



ANNUAL FINANCIAL STATEMENTS

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Declaration in terms of the Companies Act, 71 of 2008 (Companies Act)

The preparation of these financial statements has been supervised by the chief financial officer, Aarti Takoordeen, CA(SA), in terms of sections 29 and 30 of the Companies Act. The financial statements have been audited in compliance with the applicable requirements of the Companies Act.

JSE directors' responsibility statement

for the year ended 31 December 2016

The directors are responsible for the preparation and fair presentation of the consolidated and separate annual financial statements of the JSE Limited, comprising the statements of financial position at 31 December 2016, and the statements of comprehensive income, changes in equity and cash flows for the year then ended, and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory notes, in accordance with International Financial Reporting Standards and the requirements of the Companies Act of South Africa. In addition, the directors are responsible for preparing the directors' report.

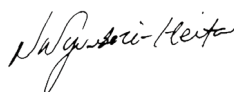
The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether owing to fraud or error, and for maintaining adequate accounting records and an effective system of risk management.

The directors have made an assessment of the ability of the Company and its subsidiaries to continue as going concerns and have no reason to believe that the businesses will not be going concerns in the year ahead.

The auditor is responsible for reporting on whether the consolidated and separate financial statements are fairly presented in accordance with the applicable financial reporting framework.

Approval of consolidated and separate annual financial statements

The consolidated and separate annual financial statements of the JSE Limited, as identified in the first paragraph, were approved by the Board of directors on 28 February 2017 and signed by:



N Nyembezi-Heita
Chairman



N Newton-King
Chief Executive Officer

Declaration by Company Secretary

For the year ended 31 December 2016

The JSE Limited has complied with all statutory and regulatory requirements in accordance with the Financial Markets Act, and all directives issued by the Financial Services Board. In terms of section 88 of the Companies Act, as amended, I hereby confirm that the Company has lodged with the Registrar of Companies all such returns as are required of a public company in terms of this Act and that all such returns are true, correct and up to date.



G Brookes
Group Company Secretary

Group Audit Committee report

Prepared by the chairman of the Group Audit Committee, Nigel Payne

GROUP AUDIT COMMITTEE	
COMPOSITION	INVITED TO ATTEND
<i>Independent non-executive directors:</i>	Chairman of the Board
Nigel Payne (Committee chairman)	CEO
Anton Botha (Lead independent director)	CFO
Dr Suresh Kana	Director: GRC
Andile Mazwai	Internal Audit
Nomavuso Mnxasana	External Auditors
	Financial Services Board



Summary of the Group Audit Committee's statutory and governance mandate:

Finance function	External auditor and external audit	Financial statements/ Integrated report	Internal financial control/ Internal audit	Complaints
Appropriateness and expertise of CFO	Nominate independent auditor for appointment by shareholders	Review all financial reports	Responsible for appointment, performance and assessment of the internal audit function	Regarding accounting practices and internal audit
Appropriateness and expertise of senior members of the finance team	Determine terms of engagement and fees	Prepare report on how duties are discharged	Approve internal audit annual plan	Regarding content or audit of financial statements
Annual review of the finance function	Approve nature and extent of non-audit services	Make submissions to Board regarding accounting policies, records and reporting	Make submissions to Board regarding internal financial control	Regarding internal financial controls
Review and approval of annual budgets and forecasts		Have regard for factors and risks affecting integrity of integrated report	Undertake formal annual assessment of internal audit performance	Any related matters
	Companies Act Sections 90-92; 94	Companies Act Section 94	Companies Act Section 94	Companies Act Section 94
King Principles	King Principles	King Principles	King Principles	King Principles
Oversight role underpinned by combined assurance model				

Group Audit Committee report (continued)

Composition and meeting procedures	Primary roles and responsibilities
<ul style="list-style-type: none"> During the year under review, three Group Audit Committee meetings were held, in accordance with the requirements of the committee's terms of reference. The Group Audit Committee is composed of its chairman, who is an independent non-executive director, and four other independent non-executive directors. The Chairman of the Board, CEO, CFO, director of GRC, Company Secretariat, and representatives of the external auditors and Internal Audit, as well as the Financial Services Board, attend meetings by invitation only. The Chairman of the Board is not a member of the Group Audit Committee. The committee is suitably skilled to perform the role required. The collective skills of the committee include an understanding of financial and sustainable reporting, internal financial controls, the internal audit function, the external audit process, corporate law, risk management, IT governance as it relates to integrated reporting, and the governance processes of the Company. However, it is not expected that each member should possess all the required qualifications, skills and experience. The members of the Group Audit Committee satisfy the requirements of section 94(4) of the Companies Act. 	<ul style="list-style-type: none"> The committee acts in accordance with its statutory duties, the delegated authority of the Board as recorded in its terms of reference, and within the guidelines of the King Code of Governance. The committee must prepare a report describing how it carried out its functions as specified in section 94(7) of the Companies Act, and this report serves that purpose. The committee has power to investigate any activity within the scope of its terms of reference. The committee has an independent role with accountability to both the Board and shareholders. The committee, in the fulfilment of its duties, may call upon the chairmen of other Board committees, any of the executive directors, officers or the Group Company Secretary to provide it with information. The committee has reasonable access to the Company's records, facilities and any other resources necessary to discharge its duties and responsibilities. The committee does not assume the functions of management, which remain the responsibility of the executive directors, officers and other members of senior management.

Appointment of Audit Committee/Audit Committee members

In terms of the Companies Act, at the annual general meeting of the Company, shareholders are required to approve Audit Committee members. The members who were approved by shareholders at the 11th annual general meeting of the Company and who serve until the next annual general meeting in 2017 are:

Name	Qualification(s)	Director	Appointed as director in	Group Audit Committee meeting attendance in 2016
Nigel Payne (chairman)	CA(SA)	Independent non-executive	July 2005	100% (3/3 meetings)
Anton Botha	BCom; BProc; BCom (Hons)	Independent non-executive	July 2005	100% (3/3 meetings)
Dr Suresh Kana	CA(SA)	Independent non-executive	July 2015	100% (3/3 meetings)
Andile Mazwai	BCom (Hons)	Independent non-executive	July 2005	100% (3/3 meetings)
Nomavuso Mnxasana	CA(SA)	Independent non-executive	December 2012	100% (3/3 meetings)

The Board appointed Andile Mazwai, an independent non-executive director, as a member of the Group Audit Committee with effect from 1 January 2016. The appointment of Andile Mazwai was approved by shareholders at the annual general meeting held in May 2016.

The Board is satisfied that:

- the Group Audit Committee, acting as a collective, is adequately skilled to perform its role having regard to the size and circumstances of the Company;
- individual members of the Group Audit Committee possess appropriate financial and related qualifications, skills and financial expertise to discharge their responsibilities; and
- individual members of the Group Audit Committee are not involved in day-to-day management of the Company.

Subsequent to year-end, Andile Mazwai stepped down from the Group Audit Committee in order to devote time to his responsibilities on other Committees of the JSE Board. The Board is satisfied that the remaining members of the Group Audit Committee, as shown in table above, meet the provisions of the Companies Act and are independent, and is therefore recommending their appointment to the Group Audit Committee for the ensuing year.

The re-election of these four independent non-executive directors to the Group Audit Committee will take place by way of separate resolutions to be considered by shareholders at the AGM to be held on 18 May 2017. The text of these ordinary resolutions is set out in the AGM Notice distributed separately to shareholders.

In line with the Companies Act and the King Report, the Group Audit Committee presents its report for the financial year ended 31 December 2016.

The committee has discharged all its responsibilities and carried out all the functions assigned to it, and these activities are set out in the remainder of this report:

Responsibilities in terms of the Companies Act/Terms of reference	How discharged
<p>In respect of the finance function:</p> <p>Annually assessed and confirmed the appropriateness of the expertise and experience of the chief financial officer (CFO) and the appropriateness of the expertise, resources and experience of the senior members of management responsible for the finance function.</p>	<p>The Company employs a full-time CFO who is also an executive director of the JSE. The CFO holds a CA (SA) qualification and has extensive senior-executive experience in finance across various industries. The performance, effectiveness and resourcing of the Company's finance function was assessed as part of the annual Board effectiveness review for the year ended December 2016, which review was undertaken by an independent service provider. The Group Audit Committee considered the results of this effectiveness review as it pertained to the committee and to the Company's finance function, and is satisfied as to the quality and effectiveness of the finance function and the level of resourcing within the finance division.</p>
<p>Responsible for the appointment and dismissal of the CFO.</p>	<p>Not applicable for the year under review.</p>
<p>In respect of the external auditor and the external audit:</p> <p>Nominated for appointment as auditor of the Company a registered auditor who, in the opinion of the committee, is independent of the Company and determined their terms of engagement and fee [section 94(7)(a) and (b)].</p>	<p>At the February 2016 meeting, the committee reviewed and confirmed the independence of the external auditors and recommended KPMG Inc for appointment by shareholders at the 2016 AGM, with Joelene Pierce as the designated auditor. This resolution was adopted by shareholders with a 99.8% majority vote at the AGM held on 26 May 2016.</p>
	<p>At the February 2016 meeting the committee also reviewed and confirmed the terms of engagement for the external auditors and the nature and extent of non-audit services to be provided by KPMG Inc. The fee proposed by KPMG Inc for the independent audit in 2016 was negotiated by executive management, and reviewed and finalised by the Group Audit Committee. This audit fee, for the independent audit of JSE Group entities for the year ended 31 December 2016, amounted to R3.9 million (2015: R4.3 million) and has been fully disclosed in the audited annual financial statements.</p> <p>During the course of 2016 the Group Audit Committee adopted a formal policy on audit firm rotation. In terms of this policy, the Company's external audit account was put to tender during the year.</p> <p>KPMG Inc has served for an extended period as the independent auditors of the Company, and has executed these responsibilities with diligence and distinction. Given the tenure of KPMG Inc as independent auditors, the firm was not considered for re-appointment for the 2017 financial year.</p> <p>In accordance with the Company's audit firm rotation policy, the Group Audit Committee is proposing that shareholders consider and approve the appointment of EY South Africa as the new independent auditors for the Company for the ensuing year, at the AGM to be held on 18 May 2017.</p>
<p>Ensured that the appointment of the auditor complies with the applicable legislation [section 94(7)(c)].</p>	<p>Ensured that the appointment process complied with the statutory requirements. Refer to the 2016 and 2017 AGM notices at http://www.jsereporting.co.za/ar2016/download_pdf/notice-agm-2016.pdf.</p>



Group Audit Committee report (continued)

Responsibilities in terms of the Companies Act/Terms of reference	How discharged
Evaluated the independence, effectiveness and performance of the external auditors.	The Group Audit Committee reviewed the detailed audit report and findings in respect of the financial statement audit for the year ended 31 December 2016 as presented by KPMG Inc at the committee meeting on 14 February 2017.
	The Group Audit Committee is satisfied that KPMG Inc remains independent of the Company. No matters of concern regarding the performance of the external auditors were noted by the committee. The external auditors continue to have unrestricted access to the Group Audit Committee and to its chairman.
	The Group Audit Committee confirmed that the independent auditors have executed their audit responsibilities in accordance with the International Standards on Auditing.
Determined the nature and extent of non-audit services that the auditor may provide and pre-approved any agreement for the provision of these services by the auditor to the Company, or a related company. Approved the internal and external audit plan of the said services on the basis that the provision of the services does not affect the auditor's independence [section 94(7)(d)and(e)].	The Company's policy on audit and non-audit services was revised at the 13 August 2015 meeting of the JSE Board. This policy was applied for the 2015 and subsequent years, and the Group Company Secretary tabled a report in respect of non-audit services for 2016 at the meeting of the Group Audit Committee held on 14 February 2017. All non-audit services (as defined) provided by the external auditors in 2016 were in compliance with this approved policy. The total value of these non-audit services amounted to R0.25 million, or 6% of the independent audit fee, which is within the 30% guideline set out in the Company's policy on non-audit services.
In respect of the financial statements: Confirmed the going concern principle as the basis of preparation of the interim and annual financial statements.	The Group Audit Committee reviewed the report of the CFO regarding the going concern status of the JSE Group for the year ended December 2016, and concluded that the JSE Group is a going concern and that the financial statements have been prepared correctly, in accordance with the going concern concept. The JSE Board has reviewed and accepted the recommendation of the Group Audit Committee that the Company is operating as a going concern, and has reported that status in the 2016 integrated annual report.
Reviewed the accounting policies and procedures adopted by the Group and the JSE and ensured that financial statements were prepared on the basis of appropriate accounting policies and International Financial Reporting Standards [section 94(7)(f)].	Applied.
	The CFO prepares financial statements in accordance with all applicable legislation and submits them to the Group Audit Committee for review. Recommended to the Board for approval.
Reviewed financial reports, which should encompass the annual financial statements, interim reports, preliminary or provisional results announcements, summarised integrated information, any other intended release of price-sensitive financial information and prospectuses, trading statements, circulars and similar documents.	Applied.
	At the first meeting of the year, the committee reviewed the full integrated annual report and recommended it to the Board for approval. The Board has subsequently approved the integrated annual report for publication to shareholders
Reviewed the areas of focus in the financial statements.	The Group Audit Committee is of the view that there are no significant judgements involved in the preparation of the financial statements that could have a material impact on those financial statements. The committee also believes that the internal control system and governance structures that have been put in place have operated effectively throughout the year in order to ensure that there were no significant matters for the independent auditors to deal with during their audit of the financial statements or to report in their auditor's report.

