantial unutilised banking facilities to cover any mismatch position.

The maturity profile of term finance liabilities in respect of the margin business and the assets held to match this term finance is provided in the following table:

R million	<1 year	1-5 years	>5 years	Open ended	Total
<b>31 December 2017</b>					
Term finance liabilities	(584)	(1 255)	-	-	(1 839)
Interest-bearing liabilities held in respect of margin business	(584)	(1 255)	-	-	(1 839)
Assets held in respect of term finance	212	974	504	149	1 839
Equities and similar securities	-	-	-	109	109
Corporate interest-bearing investments	182	972	504	40	1 698
Mortgages and loans	-	2	-	-	2
Cash, deposits and similar securities	4	-	-	-	4
Working capital assets and liabilities	26	-	-	-	26
<b>Net term finance liquidity position</b>	<b>(372)</b>	<b>(281)</b>	<b>504</b>	<b>149</b>	<b>-</b>

R million	<1 year	1-5 years	>5 years	Open ended	Total
<b>31 December 2016</b>					
Term finance liabilities	(222)	(1 350)	-	-	(1 572)
Interest-bearing liabilities held in respect of margin business	(222)	(1 350)	-	-	(1 572)
Assets held in respect of term finance	636	732	-	204	1 572
Equities and similar securities	-	-	-	121	121
Corporate interest-bearing investments	313	732	-	83	1 128
Working capital assets and liabilities	323	-	-	-	323
<b>Net term finance liquidity position</b>	<b>414</b>	<b>(618)</b>	<b>-</b>	<b>204</b>	<b>-</b>

The unsecured subordinated bonds issued by Sanlam Life, which are matched by assets with appropriate maturity profiles, are also managed by the Group Office. These assets are managed to ensure that sufficient liquid investments are available to match the cash flow profile of the term finance liabilities.



# Capital and risk management report

(continued)

The maturity profile of the term finance liabilities in respect of the unsecured subordinated bonds and the assets held to match this term finance is provided in the following table:

R million	<1 year	1-5 years	>5 years	Open ended	Total
<b>31 December 2017</b>					
Term finance liabilities					
Interest-bearing liabilities	-	-	(2 166)	-	(2 166)
Assets held in respect of term finance	262	1 353	206	345	2 166
Government interest-bearing investments	6	41	11	-	58
Corporate interest-bearing investments	170	1 149	195	-	1 514
Mortgages, policy and other loans	3	31	-	-	34
Structured transaction liabilities	77	110	-	-	187
Investment funds	-	-	-	345	345
Cash, deposits and similar securities	64	22	-	-	86
Working capital assets and liabilities	(58)	-	-	-	(58)
<b>Net term finance liquidity position</b>	<b>262</b>	<b>1 353</b>	<b>(1 960)</b>	<b>345</b>	<b>-</b>
<b>31 December 2016</b>					
Term finance liabilities					
Interest-bearing liabilities	-	-	(2 147)	-	(2 147)
Assets held in respect of term finance	80	1 430	127	510	2 147
Government interest-bearing investments	-	39	12	-	51
Corporate interest-bearing investments	102	1 136	115	-	1 353
Mortgages, policy and other loans	-	29	-	-	29
Structured transaction liabilities	11	198	-	-	209
Investment funds	-	-	-	510	510
Cash, deposits and similar securities	23	28	-	-	51
Working capital assets and liabilities	(56)	-	-	-	(56)
<b>Net term finance liquidity position</b>	<b>80</b>	<b>1 430</b>	<b>(2 020)</b>	<b>510</b>	<b>-</b>

## 2. Sensitivity analysis – market risk

Refer to page 179 of the Integrated Report online for an analysis of the Group's exposure to market risk as measured by GEV.

## 3. Cash flow hedging risk

### *Saham Finances transaction*

Subsequent to the 2017 year-end, agreements were concluded to acquire the remaining 53,4% stake in Saham Finances. This transaction significantly enhances the strategic positioning of Sanlam as the leading insurance provider in Africa, and will accelerate the extraction of synergies from the combined footprint. The transaction price of US\$1 050 million will be funded from a combination of a Sanlam Limited share issuance, available discretionary capital and debt funding.

The effective date of this transaction is dependent on the fulfilment of the conditions precedent.

In terms of Sanlam's risk management strategy, foreign currency risks can be assessed on a case-by-case basis to determine whether specific hedging requirements exist. The proposed transaction with Saham Finances was therefore assessed and it was concluded by the Executive committee that the foreign currency risk relating to this

transaction should be appropriately hedged, and as such it was decided to partially hedge the transaction through a combination of foreign currency acquisitions and forward exchange contracts. A total of US\$602 million was hedged through this strategy at an average exchange rate of R14,12.

The designated foreign currency and forward exchange contracts were identified as the hedging instruments and the proposed acquisition as described above was identified as the hedge item. The hedge was implemented in December 2017 when the transaction became highly probable.

To determine the expected effectiveness of the hedge the "Dollar offset method" (i.e. the ratio of the cumulative foreign currency movements on the designated foreign currency resources divided by the cumulative foreign currency movements on the purchase price) was considered. The hedge was deemed effective on inception date on a prospective basis, and again deemed effective on 31 December 2017 on a retrospective and a prospective basis. Hedge effectiveness will continue to be assessed over the life of the hedge.