Responsibilities in terms of the Companies Act/Terms of reference	How discharged
Consider the report on pro-active monitoring of financial statements and ensure appropriate actions are taken, to the extent required.	<p>At its meeting held on 28 July 2016 the Group Audit Committee reviewed the report on the pro-active monitoring of the Company's interim financial statements for the six months ended June 2014 and the annual financial statements for the year ended December 2015, as presented by the University of Johannesburg (Department of Accountancy).</p> <p>The committee noted that the pro-active monitoring report did not reflect any material matters of concern affecting the financial statements. The committee re-affirmed the commitment of the Company to continue adhering to the highest standards of financial disclosure.</p> <p>The pro-active monitoring report for 2016 (dated 15 February 2017) will be considered at the July 2017 meeting of the Group Audit Committee.</p>
<p>In respect of internal control:</p> <p>Reviewed the effectiveness of management information, the annual audit, the internal audit function and other systems of internal control, ensuring that the internal audit function is independent and has the necessary resources, standing and authority to enable it to discharge its functions.</p>	<p>This role was performed in part by this committee and in part by the Group Risk Management Committee. Internal Audit forms part of the Governance, Risk and Compliance division. PricewaterhouseCoopers and Deloitte are contracted to assist the internal audit function in carrying out its duties and to ensure the required degree of independence. Internal Audit has a direct reporting line to both the Group Audit Committee and the Group Risk Management Committee.</p>
Reported on the effectiveness of the internal financial controls and risk management.	This role was performed in part by this committee and in part by the Group Risk Management Committee.
Monitored the appropriateness of the Company's combined assurance model overseeing risk.	This role was performed in part by this committee and in part by the Group Risk Management Committee.
Ensured that the combined assurance from both internal and external assurance providers and management was sufficient to cover key risks facing the organisation.	This role was performed in part by this committee and in part by the Group Risk Management Committee.
Annually evaluated the nature and extent of the formal documented reviews of the design, implementation and effectiveness of the system of internal financial controls, which covered all significant areas of financial reporting.	Applied each year in consultation with the internal audit function and the external auditor.
<p>Other:</p> <p>Received and dealt with complaints and concerns from within and outside the Company relating to accounting practices and Internal Audit; the content or auditing of the financial statements; internal financial controls; or any other related matter [section 94(7)(g)].</p>	No complaints were received.
Made submissions to the Board on any matter concerning the accounting policies, financial controls, records and reporting [section 94(7)(h)].	Applied.
The Group Audit Committee should be responsible for overseeing Internal Audit.	<p>At its February 2016 meeting:</p> <ul style="list-style-type: none"> • Approved the internal audit plan for 2016. • Reviewed and approved the internal audit charter. <p>At its meeting on 14 February 2017:</p> <ul style="list-style-type: none"> • Reviewed the performance and effectiveness of the Internal Audit function for the 2016 year, and concurred with the assessment thereof by the CEO.

Group Audit Committee report (continued)

Responsibilities in terms of the Companies Act/Terms of reference	How discharged
Annual review of terms of reference and workplan.	<p>The committee was satisfied with the annual review of its terms of reference and submitted these to the Board for review and approval.</p> <p>Reviewed and submitted the 2016 workplan to the Board for approval. The Board approved the 2016 workplan.</p>
In the year ahead, the Group Audit Committee will:	<ul style="list-style-type: none"> • review management; enhancements to the financial forecast process; • oversee the on-boarding of the new independent auditors of the Company, once the appointment of EY South Africa is approved by shareholders; and • execute an oversight role in respect of the investment of funds mandate.

The Group Audit Committee has the right to obtain independent outside professional advice to assist with the execution of its duties, at the Company's expense. The committee has decision-making authority with regard to its statutory duties and is accountable in this regard to both the Board and the shareholders. On all responsibilities delegated to it by the Board, apart from the statutory duties, the committee makes recommendations for approval by the Board.

The JSE continues to prepare Group accounts that comply with International Financial Reporting Standards and the statutory requirements of the Companies Act 2008, and these responsibilities are discharged within an acceptable timeframe.

The Group Audit Committee's composition, purpose and duties are set out in the committee's charter. The Board approved the latest terms of reference at its November meeting.

The chairman of the Group Audit Committee attends annual general meetings and is available to answer any questions in relation to matters pertaining to the Group Audit Committee.



N Payne

Chairman: Group Audit Committee

Directors' report

The JSE's business



A description of the JSE's business, its value chain and Group structure is set out on pages 2 – 13.

The Company does not have a controlling shareholder and is managed by its directors for its stakeholders. The JSE Limited has its primary and only listing in South Africa on the securities exchange operated by the JSE.

Regulatory and supervisory structure

The Financial Services Board (FSB) is responsible for supervising the JSE's listing and regulates its ongoing compliance with the JSE Listings Requirements. During the year under review, the JSE complied with all its rules, Listings Requirements and procedures in a manner that warrants its continued listing.

To mitigate the possibility of any potential conflict of interest, an SRO Oversight Committee was established in 2011, as a standing committee of the Board. This committee has an independent role, providing oversight of all regulatory matters, policies and related activities of the JSE Group. The SRO Oversight Committee also functions as the appointed committee pursuant to section 2(c) of Board Notice 1 of 2015, in respect of conflicts of interest between the Company's regulatory functions and commercial services. Its terms of reference have been refined to take into account the requirements of the Financial Markets Act and to report to the FSB where required.

Corporate governance



The governance report is set out on pages 34 – 55.

Financial results

The operating results and the state of affairs of the Company and the Group are fully set out in the attached statement of financial position and described in the CEO's statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes thereto.

It should be noted that the JSE maintains the JSE Guarantee Fund Trust, the BESA Guarantee Fund Trust and the JSE Derivatives Fidelity Fund Trust for investor protection purposes, as required under the Financial Markets Act. In view of the control that the JSE exercises over these trusts, the JSE is required to consolidate them into the results of the Group in terms of International Financial Reporting Standards.

Major operating subsidiary: JSE Clear (Pty) Ltd

JSE Clear (Pty) Ltd is a licensed associated clearing house in terms of the provisions of the Financial Markets Act, 19 of 2012, and subject to an annual review conducted by the FSB. Partly as a consequence of the recent global financial crisis, global financial regulators have issued directives (Basel III) for the capitalisation of bank exposures to central counterparties (CCPs). At the end of 2012, JSE Clear was deemed a qualifying CCP by the FSB in terms of the Principles for Market Infrastructures issued by these global regulators (CPSS-IOSCO).

JSE Clear Derivatives Default Fund (Pty) Ltd

JSE Clear's objective is to act as an associated clearing house and to operate as a CCP by interposing itself between parties to derivative contracts listed on the JSE. Significant refinements have been implemented with regard to its risk management processes. One of these is the creation of a new fund, the JSE Clear Derivatives Default Fund. This default fund reduces systemic risk and, more specifically, clarifies and limits clearing members' exposure to counterparty credit risk when clearing through JSE Clear. Clearing members that are banks will consequently need to hold less capital for centrally cleared exposures under Basel III regulations.

The JSE Clear Derivatives Default Fund policy requires that fund contributions by the clearing members and the JSE must be held in a legal entity separate and bankruptcy remote from JSE Clear and the JSE. The JSE Clear Derivatives Default Fund (Pty) Ltd was constituted for the purpose of ring-fencing the abovementioned contributions, which are to be used only in the event of a clearing member default. It operates as the JSE Clear Derivatives Default Fund.

Authorised users of the JSE (members of the JSE)*

As at 31 December 2016, there were 343 authorised users (2015: 342), categorised as follows:

Category of members	2016	2015
Equity members	62	59
Equity derivatives members	95	93
Commodities derivatives members	66	65
Interest rate and currency derivatives members	95	99
Clearing members	25	26
Total	343	342

* These numbers include passive and active members. During 2016, the respective membership liaison teams continued the process of cleaning up the lists of passive members.

Ordinary share capital

The Company did not issue any shares during the year under review. Full details of the authorised, issued and unissued capital of the JSE are contained in note 19 to the annual financial statements.

Rights attaching to shares

Each ordinary JSE share is entitled to identical rights in respect of voting, dividends, profits and a return of capital. The variation of rights attaching to JSE shares requires the prior consent of at least three-fourths of the issued shares of that class or the sanction of a special resolution passed at a special general meeting of the holders of the JSE shares of that class.

The issue of JSE shares, whether in the initial or in any increased capital, is subject to shareholder approval.

Directors' report (continued)

Directors' interests and shareholding

(including directors' associates)

as at 31 December 2016

Director	Status of director	Direct beneficial	Indirect beneficial				% of issued share capital
		Share register (own name)	LTIS 2010 Trust: Unvested ¹	Other trusts ²	Held by associates ³	Total	
N Newton-King (CEO)*	Executive	37 910	149 140	3 352		190 402	0.219
A Takoordeen (CFO)*	Executive		69 560	133		69 693	0.080
L Parsons*	Alternate	26 015	83 840	1 133		110 988	0.128
J Burke*	Alternate	27 416	77 970	133		105 519	0.121
N Nyembezi-Heita	Non-executive	2 050				2 050	0.002
A Botha	Non-executive				72 960	72 960	0.084
A Mazwai	Non-executive	100				100	0.000
D Lawrence	Non-executive	3 000				3 000	0.003
Dr M Jordaan	Non-executive	5 900				5 900	0.007
Other directors	Non-executive	0				0	0
Total		102 391	380 510	4 751	72 960	560 612	0.645
G Brookes (Group Company Secretary)*		14 108	45 620	133		59 861	0.069

*There has been no change in directors' interests from the end of the financial year until the approval of the JSE annual results and release thereof on SENS on 28 February 2017.

Note: Subsequent to the 2016 annual results announcement, holdings by executive directors and prescribed officers will increase as a result of the 2016 Bonus Share award which will be announced on SENS in March 2017.

Directors' interests and shareholding (including directors' associates)

as at 31 December 2015

Director	Status of director	Direct beneficial	Indirect beneficial				% of issued share capital
		Share register (own name)	LTIS 2010 Trust: Unvested ¹	Other trusts ²	Held by associates ³	Total	
N Newton-King (CEO)*	Executive (CEO)	17 952	147 550	1 052		166 554	0.192
A Takoordeen (CFO)*	Executive (CFO)		47 410	52		47 462	0.055
Dr L Fourie*	Executive		58 060	52		58 112	0.067
L Parsons*	Alternate	16 287	67 060	1 052		84 399	0.097
J Burke*	Alternate	18 360	62 390	52		80 802	0.093
A Botha	Non-executive				72 960	72 960	0.084
A Mazwai	Non-executive	5 000				5 000	0.006
D Lawrence	Non-executive	3 000				3 000	0.003
Other directors	Non-executive					0	0
Total		60 599	382 470	2 422	72 960	518 451	0.597
G Brookes (Group Company Secretary)*		11 300	25 790	52		37 142	0.043


*These directors and officers participate in the LTIS 2010 scheme and are recipients of shares that vested from 2013 onwards. For further details, refer to note 20.6.

²The 2005 broad-based employee share scheme and JSE bonus share scheme (various employees).

³The Imalvest Flexible Fund is an associate of A Botha.

Details of transactions in JSE Limited shares by directors and prescribed offices were disclosed on SENS during 2016 and are summarised in the tables below. For the executive and alternate directors, the Group Company Secretary and the prescribed officers, the purchases are in relation to the grant of shares under allocation 7 of the Long-term incentive scheme and the bonus shares awarded in March 2016.

Name of director/prescribed officer	Status	Purchase	Sale
N Nyembezi-Heita	Non-executive director	2 050	
Dr M Jordaan	Non-executive director	5 900	
A Mazwai	Non-executive director		4 900
N Newton-King	Executive director (CEO)	43 540	15 208
A Takoordeen	Executive director (CFO)	30 081	7 285
Dr L Fourie	Executive director		14 232
L Parsons	Alternate director	35 661	7 413
J Burke	Alternate director	33 161	6 901
G Brookes	Group Company Secretary	24 861	2 140
Remaining members of the executive committee	Prescribed officers	129 129	18 153

 For further details, refer to note 25 to the annual financial statements and the remuneration report, which can be found online at http://www.jsereporting.co.za/or2016/download_pdf/remuneration-report-2016.pdf

Shareholders other than directors

 Information on shareholders is set out on page 79.

Dividend policy

In considering the payment of the dividends, the Board will, with the assistance of the Group Audit Committee, take the following into account:

- The current financial status of the Company and the solvency and liquidity test as set out in section 4 of the Companies Act, 71 of 2008.
- The future funding and capital requirements of the Company.

The Board and management remain confident as to the underlying strength of the JSE's operations and its continued strong cash flows. All planned investments and capital requirements for 2016 were funded from own resources.

Declaration of ordinary dividend

The Board has decided to declare an ordinary dividend for the year ended December 2016 at 560 cents per ordinary share. Accordingly, notice is hereby given that the directors have declared the following:

Dividend	Annual gross Amount	Withholding tax%	Net amount
Ordinary	560 cents	20%	448 cents

The dividend has been declared from retained earnings. A dividend withholding tax of 20% will be applicable to all shareholders who are not exempt. The dividends are payable to shareholders recorded in the register of members of the Company at the close of business on 24 March 2017.

In compliance with the Companies Act, the directors of the JSE confirm that the Company will satisfy the solvency and liquidity test immediately after completion of the dividend distribution. In compliance with the requirements of Strate, the following salient dates for the payment of the ordinary dividend are applicable:

Dividend paid In respect of financial year-end	31 December 2016	31 December 2015
Ordinary dividend per share	560 cents	520 cents
Special dividend per share	—	105 cents
Rand value	R487 million	R543 million
Declaration date	Tue, 28 February 2017	Thur, 25 February 2016
Last date to trade JSE shares cum dividend	Mon, 20 March 2017	Fri, 11 March 2016
JSE shares commence trading ex-dividend	Wed, 22 March 2017	Mon, 14 March 2016
Record date for purposes of determining the registered holders of JSE shares to participate in the dividend at close of business on	Fri, 24 March 2017	Fri, 18 March 2016
Date of payment of dividend	Mon, 27 March 2017	Tues, 22 March 2016

Directors' report (continued)

Share certificates may not be dematerialised or rematerialised from Wednesday, 22 March 2017 to Friday, 24 March 2017, both days inclusive.

On 27 March 2017, the dividend will be electronically transferred to the bank accounts of certificated shareholders who use this facility. In respect of those who do not use this facility, cheques dated 27 March 2017 will be posted on or about that date. The accounts of those shareholders who have dematerialised their shares (which are held at their central securities depository participant or broker) will be credited on 27 March 2017.

The issued share capital of the Company as at the declaration date was 86 877 600 ordinary shares. The tax number of the Company is 9313008840.

Service contracts with directors

The chief executive officer, all executive directors, the Group Company Secretary and the executive management of the JSE have signed contracts of employment with the JSE. Apart from the contract with the chief executive officer, all such contracts have a three-month notice period for resignation or termination of employment. The chief executive officer's notice period for resignation or termination of employment is four months. The chief executive officer's service contract makes provision for a 12-month restraint of trade payable on termination of the chief executive officer's employment. Other members of the executive committee are also subject to restraint arrangements. All the other clauses of the service contracts are standard clauses for contracts of this nature.

External audit and external auditor independence

The Group financial statements have been audited by independent auditors KPMG Inc.

KPMG Inc has served for an extended period as the independent auditors of the Company, and has executed these responsibilities with diligence and distinction. The Board is of the view that KPMG Inc has observed the highest level of business and professional ethics. The Board concurs with the view of the Group Audit Committee that KPMG Inc has at all times remained independent of the Company.

The audit fees paid to KPMG Inc for the independent audit of JSE Group entities for the year ended 31 December 2016 are fully disclosed in the financial statements – these audit fees amounted to R3.9 million (2015: R4.3 million).

KPMG Inc also provided various non-audit services to the Company during the year under review. The total value of these non-audit services amounted to R0.25 million, or 6% of the independent audit fee, which is within the 30% guideline set out in the Company's policy on non-audit services.

During the course of 2016 the Group Audit Committee adopted a formal policy on audit firm rotation. In terms of this policy, the Company's external audit account was put to tender during the year.

Given the tenure of KPMG Inc as independent auditors, the firm was not considered for re-appointment in 2017. The Board has endorsed the recommendation of the Group Audit Committee to shareholders that EY South Africa be appointed as the new independent auditors of the Group with effect from the date of the AGM to be held on 18 May 2017. The Group Audit Committee has confirmed that EY South Africa is independent of the Company as required by section 90 of the Companies Act. The Board agrees with the Group Audit Committee's assessment.

The proposed audit fee to be paid to EY South Africa for the independent audit of JSE Group entities for the year to 31 December 2017 amounts to R3.75 million.

Systems of internal control

Executive management is responsible for the design, establishment and maintenance of systems of internal control that provide substantial assurance against the risk of material loss or misstatement of financial performance. The Board, and in particular the Group Audit Committee, bears ultimate responsibility to ensure that the systems of internal control that are implemented are suitable for addressing the material risks to which the JSE is exposed and are operating effectively.

To assist the Board in meeting the above obligations, JSE Internal Audit develops an annual audit programme based on the inherent risk profiles of the various areas of the JSE's operations. The following three steps are followed to support the risk-based approach to internal audit:

- Annually review the key enterprise-level risks of the JSE to ensure the planned internal audit assignments are focused on high-risk areas.
- Engage with the Enterprise Risk Management team to understand their responsibilities as the second line of defence and to highlight areas where Internal Audit can provide independent assurance on their behalf.
- Meet with key JSE decision-makers such as the CEO, CIO and CFO to ensure that the internal audit objectives are supportive of the JSE's overall strategic objectives.

The appropriateness of this programme was considered by both the Group Audit Committee and the Group Risk Management Committee, and approved without amendment. This programme served as the basis for the internal audit work performed during the year.

All Internal Audit reports in respect of audit assignments performed during the year are discussed with relevant line management, together with any remedial actions that may be warranted as a result of the internal audit findings. All reports are then tabled for consideration by the executive committee. Internal Audit reports are also tabled for review at meetings of both the Group Audit Committee and the Group Risk Management Committee.

The reports of Internal Audit are also made available to the JSE's external auditors to assist them in meeting their responsibilities.

Although the audit procedures performed by Internal Audit during the past year identified some areas for improvement in the internal controls of the JSE, none of the perceived deficiencies were of a nature to suggest that they expose the Company to material loss or misstatement of financial performance. Internal Audit has identified the need for management to implement various process improvements, mainly as a result of legacy systems and manual processes still in place.

Resolutions passed at AGM in May 2016

The following resolutions were adopted by shareholders in 2016:

Resolutions		% vote in favour
Ordinary resolutions		
1.	Adoption of annual financial statements and reports	100%
2.1	To elect Dr SP Kana as a director	99.82%
2.2	To re-elect Mr DM Lawrence as a director	99.29%
2.3	To re-elect Mr AM Mazwai as a director	99.79%
2.4	To re-elect Mr AD Botha as a director	99.19%
3.	To re-appoint KPMG Inc. as external auditors	99.82%
4.1	Re-elect Mr NG Payne – Audit Committee chairman	99.71%
4.2	Re-elect Mr AD Botha – Audit Committee member	98.68%
4.3	Re-elect Ms NP Mnxasana – Audit Committee member	94.99%
4.4	Elect Dr SP Kana – Audit Committee member	100.00%
4.5	Elect Mr AM Mazwai – Audit Committee member	99.69%
5.	Non-binding advisory vote on the remuneration policy	99.51%
6.	Authorisation of a director or company secretary to implement resolutions	100.00%
Special resolutions		
7.	Special Resolution 1: Authorising the provision of financial assistance in terms of section 44 and 45 of the Companies Act	99.73%
8.	Special Resolution 2: General authority to repurchase shares	100.00%
9.	Special Resolution 3: Authorising the provision of specific financial assistance for purposes of the JSE LTIS 2010 long-term incentive scheme	99.59%
10.	Special Resolution 4.1: Proposed non-executive director emoluments for 2016	99.58%
11.	Special Resolution 4.2: Proposed non-executive director emoluments for 2017	99.58%

Change to directorate

In 2016, there was the following change to the Board:

- Dr Leila Fourie, executive director and head of the Post-Trade and Information Services division, resigned with effect from 18 July 2016, following her emigration.

State of affairs at the Company – material matters

Contingent liabilities and commitments	The JSE's contingent liabilities and commitments are disclosed in note 28 to the annual financial statements.
Related-party transactions	To the knowledge of the Company, none of the directors or major shareholders of the Company or their families had an interest directly or indirectly in any transaction during the period under review or in any proposed transaction that has or will materially affect the Company or its subsidiaries, other than the disclosure made in note 27 to the annual financial statements.

Going-concern statement

In accordance with the solvency and liquidity test set out in section 4 of the Companies Act, the Board is of the opinion that, after making enquiries, it has reasonable expectation that the Group has sufficient resources to maintain its operational existence for the foreseeable future and that:

- the Group's assets fairly valued exceed its liabilities fairly valued; and
- the Group will be able to pay its debts as they become due in the ordinary course of business for the 12 months following 31 December 2016.

Post-reporting-date events

There have been no changes to the directors' interests in the ordinary share capital of the Company and no material events that would require adjustment or disclosure in the annual financial statements have occurred between 31 December 2016 and the date of this report.

Independent Auditor's report

To the Shareholders of JSE Limited

Report on the Audit of the Consolidated and Separate Financial Statements

Opinion

We have audited the consolidated and separate financial statements of the JSE Limited (the Group and Company) set out on pages 18 to 63, which comprise the statements of financial position as at 31 December 2016, and the statements of comprehensive income, the statements of changes in equity and the statements of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated and separate financial statements present fairly, in all material respects, the consolidated and separate financial position of the JSE Limited as at 31 December 2016, and its consolidated and separate financial performance and the consolidated and separate cash flows for the year then ended in accordance with International Financial Reporting Standards and the requirements of the Companies Act of South Africa.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements* section of our report. We are independent of the Group and Company in accordance with the Independent Regulatory Board for Auditors *Code of Professional Conduct for Registered Auditors (IRBA Code)* and other independence requirements applicable to performing audits of financial statements in South Africa. We have fulfilled our other ethical responsibilities in accordance with the IRBA Code and in accordance with other ethical requirements applicable to performing audits in South Africa. The IRBA Code is consistent with the International Ethics Standards Board for Accountants *Code of Ethics for Professional Accountants* (Parts A and B). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of our audit of the consolidated and separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Capitalisation and recognition of software under development

The consolidated and separate financial statements reflect software under development on the statement of financial position with a carrying value of R173.5 million and R170.9 million respectively. Additions to software under development costs amounted to R141.5 million. The balance comprises primarily of the ITaC project (2016: R111.2m).

Refer to accounting policy note 3.6 and note 11 to the consolidated and separate financial statements.

This key audit matter is applicable to both the consolidated and separate financial statements.

Key audit matters and how they were addressed

Key audit matter	How the matter was addressed
<p>ITaC is a critical project for the JSE, aimed at implementing an integrated trading and clearing solution across all of its markets. Due to the nature of costs (internal costs, labour broker costs and foreign vendor spend for the ITaC project), there is a risk that costs relating to software under development may be capitalised as intangible assets when they do not meet the recognition criteria of the accounting standards.</p> <p>This assessment, as well as management's continuous assessment of the recognition of capitalised costs, involves significant management judgment in evaluating the validity of costs incurred while the software is being developed; whether the costs incurred can be recovered through the future use of the software; and whether the development project is meeting the envisaged timelines for implementation of the software.</p> <p>Given the extent of management judgement involved and the significance of the balance in the financial statements, the assessment of whether the required accounting standards have been met requires significant audit effort</p>	<p>Our audit procedures included among others:</p> <p>We inspected the Project Sponsor reports and Risk Committee minutes to consider a range of factors in identifying potential impairment concerns including:</p> <ul style="list-style-type: none"> • whether the costs incurred to date are within the budgeted costs • whether there are any delays in the planned implementation date • whether the live portion of the project is currently under-performing • whether the recoverable amount of the software is greater than its carrying amount. <p>We tested the JSE's controls over the approval and capturing of timesheets for internal costs; the approval of labour broker invoices; and the approval of foreign vendor invoices.</p> <p>We agreed a sample of development costs relating to the ITaC project, which includes capitalised internal costs, labour broker costs and foreign vendor spend, to source documentation, to ensure compliance with accounting standards.</p> <p>We also performed specific items testing on expensed technology costs to ensure that expensed items should not have been capitalised.</p> <p><i>Findings</i></p> <p>Our procedures confirmed that software under development were capitalised and recognised in accordance with the accounting standards.</p>

Other information

The directors are responsible for the other information. The other information comprises all the information contained in the Annual Financial Statements including the directors' report, the Audit Committee's report and the Company Secretary's certificate as required by the Companies Act of South Africa. Other information does not include the consolidated and separate financial statements and our auditor's report thereon.

Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the consolidated and separate financial statements

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with International Financial Reporting Standards and the requirements of the Companies Act of South Africa, and for such internal control as the directors determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether owing to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group and/or the Company or to cease operations, or have no realistic alternative but to do so.

Independent Auditor's report (continued)

Auditor's responsibilities for the audit of the consolidated and separate financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and/or the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

In terms of the IRBA Rule published in Government Gazette Number 39475 dated 4 December 2015, we report that KPMG Inc. has been the auditor of JSE Limited for 11 years. We were also the auditor of the Exchange prior to its demutualisation and listing in 2005 for at least a further 25 years.

KPMG Inc.
Registered Auditor



JN Pierce
Chartered Accountant (SA)
Director
Registered Auditor

28 February 2017

KPMG Crescent
85 Empire Road
Parktown
2193

Consolidated statement of comprehensive income

For the year ended 31 December 2016

	Notes	Group		Company	
		2016 R'000	2015 R'000	2016 R'000	2015 R'000
Revenue	6.1	2 338 796	2 133 548	2 385 697	2 168 312
Other income	6.2	46 402	145 887	56 333	148 849
Personnel expenses	7.1	(564 996)	(495 759)	(559 831)	(491 335)
Other expenses	7.2	(845 144)	(760 920)	(814 415)	(731 295)
Profit from operating activities		975 058	1 022 756	1 067 784	1 094 531
Finance income	7.3	3 249 286	2 133 136	165 944	127 919
Finance costs	7.4	(3 035 497)	(1 967 342)	(37 436)	(29 736)
Net finance income		213 789	165 794	128 508	98 183
Share of profit of equity-accounted investee (net of income tax)	12.2	59 066	46 568	–	–
Profit before income tax		1 247 913	1 235 118	1 196 292	1 192 714
Income tax expense	8.1	(328 211)	(335 640)	(327 567)	(335 099)
Profit for the year		919 702	899 478	868 725	857 615
Other comprehensive income					
Items that are or may be reclassified to profit or loss					
Net change in fair value of available-for-sale financial assets		(22 331)	24 191	–	–
Net change in fair value of available-for-sale financial assets reclassified to profit or loss		(16 328)	(20 644)	–	–
Other comprehensive income for the year, net of income tax		(38 659)	3 547	–	–
Total comprehensive income for the year		881 043	903 025	868 725	857 615
Earnings per share					
Basic earnings per share (cents)	9.1	1 074.8	1 051.0	1 015.2	1 002.1
Diluted earnings per share (cents)	9.2	1 062.1	1 040.3	1 003.3	991.9
Other earnings					
Headline earnings per share (cents)	9.3	1 063.2	1 026.3	1 021.0	1 001.5
Diluted headline earnings per share (cents)	9.4	1 050.7	1 015.8	1 009.0	991.2

Consolidated statement of financial position

As at 31 December 2016

		Group		Company	
Notes		2016 R'000	2015 R'000	2016 R'000	2015 R'000
Assets					
Non-current assets		1 244 388	1 115 895	849 912	738 720
Property and equipment	10.3	173 047	165 073	173 047	165 073
Intangible assets	11.3/6	452 039	358 700	426 822	332 803
Investment in equity-accounted investee	12.1	223 151	187 030	21 416	21 416
Investments in subsidiaries	13.1	–	–	104 352	104 352
Other investments	14	293 470	312 564	1	1
Due from Group entity	13.3	–	–	21 593	22 547
Loan to the JSE Empowerment Fund Trust	15	25 098	25 271	25 098	25 271
Deferred taxation	21.1/3	77 583	67 257	77 583	67 257
Current assets		44 713 700	37 462 906	2 501 282	2 474 289
Trade and other receivables	16	555 091	466 930	263 095	269 430
Income tax receivable		1 064	594	451	–
Due from Group entities	13.4	–	–	47 828	51 930
JSE Clear Derivatives Default Fund collateral deposit	17.3	500 000	500 000	100 000	100 000
Margin deposits	17.1	41 538 835	34 447 066	139 290	175 616
Collateral deposits	17.2	23 926	140 687	23 926	140 687
Cash and cash equivalents	18	2 094 784	1 907 629	1 926 692	1 736 626
Total assets		45 958 088	38 578 801	3 351 194	3 213 009
Equity and liabilities					
Total equity		3 269 531	2 956 152	2 714 198	2 413 137
Stated capital		26 693	66 507	26 693	66 507
Reserves		475 700	478 360	59 776	44 968
Retained earnings		2 767 138	2 411 285	2 627 729	2 301 662
Non-current liabilities		137 391	126 464	164 150	160 907
Employee benefits	20.1	8 796	10 845	8 796	10 845
Due to Safex members	23	1 347	1 347	1 347	1 347
Deferred taxation	21.1/3	17 771	13 620	17 567	13 226
Operating lease liability	28.1	97 287	87 435	97 287	87 435
Deferred income	26	12 190	13 217	39 153	48 054
Current liabilities		42 551 166	35 496 185	472 846	638 965
Trade and other payables	22	434 442	339 561	155 667	153 791
Income tax payable		–	32 713	–	32 713
Employee benefits	20.1	153 963	136 158	153 963	136 158
JSE Clear Derivatives Default Fund collateral contribution	17.3	400 000	400 000	–	–
Margin deposits	17.1	41 538 835	34 447 066	139 290	175 616
Collateral deposits	17.2	23 926	140 687	23 926	140 687
Total equity and liabilities		45 958 088	38 578 801	3 351 194	3 213 009

Consolidated statement of changes in equity

For the year ended 31 December 2016

Group	Notes	Stated capital R'000	NDR R'000	Share-based payments reserve R'000	Total reserves R'000	Retained earnings R'000	Total equity R'000
Balance at 1 January 2015		71 889	405 551	43 937	449 488	1 952 617	2 473 994
Profit for the year		–	–	–	–	899 478	899 478
Other comprehensive income		–	3 547	–	3 547	–	3 547
Total comprehensive income for the year		–	3 547	–	3 547	899 478	903 025
LTIS Allocation 2 – shares vested		8 457	–	(8 457)	(8 457)	–	–
LTIS Allocation 3 – shares vested		12 177	–	(12 177)	(12 177)	–	–
Distribution from the BESA Guarantee Fund Trust ¹		–	(3 591)	–	(3 591)	3 591	–
Dividends paid to owners	19.4	–	–	–	–	(416 516)	(416 516)
Equity-settled share-based payment	20.6	–	–	21 665	21 665	–	21 665
Transfer of profit to investor protection funds		–	27 885	–	27 885	(27 885)	–
Treasury shares		(25 802)	–	–	–	–	(25 802)
Treasury shares – share issue costs		(214)	–	–	–	–	(214)
Total contributions by and distributions to owners of the Company recognised directly in equity		(5 382)	24 294	1 031	25 325	(440 810)	(420 867)
Balance at 31 December 2015		66 507	433 392	44 968	478 360	2 411 285	2 956 152
Profit for the year		–	–	–	–	919 702	919 702
Other comprehensive income		–	(38 659)	–	(38 659)	–	(38 659)
Total comprehensive income for the year		–	(38 659)	–	(38 659)	919 702	881 043
LTIS Allocation 3 – shares vested	20.6	10 288	–	(10 288)	(10 288)	–	–
LTIS Allocation 4 – shares vested	20.6	15 636	–	(15 636)	(15 636)	–	–
Distribution from the BESA Guarantee Fund Trust ¹		–	(4 422)	–	(4 422)	4 422	–
Dividends paid to owners	19.4	–	–	–	–	(542 658)	(542 658)
Equity-settled share-based payment	20.6	–	–	40 732	40 732	–	40 732
Transfer of profit to investor protection funds		–	25 613	–	25 613	(25 613)	–
Treasury shares		(65 281)	–	–	–	–	(65 281)
Treasury shares – share issue costs		(457)	–	–	–	–	(457)
Total contributions by and distributions to owners of the Company recognised directly in equity		(39 814)	21 191	14 808	35 999	(563 849)	(567 664)
Balance at 31 December 2016		26 693	415 924	59 776	475 700	2 767 138	3 269 531
Note		19.3	19.3	19.3		19.3	

¹ The BESA Guarantee Fund Trust Deed makes specific provision for the utilisation of excess funds for the purpose of reducing the risk of claims being made against the Trust. To this effect, R4.4m (December 2015: R3.6m) before intercompany adjustments was transferred to JSE Limited to defray market regulatory expenditure.

Consolidated statement of changes in equity (continued)

For the year ended 31 December 2016

Company	Notes	Stated capital R'000	NDR R'000	Share-based payments reserve R'000	Total reserves R'000	Retained earnings R'000	Total equity R'000
Balance at 1 January 2015		71 889	–	43 937	43 937	1 860 563	1 976 389
Profit for the year		–	–	–	–	857 615	857 615
Total comprehensive income for the year		–	–	–	–	857 615	857 615
LTIS Allocation 2 – shares vested		8 457	–	(8 457)	(8 457)	–	–
LTIS Allocation 3 – shares vested		12 177	–	(12 177)	(12 177)	–	–
Dividends paid to owners	19.4	–	–	–	–	(416 516)	(416 516)
Equity-settled share-based payment	20.6	–	–	21 665	21 665	–	21 665
Treasury shares		(25 802)	–	–	–	–	(25 802)
Treasury shares – share issue costs		(214)	–	–	–	–	(214)
Total contributions by and distributions to owners of the Company recognised directly in equity		(5 382)	–	1 031	1 031	(416 516)	(420 867)
Balance at 31 December 2015		66 507	–	44 968	44 968	2 301 662	2 413 137
Profit for the year		–	–	–	–	868 725	868 725
Total comprehensive income for the year		–	–	–	–	868 725	868 725
LTIS Allocation 3 – shares vested	20.6	10 288	–	(10 288)	(10 288)	–	–
LTIS Allocation 4 – shares vested	20.6	15 636	–	(15 636)	(15 636)	–	–
Dividends paid to owners	19.4	–	–	–	–	(542 658)	(542 658)
Equity-settled share-based payment	20.6	–	–	40 732	40 732	–	40 732
Treasury shares		(65 281)	–	–	–	–	(65 281)
Treasury shares – share issue costs		(457)	–	–	–	–	(457)
Total contributions by and distributions to owners of the Company recognised directly in equity		(39 814)	–	14 808	14 808	(542 658)	(567 664)
Balance at 31 December 2016		26 693	–	59 776	59 776	2 627 729	2 714 198
Note		19.3	19.3	19.3		19.3	

Consolidated statement of cash flows

For the year ended 31 December 2016

	Notes	Group		Company	
		2016 R'000	2015 R'000	2016 R'000	2015 R'000
Cash flows from operating activities					
Cash generated by operations	24.1	1 136 998	1 058 178	1 217 721	1 105 322
Interest received		3 151 306	2 081 875	164 182	126 445
Interest paid		(2 948 179)	(1 919 176)	(39 414)	(28 962)
Dividends received		3 546	6 455	–	–
Taxation paid	24.2	(367 569)	(339 029)	(366 716)	(338 309)
Net cash generated by operating activities		976 102	888 303	975 773	864 496
Cash flows from investing activities					
Proceeds on sale of other investments		77 408	74 090	–	–
Acquisition of other investments		(80 648)	(69 712)	–	–
Dividends from equity-accounted investee		22 945	18 823	22 945	18 823
Proceeds from disposal of property and equipment		310	759	310	759
Leasehold improvements		(5 076)	(893)	(5 076)	(893)
Acquisition of intangible assets		(145 600)	(123 594)	(145 600)	(123 594)
Acquisition of property and equipment		(49 890)	(54 875)	(49 890)	(54 875)
Net cash used in investing activities		(180 551)	(155 402)	(177 311)	(159 780)
Cash flows from financing activities					
Proceeds from sale of treasury shares		–	13 969	–	13 969
Loan repaid		–	(13 977)	–	–
Acquisition of treasury shares		(65 738)	(39 986)	(65 738)	(39 986)
Dividends paid		(542 658)	(416 516)	(542 658)	(416 516)
Net cash used in financing activities		(608 396)	(456 510)	(608 396)	(442 533)
Net increase in cash and cash equivalents		187 155	276 391	190 066	262 183
Cash and cash equivalents at 1 January		1 907 629	1 631 238	1 736 626	1 474 443
Cash and cash equivalents at 31 December 2016	18	2 094 784	1 907 629	1 926 692	1 736 626

Notes to the consolidated financial statements

For the year ended 31 December 2016

1. Reporting entity

JSE Limited (the “JSE” or the “Company”) is a company domiciled in South Africa. The registration number is 2005/022939/06. The JSE is licensed as an exchange in terms of the Financial Markets Act, No. 19 of 2012. The JSE has the following main lines of business: Capital Markets, Trading and Market Services, Information Services and Post-Trade Services. The address of the Company’s registered office is One Exchange Square, 2 Gwen Lane, Sandown. The consolidated financial statements of the Company as at and for the year ended 31 December 2016 comprise the Company and its subsidiaries and controlled structured entities (collectively referred to as the “Group” and individually as “Group entities”) and reflect the Group’s interest in associates.

When reference is made to the “Group” in the accounting policies, it should be interpreted as referring to the Company, where the context requires, unless otherwise noted.

2. Basis of preparation

2.1 Statement of compliance

The Group financial statements of the Company have been prepared in accordance with International Financial Reporting Standards (IFRSs), the SAICA financial reporting guides as issued by the Accounting Practice Committee, the Financial Pronouncements as issued by the Financial Reporting Standards Council, the JSE Listings Requirements and the requirements of the Companies Act, 2008.

The Group financial statements were authorised for issue by the Board of Directors on 28 February 2017.

2.2 Basis of measurement

The Group financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position, measured at fair value as described below:

- Available-for-sale financial assets
- Shared-based payment transactions

The methods used to measure fair values are discussed further in note 5.

2.3 Functional and presentation currency

The consolidated and separate financial statements are presented in South African Rand (which is the Company’s functional currency), rounded to the nearest thousand, except where otherwise indicated.

2.4 Use of estimates and judgements

The preparation of financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about significant areas of estimation, uncertainty and critical judgements that have the most significant effect on the amounts recognised in the financial statements is included in the following notes:

- Note 3.5 and 10 Property and equipment
- Note 3.6 and 11 Intangible assets
- Note 30 Fair value estimation
- Note 20 Employee benefits
- Note 20.6 Measurement of share-based payments
- Note 28.1 Lease classifications

2.5 Changes in accounting policies

The Group has consistently applied the accounting policies set out in note 3 to all periods presented in these consolidated financial statements.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

3. Significant accounting policies

3.1 Basis of consolidation

(i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group financial statements incorporate the assets, liabilities and results of the operations of JSE Clear (Pty) Limited, JSE Clear Derivatives Default Fund (Pty) Limited, the JSE Derivatives Fidelity Fund Trust, the JSE Guarantee Fund Trust, JSE Trustees (Pty) Limited, BESA Guarantee Fund Trust, Nautilus MAP Holdings (Pty) Limited and Nautilus MAP Operations (Pty) Limited as subsidiary companies. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In the separate financial statements of the Company, investments in subsidiaries are carried at cost less accumulated impairment losses. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

BESA Limited, BESA Investments (Pty) Limited and BondClear Limited are dormant and are in the process of deregistration.

(ii) Structured entities

The JSE Guarantee Fund Trust, the JSE Derivatives Fund Trust and the BESA Guarantee Fund Trust are trusts established in terms of the Trust Property Control Act, No. 57 of 1988 and are collectively referred to as the investor protection funds. These investor protection funds have been established in consonance with the statutory obligations imposed on the JSE, as a licensed exchange, by the peremptory provisions of section 8(1)(h) of the Financial Markets Act, No. 19 of 2012 which state that a licensed exchange must have a guarantee, compensation fund or warranty in place to enable it to provide compensation to clients, subject to the exchange rules. The funds and assets of these trusts are segregated from the assets of the JSE but the JSE, by virtue of its role as trustee and custodian of these funds, has to consolidate the results of these funds in its Annual Financial Statements. The JSE's control as custodian and trustee of the assets of these Funds is exercised within the ambit of the JSE's powers as trustee, as defined in the trust deeds and rules of these Funds.

(iii) Investments in associates (equity-accounted investee)

Associates are those entities in which the Group has significant influence, but not control, over financial and operating policies. Significant influence is presumed to exist when the Group holds between 20% and 50% of the voting power of another entity. Associates are accounted for using the equity method (equity-accounted investee) and are recognised initially at cost, which includes transaction costs. The Group's investment includes goodwill identified on acquisition, and is net of any accumulated impairment losses. The equity method is applied to the Group's investment in Strate (Pty) Limited. In applying the equity method, account is taken of the Group's share of the income and expenses and other comprehensive income of the equity-accounted investee from the effective date on which the enterprise became an associate until significant influence ceases. The share of the associated company's retained earnings and reserves is determined from the latest audited financial statements.

When the Group's share of losses exceeds its interest in an equity-accounted investee, the carrying amount of the investment, including any long-term interests that form part thereof, is reduced to zero and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has made payments on behalf of the investee. In the separate financial statements of the Company, the associate is accounted for at cost less accumulated impairment losses.

3.2 Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with the equity-accounted investee are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

3.3 Foreign currency transactions

Transactions in foreign currencies are translated to South African Rand at the transaction date. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortised cost in foreign currency translated at the exchange rate at the end of the year.

3.4 Financial instruments

(i) Non-derivative financial instruments

Non-derivative financial instruments comprise investments in equity and debt securities, trade receivables, interest receivable, a loan to the JSE Empowerment Fund Trust and other receivables, margin and collateral deposits, cash and cash equivalents, borrowings, trade payables, interest payable, amounts due to and from Group companies, amounts due to Safex members and JSE Clear Derivatives Default Fund (Pty) Limited.

A financial instrument is recognised if the Group becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are accounted for at trade date, being the date that the Group commits itself to purchase or sell the asset. Financial assets are derecognised if the Group's contractual rights to the cash flows from the

financial assets expire or if the Group transfers the financial asset to another party without retaining control or substantially all risks and rewards of the asset. Financial liabilities are derecognised if the Group's obligations specified in the contract expire or are discharged or cancelled.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Non-derivative financial instruments are measured initially at fair value plus, for instruments not at fair value through profit or loss, any directly attributable transaction costs.

The Group classifies non-derivative financial assets into the following categories:

- Available-for-sale financial assets
- Loans and receivables

Subsequent to initial recognition, non-derivative financial instruments are measured as described below.

Available-for-sale financial assets

The Group's investments in equity and debt securities are classified as available-for-sale financial assets. Available-for-sale financial assets are carried at fair value with any resultant gain or loss being recognised directly in other comprehensive income. Impairment losses and monetary items such as debt securities and foreign exchange gains and losses are recognised in profit or loss. When these investments are derecognised, the cumulative gain or loss previously recognised in other comprehensive income is transferred to profit or loss. Where these investments are interest-bearing, interest calculated using the effective interest method is recognised in profit or loss. Dividends on available-for-sale equity instruments are recognised in profit or loss when the Group's right to receive payment is established. Refer to note 14 (Other investments) for the financial assets classified as available-for-sale.

Loans and receivables and financial liabilities measured at amortised cost

Other non-derivative financial instruments are measured at amortised cost using the effective interest method, less any impairment losses on financial assets. Other non-derivative financial instruments include trade and other receivables, a loan to the JSE Empowerment Fund Trust, JSE Clear Derivatives Default Fund (Pty) Limited contribution, trade and other payables, cash and cash equivalents, amounts due to and from Group companies, margin and collateral deposits and amounts due to Safex members.

(ii) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of six months or less from the acquisition date and are used by the Group in the management of its short-term commitments.

(iii) Stated capital

Ordinary shares

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares and share options are recognised as a deduction from equity, net of any tax effects.

Repurchase, disposal and reissue of share capital (treasury shares)

When share capital recognised as equity is repurchased, the amount of the consideration paid, which includes directly attributable costs, net of any tax effects, is recognised as a deduction from equity. Repurchased shares are classified as treasury shares and are presented against stated capital. When treasury shares are subsequently sold or reissued, the amount received is recognised as an increase in equity, and the resulting surplus or deficit on the transaction is presented in share premium.

3.5 Property and equipment

(i) Recognition and measurement

Items of property and equipment (including leasehold improvements), are measured at cost less accumulated depreciation and accumulated impairment losses. Costs include expenditures that are directly attributable to the acquisition of the asset. When parts of an item of property and equipment have different useful lives, they are accounted for as separate items.

Any gain or loss on disposal of an item of property and equipment (calculated as the difference between the net proceeds from disposal and the carrying amount of the item) is recognised in profit or loss.

(ii) Subsequent costs

The cost of replacing part of an item of property and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property and equipment are recognised in profit or loss as incurred.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

3. Significant accounting policies (continued)

3.5 Property and equipment (continued)

(iii) Depreciation

Depreciation is calculated on the depreciable amount, which is the cost of an asset less its residual value.

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful life of each part of an item of property and equipment, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Leased assets and leasehold improvements are depreciated over the shorter of the lease term and their useful lives, unless it is reasonably certain that the Group will obtain ownership by the end of the lease term.

The estimated useful lives for the current and comparative periods are as follows:

• Computer hardware	3 to 10 years
• Vehicles	5 years
• Furniture and equipment	3 to 15 years
• Finance leased assets	3 years
• Leasehold improvements	15 years

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

3.6 Intangible assets

(i) Goodwill

Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets. The Group measures goodwill at the acquisition date as the fair value of the consideration transferred, including the recognised amount of any non-controlling interests in the acquiree plus, if the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

As such, goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investee, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity-accounted investee.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new technical knowledge and understanding, is recognised in profit or loss as an expense as incurred. Development activities involve a plan or design for the production of new or substantially improved technology. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete the development and to use or sell the asset. The expenditure capitalised includes the cost of direct consulting charges and direct labour. Other development expenditure is recognised in profit or loss as an expense as incurred. Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

(iii) Other intangible assets

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

(iv) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates and the cost can be measured reliably. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

(v) Amortisation

Amortisation is based on the cost of the asset less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

• Trademarks	5 to 10 years
• Customer relationships	6 to 10 years
• Capitalised development costs	3 to 10 years

Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(vi) **Derecognition**

The gain or loss arising from the derecognition of an intangible asset is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the asset. This gain or loss is recognised in profit or loss when the asset is derecognised.

3.7 **Leases**

Finance leases

Leases in terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition, the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Operating leases

Leases where the lessor retains the risks and rewards of ownership of the underlying asset are classified as operating leases. Payments made under operating leases are charged against profit or loss on a straight-line basis over the period of the lease. When the amount of lease payments does not represent the time pattern of the lessee's benefits under the lease agreement, prepaid rent or accrued liability for rental payments is recognised.

Lease payments

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

3.8 **Impairment**

(i) **Financial assets**

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

Objective evidence that financial assets (including equity securities) are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indications that a debtor or issuer will enter bankruptcy, adverse changes in the payment status of borrowers or issuers in the Group, economic conditions that correlate with defaults, or the disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

Individually significant financial assets at amortised cost are tested for impairment on an individual basis. Those found not to be specifically impaired are then collectively assessed for any impairment that has been incurred, but not yet identified. Assets that are not individually significant are collectively assessed for impairment by grouping together assets with similar risk characteristics. Impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows, discounted at the asset's original effective interest rate. The carrying amount of the impaired financial asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. When an event occurring after the impairment was recognised causes the amount of the impairment to decrease, the decrease in impairment loss is reversed through profit or loss.

Impairment losses on available-for-sale financial assets are recognised by reclassifying the losses accumulated in the fair value reserve in equity to profit or loss. The cumulative loss that is reclassified from equity to profit or loss is the difference between the acquisition cost, net of any principal repayment and amortisation, and the current fair value, less any impairment loss recognised previously in profit or loss. If, in a subsequent period, the fair value of an impaired available-for-sale security increases and the increase can be related objectively to an event occurring after the impairment loss was recognised, then the impairment loss is reversed, with the amount of the reversal recognised in profit or loss for debt securities and in other comprehensive income for equity securities.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

3. Significant accounting policies (continued)

3.8 Impairment (continued)

(ii) Non-financial assets

The carrying amount of the Group's non-financial assets, other than deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. A cash-generating unit is the smallest identifiable asset group that generates cash inflows that are largely independent from other assets and groups. Impairment losses recognised in respect of cash generating units are allocated first to reduce the carrying amount of goodwill allocated to the cash-generating unit, and then to reduce the carrying amounts of other assets of the cash generating unit *pro rata*. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses are recognised in profit or loss. Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists.

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised. Impairment losses in respect of goodwill are not reversed.

3.9 Employee benefits

(i) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an employee benefit expense in profit or loss in the periods during which services are rendered by employees. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available. Contributions to a defined contribution plan that are due more than 12 months after the end of the period in which the employee renders the service are discounted to their present value.

(ii) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

The JSE accrues for the value of leave due on the basis of the number of days owing and the relevant associated costs.

(iii) Share-based payment transactions

The grant-date fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period that the employee became unconditionally entitled to the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

The fair value of the amount payable to employees in respect of share appreciation rights, which are settled in cash, is recognised as an expense, with a corresponding increase in liabilities, over the period in which the employees become unconditionally entitled to payment. The liability is remeasured at each reporting date and at settlement date. Any changes in the fair value of the liability are recognised as personnel expenses in profit or loss.

3.10 Revenue

Revenue comprises primary market fees, trading fees, clearing and settlement fees, market data fees, funds under management and Strate ad valorem fees. Revenue is recognised in the year to which the service relates and is measured at the fair value of the consideration received or receivable.

3.11 Other income

Other income comprises rental income, net foreign exchange gains, dividend income, profit on sale of financial assets, profit on sale of property and equipment, and other sundry income. Dividend income is recognised in profit or loss when the right to receive payment is established, which is the date the dividend is declared. Rental income is recognised on a straight-line basis over the term of the lease. On derecognition of a financial asset in its entirety, the difference between: a) the carrying amount and b) the sum of consideration received and any cumulative gain or loss that has been recognised in other comprehensive income shall be recognised in profit or loss.

Distributions from structured entities

Funds from the JSE Guarantee Fund Trust approved for distribution by the Financial Services Board, in previous years, for the data centre and disaster recovery are recognised initially as deferred income at fair value when the funds are received and the Group will comply with the conditions associated with the distribution of the funds. These funds are then recognised in profit or loss as other income on a systematic basis over the useful lives of the related assets.

3.12 Finance income and expenses

Finance income comprises interest income from funds invested as well as on the loan to the JSE Empowerment Fund Trust. Interest income is recognised as it accrues, using the effective interest method.

Finance expenses comprise finance lease charges and the interest expense on margin and collateral deposits and on the investor protection levies. Interest expense is recognised in profit or loss using the effective interest method.

3.13 Income tax expense

(i) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and associates to the extent that it is probable that they will not reverse in the foreseeable future and the Group can control the timing of the reversal. In addition, deferred tax is not recognised for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which that can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(ii) Withholding taxes

Dividend withholding tax is a tax on shareholders receiving dividends and is applicable to all dividends declared on or after 1 April 2012. The Company withholds dividend tax on behalf of its shareholders at a rate of 15% on dividends declared. Amounts withheld are not recognised as part of the Company's tax charge, but rather as part of the dividend paid, recognised directly in equity.

3.14 Earnings per share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributed to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise share options granted to qualifying black shareholders and employees under the long-term incentive scheme.

3.15 Segment reporting

The Group determines and presents operating segments based on the information that is internally provided to the Executive Committee (Exco), which represents the Group's chief operating decision-maker.

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. Costs in the JSE are managed holistically across the Exchange and variances against budget are closely monitored. Information technology and other corporate overheads are not generally allocated to a particular segment.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

4. New standards and interpretations not yet adopted

There are a number of forthcoming new standards and interpretations or amendments to standards and interpretations, which have been issued by the International Accounting Standards Board (IASB) prior to the publication of these financial statements, but are effective only in future accounting periods, as listed below:

IFRS 9: Financial Instruments – effective date: 1 January 2018

The amendments affect the classification, measurement and derecognition of financial assets and financial liabilities. The amendment will be adopted by the Group for its financial reporting period ending after the date the statement comes into effect. The Group does not expect a significant impact from the adoption of this statement.

IFRS 15: Revenue from Contracts with Customers – effective date: 1 January 2018

The standard contains a single model that applies to contracts with customers and two approaches to recognising revenue: at a point in time or over time. The model features a contract based five-step analysis of transactions to determine whether, how much and when revenue is recognised. The Group does not expect a significant impact from the adoption of this statement.

IFRS 16 Leases – effective date : 1 January 2019

IFRS 16 was published in January 2016. It sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, ie the customer ('lessee') and the supplier ('lessor'). IFRS 16 replaces the previous leases Standard, IAS 17 *Leases*, and related Interpretations. IFRS 16 has one model for lessees which will result in almost all leases being included on the Statement of Financial position. No significant changes have been included for lessors.

Early adoption is permitted only if the entity also adopts IFRS 15. The transitional requirements are different for lessees and lessors. The group and company are assessing the potential impact on the financial statements resulting from the application of IFRS 16.

5. Determination of fair values

A number of the Group's accounting policies and disclosures require the determination of fair value for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

5.1 Investments in equity and debt securities

The fair value of available-for-sale financial assets is determined by reference to the quoted bid price for equity instruments and the clean price from a quoted exchange for interest-bearing instruments, at the reporting date. In respect of unit trusts, valuations are carried out in accordance with the agreed principle that units in collective investment schemes shall be valued by reference to their middle market price where the units have a bid/offer spread, or to their most recently published net asset value (NAV). In the absence of final bid/offer prices or final net asset values, estimated figures may be relied upon. The value of any underlying fund is provided by the manager or the administrator of that fund. Should the manager be in any doubt as to the valuations, the manager will request an independent third party to review the valuations in order to confirm their fairness. The NAV per share is calculated and rounded down to four decimal places, any rounding to be retained for the benefit of the fund.

5.2 Share-based payment transactions

The fair values of the shares granted to employees in terms of the LTIS 2010 incentive scheme are measured using the Black-Scholes model. Measurement inputs include the share price on measurement date, the exercise price of the instrument, the expected volatility (based on weighted average historic volatility, adjusted for changes expected owing to publicly available information), the weighted average expected life of the instrument, expected dividends, and the interest rate (based on the notional amount compounded annually (NACA) rate). Service and non-market performance conditions attached to the transactions are not taken into account in determining fair value.

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
6. Operating segments, revenue and other income				
6.1 Revenue and operating segments comprise:				
Capital markets				
Equity market fees	555 439	501 190	555 439	501 190
Equity derivatives fees	177 335	173 434	177 335	173 434
Currency derivatives fees	37 573	34 009	37 573	34 009
Interest rate market fees	60 318	50 240	64 197	53 390
Commodity derivatives fees	69 725	73 069	69 725	73 069
Primary market fees	164 368	160 644	164 368	160 644
Post-trade services				
Clearing and settlement fees	412 741	356 677	412 741	356 677
Back-office services (BDA)	315 981	310 717	315 981	310 717
Funds under management	94 940	86 415	137 962	118 029
Information services				
Indices net of FTSE	42 150	35 882	42 150	35 882
Colocation fees	19 938	16 621	19 938	16 621
Other market data fees	235 956	192 434	235 956	192 434
Trading and market services				
Trading services	23 401	19 944	23 401	19 944
Total revenue excluding Strate ad valorem fees	2 209 865	2 011 276	2 256 766	2 046 040
Strate ad valorem fees – cash equities	128 931	122 272	128 931	122 272
	2 338 796	2 133 548	2 385 697	2 168 312

During the year, management revised the operating segments following a restructure. The effect of this change is as follows:

- Post-Trade and Information Services has been split into two separate categories, namely Post-Trade Services as well as Information Services
- Previously disclosed as part of Post-Trade and Information Services, Market data now forms part of Information Services
- Previously disclosed as part of Trading and Market Services, Back-Office Services (BDA) now forms part of Post-Trade Services
- Previously disclosed as part of Trading and Market Services, Fund under management now forms part of Post-Trade Services
- Prior year figures have been restated

	Notes	Group		Company	
		2016 R'000	2015 R'000	2016 R'000	2015 R'000
6.2 Other income comprises:					
Recognised in profit or loss					
Investor protection funds		19 874	27 423	–	–
– Contributions to BESA Guarantee Fund Trust		–	324	–	–
– Dividend income		3 546	6 455	–	–
– Net realised gain on disposal of available-for-sale financial assets		16 328	20 644	–	–
Dividends received		–	–	22 945	18 823
Net foreign exchange (loss)/gain		(13 756)	82 512	(13 756)	82 512
Income recognised from deferred income (data centre and disaster recovery)		–	–	7 874	11 520
Investor Protection Levy		28 380	26 207	28 380	26 207
Rental income		1 927	2 312	1 927	2 312
Sundry income		9 977	7 433	8 963	7 475
		46 402	145 887	56 333	148 849

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

		Group		Company	
		2016	2015	2016	2015
		R'000	R'000	R'000	R'000
7. Profit before taxation comprises					
7.1 Personnel expenses					
		473 893	417 613	469 777	413 802
		14 364	17 544	14 364	17 544
		16 215	14 598	16 047	14 441
		37 104	33 336	36 767	33 336
	25.1	29 301	26 704	29 301	26 704
	25.3	7 803	6 632	7 466	6 632
		42 763	30 295	42 219	29 839
		42 763	30 295	42 219	29 839
		584 339	513 386	579 174	508 962
		(19 343)	(17 627)	(19 343)	(17 627)
		564 996	495 759	559 831	491 335
7.2 Other expenses					
		52 261	48 005	51 581	47 064
		4 018	5 000	2 896	3 895
		3 853	4 265	2 804	3 276
		199	318	126	318
		161	417	161	301
		(195)	–	(195)	–
		4 707	21 523	4 707	21 523
		46 750	51 974	46 750	51 974
		29 561	29 817	29 561	29 817
		3 266	2 960	3 266	2 960
		7 120	9 492	7 120	9 492
		6 796	9 697	6 796	9 697
		7	8	7	8
		933	715	933	715
		28 380	26 207	28 380	26 207
		60 880	60 987	60 880	60 987
		60 880	60 928	60 880	60 928
		–	59	–	59
		140 835	134 112	140 835	134 112
		217 693	177 817	191 758	150 918
		6 029	–	6 029	–
		282 658	234 580	279 666	233 900
		845 144	760 920	814 415	731 295

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
7. Profit before taxation comprises (continued)				
7.3 Finance income				
Investor protection funds	9 447	8 159	–	–
Finance income earned on margin and collateral deposits	3 117 264	2 031 268	45 252	35 449
– Derivatives	3 036 119	1 964 492	–	–
– JSE Clear Derivatives Default Fund	35 893	31 327	–	–
– Equities	45 252	35 449	45 252	35 449
Finance income earned on all funds excluding collateral and margin deposits	122 575	93 709	120 692	92 470
Total finance income	3 249 286	2 133 136	165 944	127 919
7.4 Finance costs				
Finance costs on margin and collateral deposits	3 034 920	1 965 374	36 859	28 823
– Derivatives	2 962 230	1 905 912	–	–
– JSE Clear Derivatives Default Fund	35 831	31 267	–	–
– Equities	36 859	28 195	36 859	28 823
Finance costs on all funds excluding collateral and margin deposits	577	1 968	577	913
Total finance costs	3 035 497	1 967 342	37 436	29 736
8. Income tax expenses				
8.1 Taxation				
Current tax expense				
– Current year	340 657	339 376	339 823	338 645
– Prior year adjustment	(6 271)	–	(6 271)	–
Deferred tax asset				
– Reversal of deductible temporary differences	(10 516)	(8 279)	(10 326)	(8 279)
Deferred tax liability				
– Origination of taxable temporary differences	4 341	4 543	4 341	4 733
	328 211	335 640	327 567	335 099
8.2 Reconciliation of effective tax rate				
	%	%	%	%
Current tax rate	28	28	28	28
Adjusted for:				
– Non-taxable dividend income	–	–	0.56	(0.02)
– Adjustment for prior periods	0.14	–	0.15	–
– Non-deductible expenses:				
– Depreciation on leasehold improvements	(0.15)	(0.22)	(0.16)	(0.23)
– The SA SME Fund Limited - write-down of investment	(0.11)	–	(0.12)	–
– Other	(0.62)	0.27	(0.63)	0.28
– Share of profit of equity-accounted investee	(1.33)	(1.05)	–	–
Net effective tax rate	26	27	28	28
8.3	The Group's consolidated effective tax rate for the year ended 31 December 2016 was 26% (2015: 27%).			
8.4	The following tax rates are applicable to the various entities in the Group:			
JSE Limited	28% (2015: 28%)			
JSE Clear (Pty) Limited	28% (2015: 28%)			
JSE Clear Derivatives Default Fund (Pty) Limited	28% (2015: 28%)			
Strate (Pty) Limited	28% (2015: 28%)			
Nautilus MAP Holdings (Pty) Limited	28% (2015: 28%)			
Nautilus MAP Operations (Pty) Limited	28% (2015: 28%)			
JSE Trustees (Pty) Limited	28% (2015: 28%)			
JSE Derivatives Fidelity Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act, No 58 of 1962			
JSE Guarantee Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act, No 58 of 1962			
BESA Guarantee Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act, No 58 of 1962			

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
9. Earnings and headline earnings per share				
9.1 Basic earnings per share				
Profit for the year attributable to ordinary shareholders	919 702	899 478	868 725	857 615
Weighted average number of ordinary shares:				
Issued ordinary shares at 1 January	86 877 600	86 877 600	86 877 600	86 877 600
Effect of own shares held (JSE LTIS 2010)	(1 305 370)	(1 297 984)	(1 305 370)	(1 297 984)
Weighted average number of ordinary shares at 31 December	85 572 230	85 579 616	85 572 230	85 579 616
Basic earnings per share (cents)	1 074.8	1 051.0	1 015.2	1 002.1
9.2 Diluted earnings per share				
Profit for the year attributable to ordinary shareholders	919 702	899 478	868 725	857 615
Weighted average number of ordinary shares (diluted):				
Weighted average number of ordinary shares at 31 December (basic)	85 572 230	85 579 616	85 572 230	85 579 616
Effect of LTIS Share Scheme	1 016 489	885 896	1 016 489	885 896
Weighted average number of ordinary shares (diluted)	86 588 719	86 465 512	86 588 719	86 465 512
Diluted earnings per share (cents)	1 062.1	1 040.3	1 003.3	991.9
The average market value of the Company's shares for purposes of calculating the dilutive effect of share options was based on quoted market prices using a volume-weighted average price for the year.				
9.3 Headline earnings per share				
Reconciliation of headline earnings:				
Profit for the year attributable to ordinary shareholders	919 702	899 478	868 725	857 615
Adjustments are made to the following:				
Profit on disposal of property and equipment	(66)	(536)	(66)	(536)
– Gross amount	(92)	(745)	(92)	(745)
– Taxation effect	26	209	26	209
The SA SME Fund Limited – write-down of investment	5 000	–	5 000	–
– Gross amount	5 000	–	5 000	–
– Taxation effect	–	–	–	–
Net realised gain on disposal of available-for-sale financial assets (no taxation effect)	(14 820)	(20 644)	–	–
Headline earnings	909 816	878 298	873 659	857 079
Headline earnings per share (cents)	1 063.2	1 026.3	1 021.0	1 001.5
9.4 Diluted headline earnings per share				
Diluted headline earnings per share (cents)	1 050.7	1 015.8	1 009.0	991.2

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total owned assets R'000	Finance lease assets R'000	Total assets R'000
10. Property and equipment								
10.1 Cost								
Group and Company 2016								
Balance at 1 January 2016		303 354	49 570	121 361	202	474 487	38 147	512 634
Additions		43 662	6 228	5 076	–	54 966	–	54 966
Disposals		(71)	(195)	–	(62)	(328)	–	(328)
Balance at 31 December 2016		346 945	55 603	126 437	140	529 125	38 147	567 272
Group and Company 2015								
Balance at 1 January 2015		259 877	41 418	120 468	202	421 965	38 147	460 112
Additions		21 363	8 241	893	–	30 497	–	30 497
Transfer from development		25 271	–	–	–	25 271	–	25 271
Disposals		(3 157)	(89)	–	–	(3 246)	–	(3 246)
Balance at 31 December 2015		303 354	49 570	121 361	202	474 487	38 147	512 634
10.2 Accumulated depreciation								
Group and Company 2016								
Balance at 1 January 2016		204 311	34 054	77 974	195	316 534	31 027	347 561
Depreciation charge for the year	7.2	29 561	3 266	6 796	7	39 630	7 120	46 750
Disposals		(24)	–	–	(62)	(86)	–	(86)
Balance at 31 December 2016		233 848	37 320	84 770	140	356 078	38 147	394 225
Group and Company 2015								
Balance at 1 January 2015		177 183	31 094	68 277	187	276 741	21 535	298 276
Depreciation charge for the year	7.2	29 817	2 960	9 697	8	42 482	9 492	51 974
Disposals		(2 689)	–	–	–	(2 689)	–	(2 689)
Balance at 31 December 2015		204 311	34 054	77 974	195	316 534	31 027	347 561
10.3 Carrying amounts								
Group and Company 2016								
At 31 December 2015		99 043	15 516	43 387	7	157 953	7 120	165 073
At 31 December 2016		113 097	18 283	41 667	–	173 047	–	173 047
Group and Company 2015								
At 31 December 2014		82 694	10 324	52 191	15	145 224	16 612	161 836
At 31 December 2015		99 043	15 516	43 387	7	157 953	7 120	165 073

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Notes	Goodwill R'000	Customer relations R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
11. Intangible assets							
11.1 Cost							
Group							
2016							
Balance at 1 January 2016		107 709	4 078	2 217	412 316	140 331	666 651
Additions		–	–	–	4 024	141 576	145 600
Transfer to computer software		–	–	–	108 380	(108 380)	–
Balance at 31 December 2016		107 709	4 078	2 217	524 720	173 527	812 251
Group							
2015							
Balance at 1 January 2015		107 709	4 078	2 217	392 109	36 944	543 057
Additions		–	–	–	11 854	137 011	148 865
Transfer to computer software		–	–	–	8 353	(8 353)	–
Transfer to computer hardware		–	–	–	–	(25 271)	(25 271)
Balance at 31 December 2015		107 709	4 078	2 217	412 316	140 331	666 651
11.2 Accumulated amortisation							
Group							
2016							
Balance at 1 January 2016		158	3 321	1 753	302 719	–	307 951
Amortisation for the year	7.2	–	680	–	51 581	–	52 261
Balance at 31 December 2016		158	4 001	1 753	354 300	–	360 212
Group							
2015							
Balance at 1 January 2015		158	2 380	1 753	255 655	–	259 946
Amortisation for the year	7.2	–	941	–	47 064	–	48 005
Balance at 31 December 2015		158	3 321	1 753	302 719	–	307 951
11.3 Carrying amounts							
Group							
2016							
At 31 December 2015		107 551	757	464	109 597	140 331	358 700
At 31 December 2016		107 551	77	464	170 420	173 527	452 039
Group							
2015							
At 31 December 2014		107 551	1 698	464	136 454	36 944	283 111
At 31 December 2015		107 551	757	464	109 597	140 331	358 700

	Notes	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
11.4 Cost						
Company						
2016						
Balance at 1 January 2016		82 987	1 829	392 472	137 694	614 982
Additions		–	–	4 024	141 576	145 600
Transfer to computer software		–	–	108 380	(108 380)	–
Balance at 31 December 2016		82 987	1 829	504 876	170 890	760 582
Company						
2015						
Balance at 1 January 2015		82 987	1 829	372 265	34 307	491 388
Additions		–	–	11 854	137 011	148 865
Transfer to computer software		–	–	8 353	(8 353)	–
Transfer to computer hardware		–	–	–	(25 271)	(25 271)
Balance at 31 December 2015		82 987	1 829	392 472	137 694	614 982
11.5 Accumulated amortisation						
Company						
2016						
Balance at 1 January 2016		–	1 829	280 350	–	282 179
Amortisation for the year	7.2	–	–	51 581	–	51 581
Balance at 31 December 2016		–	1 829	331 931	–	333 760
Company						
2015						
Balance at 1 January 2015		–	1 829	233 286	–	235 115
Amortisation for the year	7.2	–	–	47 064	–	47 064
Balance at 31 December 2015		–	1 829	280 350	–	282 179
11.6 Carrying amounts						
Company						
2016						
At 31 December 2015		82 987	–	112 122	137 694	332 803
At 31 December 2016		82 987	–	172 945	170 890	426 822
Company						
2015						
At 31 December 2014		82 987	–	138 979	34 307	256 273
At 31 December 2015		82 987	–	112 122	137 694	332 803

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

11. Intangible assets (continued)

11.7 Impairment testing for cash-generating units containing goodwill

A cash-generating unit, (CGU), is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

For the purpose of impairment testing, goodwill is allocated to the Group's operating divisions, which represent the lowest level in the Group at which goodwill is monitored for internal management purposes, which is not higher than the Group's operating segments as reported in note 6.

(i) Goodwill on the acquisition of BESA Limited

All BESA operations are fully integrated into the JSE. However, as the cash inflows generated have not changed, the Interest Rate Market, previously defined as a CGU, is still defined as such. All other functions relating to the Interest Rate Market (e.g. cash management and creditors) are managed holistically across the JSE, with practical difficulties in allocating the assets and liabilities related to these integrated functions on a reasonable and consistent basis to the BESA CGU. For example, the portion of the JSE's overall cash balance attributable to the Interest Rate Market cannot be identified without undue effort. Other assets and liabilities relating to the running of the Interest Rate Market have also been integrated within the JSE. The integration has resulted in effective synergies and therefore using the costs attributable to BESA in the prior periods as an allocation method is unlikely to be an accurate reflection of the corporate costs associated with the Interest Rate Market in the current period.

A second impairment test was performed. This test was performed at the next highest group of CGUs to which the corporate assets could be allocated on a reasonable and consistent basis. As the JSE monitors corporate assets and expenses holistically, the second impairment test was performed at a JSE level. An impairment was not recognised at this level as the market capitalisation significantly exceeded the net asset value.

(ii) Goodwill on the acquisition of the business of Nautilus MAP Operations (Pty) Limited

On 1 July 2011, a newly created company of the Group, Nautilus MAP Operations (Pty) Limited, acquired the business that administers the hedge fund platform of Momentum Managed Account Platform (Pty) Limited (MOMMAP), as a going concern. For the purposes of impairment testing, the business of Nautilus MAP Operations (Pty) Limited was defined as the cash-generating unit. The recoverability of this cash-generating unit was based on its value in use and was determined by discounting the future cash flows to be generated from the CGU. The carrying amount of the CGU was determined to be lower than its recoverable amount. No impairment loss was therefore recognised.

Key assumptions used in the calculation of the recoverable amount were the discount rates (a weighted average cost of capital of 2016: 15% (2015: 12.5%), terminal growth rate of 5% (2015: 5.0%) and management's estimates of future cash flows. Five years of future cash flows have been included in the discounted cash flow model.

This rate is estimated from the rate implicit in current market transactions for similar assets or from the weighted average cost of capital of a listed entity that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review.

The values assigned to the key assumptions represent management's assessment of future trends for the business, which were based on both external and internal sources (forecasts and budgets).

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
12. Investment in equity-accounted investee				
12.1 Carrying amount				
Strate (Pty) Limited				
Carrying amount at beginning of year	187 030	159 284	21 416	21 416
– Dividends received	(22 945)	(18 823)	–	–
– Share of profit	59 066	46 568	–	–
Total investment in equity-accounted investee	223 151	187 030	21 416	21 416

		Strate (Pty) Limited	
		2016 R'000	2015 R'000
12.2	Group share of post-acquisition profit		
	Share of opening accumulated profit	319 107	272 539
	Share of profit after tax	59 066	46 568
	Share of closing accumulated profit	378 173	319 107
12.3	Summarised financial statements at 31 December		
	Non-current assets	196 629	214 564
	Current assets	378 660	302 556
	Total assets	575 289	517 120
	Equity	497 962	440 628
	Non-current liabilities	13 402	7 453
	Current liabilities	63 925	69 039
	Total equity and liabilities	575 289	517 120
	Revenue	447 844	405 048
	Other income including finance income	17 743	17 755
	Expenses	(310 041)	(277 275)
	Taxation	(45 190)	(40 998)
	Profit for the year	110 356	104 530

		Effective holding		Number of shares held	
		2016 %	2015 %	2016	2015
12.4	Unlisted associated company				
	Group and Company				
	Strate (Pty) Limited	44.55	44.55	4 346	4 346

Strate (Pty) Limited is an authorised Central Securities Depository (CSD) for the electronic settlement of cash equity, bond and money market instruments and is incorporated in South Africa.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Issued share capital/trust capital	Percentage holding		Carrying value of shares held		
		2016 %	2015 %	2016 R'000	2015 R'000	
13. Subsidiaries – Company						
13.1 Investments in subsidiaries						
13.1.1	<i>JSE Clear (Pty) Limited¹</i> – Ordinary shares of 12.5 cents each	8 300	100	100	3 201	3 201
13.1.2	<i>JSE Clear Derivatives Default Fund (Pty) Limited²</i> – Ordinary shares of R1 each	1	100	100	*	*
13.1.3	<i>JSE Trustees (Pty) Limited</i> – Ordinary shares of R1 each The Group elected directors to hold shares in their capacity as nominees for the Company. The Company has control over the operating and decision-making activities of JSE Trustees (Pty) Limited.	7	100	100	*	*
13.1.4	<i>Nautilus MAP Holdings (Pty) Limited</i> – 1 ordinary share of R1 each Nautilus MAP Holdings (Pty) Limited holds 100% of the ordinary shares in Nautilus MAP Operations (Pty) Limited.	1	100	100	*	*
13.1.5	<i>JSE LTIS 2010 Trust</i> – Trust capital	1 000	100	100	1	1
13.1.6	<i>BESA Limited</i> – Ordinary shares of 12.5 cents each BESA Limited holds 100% of the ordinary shares in BESA Investments (Pty) Limited and 80% of the ordinary shares of BondClear Limited. The remaining 20% of the ordinary share capital in BondClear Limited is held by the JSE. All three entities are in the process of being deregistered.	1 925	100	100	101 150	101 150
	Investments in subsidiaries				104 352	104 352
13.1.7	<i>Investor protection funds</i> In terms of section 9.1(e) of the Financial Markets Act, the JSE is required to have an investor protection mechanism in place to enable it to provide compensation to clients in certain circumstances. In compliance with this requirement, the JSE has guarantee funds (The JSE Guarantee Fund Trust and The BESA Guarantee Fund Trust) that cover the Equities and Interest Rate Markets respectively, and a fidelity fund (The JSE Derivatives Fidelity Fund Trust) that covers the derivatives markets. The three funds are housed in formalised trusts. The funds are administered in terms of their respective trust deeds and their sets of rules. Certain JSE directors are trustees. As a result of the control exercised over these funds, the Group is required to consolidate them.					
	* Less than R1 000.					
	¹ JSE Clear (Pty) Limited operates as the JSE's appointed clearing house in terms of the Financial Markets Act. In order to achieve recognition as a qualifying central counterparty (QCCP) under the CPSS-IOSCO provisions, clearing houses are required to establish a default fund for mutualising losses in the event of a clearing member default. JSE Clear (Pty) Limited has established such a default fund, and has been recognised by the Financial Services Board (FSB) as a QCCP with effect from January 2013.					
	² JSE Clear Derivatives Default Fund (Pty) Limited is incorporated as a private for profit company wholly owned by JSE Limited with a limited purpose of holding these funds.					

13.2 Involvement with unconsolidated structured entities

The table below describes the structured entities that the Group does not consolidate but in which it holds an interest.

Name of structured entity	Nature and purpose	Interest held by the Group
The JSE Benevolent Fund	This fund was created by then members of the JSE prior to the JSE's demutualisation in 2005. The purpose of the fund is to provide financial assistance and poverty relief to stockbrokers, employees of authorised members of the JSE, full-time employees of the JSE prior to 8 November 1995 and their dependants. The assets of the fund are applied by the fund trustees according to the applicable rules and their discretion.	This is a structured fund to which the JSE provides administrative services. The JSE does not earn any revenue in return for the provision of these services and does not provide financial support to this unconsolidated fund.
The JSE Empowerment Fund Trust	The trust was created as part of the listing of the Company and it received JSE shares as part of the listing process. The purpose of the fund is to provide bursaries or financial assistance to black bursars. These bursaries are funded from the dividends received by the trust. This constitutes education and development as contemplated in paragraph 3 of Part II of the Ninth Schedule of the Income Tax Act, No 58 of 1962.	This is a structured fund to which the JSE provides administrative services. The JSE does not earn any revenue in return for the provision of these services to this unconsolidated fund. The JSE does not have any investments in this fund.
Nautilus MAP (Pty) Limited	The purpose of the company is to allow investors to invest in alternative assets where the operational risks are mitigated.	The JSE provides administrative services to this company. 100% of the issued share capital is held by the JSE at a cost of R1. No financial support to this unconsolidated entity is provided by the Company. The JSE does not earn any revenue directly through this entity.

	2016 R'000	2015 R'000
13.3 Due from Group entity		
Nautilus MAP Operations (Pty) Limited	21 593	22 547
Total non-current asset	21 593	22 547
Amounts due from Group entity is unsecured, interest free and of a long-term nature.		
13.4 Due from Group entities		
JSE Clear (Pty) Limited	38 972	43 910
JSE Clear Derivatives Default Fund (Pty) Limited	35	–
JSE Trustees (Pty) Limited	8 403	7 589
BESA Guarantee Fund Trust	418	364
JSE Derivatives Fidelity Fund Trust	–	67
Total due from Group entities	47 828	51 930

All entities are incorporated in the Republic of South Africa.

Amounts due from Group entities consist mainly of management fees payable to the Company. These fees are invoiced monthly by the Company and are payable within 30 days from invoice date.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
14. Other investments				
14.1 Investor protection funds available-for-sale financial assets				
14.1.1 JSE Derivatives Fidelity Fund Trust				
Bonds	9 427	15 129	–	–
Listed equities	71 900	82 533	–	–
Foreign unit trusts	72 078	64 314	–	–
	153 405	161 976	–	–
14.1.2 JSE Guarantee Fund Trust				
Bonds	8 818	13 561	–	–
Listed equities	63 208	72 242	–	–
Foreign unit trusts	62 721	60 062	–	–
Local unit trusts	5 317	4 722	–	–
	140 064	150 587	–	–
	293 469	312 563	–	–
14.2 Other investments				
Stock Exchange Nominees (Pty) Limited	1	1	1	1
Investment in The SA SME Fund Limited	5 000	–	5 000	–
Write-down of investment	(5 000)	–	(5 000)	–
	–	–	–	–
	293 470	312 564	1	1
15. Loan to the JSE Empowerment Fund Trust	25 098	25 271	25 098	25 271

In accordance with the JSE's holistic transformation strategy, a loan to facilitate enterprise development was granted to the JSE Empowerment Fund Trust. The intention of this loan is to assist the sustainability of the financial and operational independence of the fund. The loan is interest free. The JSE has the option to terminate the agreement with the fund on one month's written notice, charging interest at JIBAR on any outstanding amounts.

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
16. Trade and other receivables				
16.1 Trade and other receivables				
Interest receivable	285 591	187 611	7 932	6 170
Other receivables	17 395	25 875	5 925	14 261
Prepaid expenses	52 669	50 016	49 860	46 940
Trade receivables	199 436	203 428	199 378	202 059
	555 091	466 930	263 095	269 430

The age analysis of trade receivables is as follows:

	Group		Company	
	Gross R'000	Allowance for impairment losses R'000	Gross R'000	Allowance for impairment losses R'000
At 31 December 2016				
Fully performing: 0 – 30 days	172 132	–	172 168	–
Past due: 31 – 90 days	24 766	–	24 766	–
Past due: More than 90 days	4 475	1 937	4 381	1 937
Total	201 373	1 937	201 315	1 937
At 31 December 2015				
Fully performing: 0 – 30 days	189 060	–	187 787	–
Past due: 31 – 90 days	13 846	–	13 805	–
Past due: More than 90 days	1 743	1 221	1 688	1 221
Total	204 649	1 221	203 280	1 221

The movement in the allowance for impairment losses in respect of trade receivables during the year was as follows:

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
At 1 January	1 221	800	1 221	800
Increase in allowance for impairment	929	757	929	757
Receivables written off during the year as uncollectable	(213)	(336)	(213)	(336)
At 31 December	1 937	1 221	1 937	1 221

All trade receivables are assessed for impairment on a continuous basis. Impairments are recognised in respect of receivables where there are concerns about recoverability. In assessing recoverability, indicators of potential default are considered and these include, amongst other factors, the clients' payment records and the industry in which the clients operate.

Based on historic default rates, the Group believes that no further impairment allowance is necessary in respect of trade receivables as the amounts relate to clients that have a good payment record with the Group and there has been no objective evidence to the contrary.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
17. Margin and collateral deposits				
Margin and collateral deposits received are managed and invested on behalf of members in terms of the JSE's rules. These funds have been placed with F1/A1 and F1+/A1+ rated banks. A corresponding liability has been raised (which is due to market participants) against these margin and collateral deposits, as the JSE only manages these assets to facilitate clearing of the equity and derivative markets.				
17.1 Margin deposits				
Derivatives funds held by JSE Clear (Pty) Limited	41 399 545	34 271 450	–	–
Equities	139 290	175 616	139 290	175 616
	41 538 835	34 447 066	139 290	175 616
17.2 Collateral deposits	23 926	140 687	23 926	140 687
The JSE acts as an agent in equity securities lending transactions necessary to facilitate electronic settlement of equity trades in the Strate environment. At year-end, interest-bearing collateral deposits of R23.9m (2015: R140.7m) have been lodged as security against securities lending transactions with a market value of R20.6m (2015: R119.0m).				
17.3 JSE Clear Derivatives Default Fund (Pty) Limited	500 000	500 000	100 000	100 000
JSE Clear Derivatives Default Fund (Pty) Limited has established a default fund for neutralising losses in the event of clearing member default.				
The initial collateral deposits required from clearing members are managed and invested in terms of the JSE Rules. The Company contribution of the fund is R100m (2015: R100m).				
Collateral deposits				
JSE Clear Derivatives Default Fund (Pty) Limited members' contributions	400 000	400 000	–	–
18. Cash and cash equivalents				
Cash and cash equivalents comprises:				
Bank balances	1 066 214	973 264	909 873	819 135
Call deposits	1 028 570	934 365	1 016 819	917 491
Total cash and cash equivalents	2 094 784	1 907 629	1 926 692	1 736 626

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
19. Stated capital and reserves				
19.1 Authorised stated capital				
400 000 000 ordinary shares with a par value of 10 cents per share	40 000	40 000	40 000	40 000
19.2 Issued stated capital				
Balance at 1 January	8 553	8 541	8 553	8 541
Ordinary shares issued	35	31	35	31
Acquisition of treasury shares	(46)	(30)	(46)	(30)
Sale of treasury shares	27	11	27	11
Balance at 31 December	8 569	8 553	8 569	8 553
19.3 Stated capital and reserves				
Stated capital	26 693	66 507	26 693	66 507
Non-distributable reserves made up as follows:	415 924	433 392	–	–
Investor protection funds	415 924	433 392	–	–
Fair value reserve ¹	100 819	139 480	–	–
– JSE Derivatives Fidelity Fund Trust	47 110	66 902	–	–
– JSE Guarantee Fund Trust	53 709	72 578	–	–
Capital and accumulated funds ²	315 105	293 912	–	–
– BESA Guarantee Fund Trust	109 448	107 306	–	–
– JSE Derivatives Fidelity Fund Trust	110 861	101 744	–	–
– JSE Guarantee Fund Trust	94 796	84 862	–	–
JSE LTIS 2010 reserve ³	59 776	44 968	59 776	44 968
Retained earnings	2 767 138	2 411 285	2 627 729	2 301 662
Total	3 269 531	2 956 152	2 714 198	2 413 137

¹ This reserve comprises fair value adjustments in respect of available-for-sale financial assets.

² These funds were established for the purpose of investor protection in the event of a member defaulting in the Equity, Equity Derivatives and Bond Markets.

³ This reserve relates to the portion of the LTIS 2010 Long-Term Incentive Scheme that has been expensed to date.

	Company	
	2016 R'000	2015 R'000
19.4 Dividends declared and paid		
Ordinary dividend of 520 cents (2015: 400 cents) per share	451 764	417 012
Special dividend of 105 cents (2015: 80 cents) per share	91 221	–
Total dividend of 625 cents (2015: 480 cents) on unallocated treasury shares	(327)	(496)
	542 658	416 516

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Notes	Group		Company	
		2016 R'000	2015 R'000	2016 R'000	2015 R'000
20. Employee benefits					
20.1 Group and Exchange					
Non-current liabilities		8 796	10 845	8 796	10 845
Cash-settled liability	20.5	8 796	10 845	8 796	10 845
Current liabilities		153 963	136 158	153 963	136 158
Contractual bonus (deferred portion only)	20.2	32 677	29 727	32 677	29 727
Leave pay accrual		18 830	17 347	18 830	17 347
Cash-settled liability	20.5	9 722	3 184	9 722	3 184
Discretionary bonus		92 734	85 900	92 734	85 900

20.2 Contractual bonus (includes deferral)

The contractual bonus scheme is an annual incentive for qualifying employees. Specialists and staff from junior management level upwards (excluding the CEO) are eligible to participate in this scheme. Awards are assessed on individual performance, with a maximum award at executive management level equal to 3.74 months' guaranteed pay. Contractual bonuses are awarded in December each year, with 50% of these awards being subject to a six-month deferral based on continued employment. The deferred portion attracts interest at 10% per annum. No performance claw-back provisions apply to these awards.

The CEO does not qualify for awards under the scheme, but is eligible for an annual bonus up to a maximum of her annual guaranteed cost-to-company package (with 50% being deferred for six months, and the deferred portion attracting interest at 10% per annum).

For the year under review, contractual bonuses awarded under this scheme amounted to R60.2m (2015: R57.2m) of which R4.2m (2015: R5.9m) was awarded to executive management (all amounts are inclusive of interest). In total 50% of these awards are deferred for six months.

The CEO's contractual bonus totalled R6.8m (2015: R3.9m) this being an amount equal to 100% of her annual guaranteed package, with half of this award deferred for six months (inclusive of interest).

20.3 Discretionary bonus

The discretionary bonus scheme is an annual incentive for qualifying employees. All permanent staff members are eligible to participate in this scheme. Awards are assessed on individual performance and the achievement of specific corporate deliverables as set out in the annual corporate scorecard approved by the Board. Discretionary bonuses related to 2016 performance are payable in March 2017.

The total discretionary bonus pool for 2016 amounted to R88.9m (2015: R85.9m), of which R22.9m (2015: R21.3m) was paid to executive management (including the CEO).

20.4 Retirement benefits

The JSE provides retirement benefits for employees through the JSE Pension Scheme, which is a defined contribution retirement scheme.

20.5 Cash-settled liability

For the 2015 and 2016 financial years, the Board implemented a cash-only long-term retention scheme (Critical Skills Cash Scheme 2015 and 2016) as an alternative to a traditional long-term incentive. This retention scheme, which is now closed, was applicable to selected senior employees of the JSE.

Critical Skills Cash Scheme 2014 vested on 1 May 2016, Critical Skills Cash Scheme 2015 vests on 1 June 2017 and Critical Skills Cash Scheme 2016 on 1 June 2018.

The unvested portions of both Critical Skills Cash Schemes attract interest at the commercial rate earned by the JSE Trustees on funds under management. No performance hurdles or claw-back provisions are applicable to either Critical Skills Cash Schemes.

In order to calculate the net present value impact to profit or loss of all unvested tranches under the Critical Skills Cash Schemes, the unvested portions have been discounted on an annual basis at the average cost of capital. The net present value and interest movement in both schemes resulted in a charge to profit and loss of R12.1m (2015: R7.4m).

	Critical Skills Cash Scheme 2016	Critical Skills Cash Scheme 2015
	R'000	R'000
Total cash value of grant approved by Board	10 184	10 046
Portion of grant awarded to Executive Committee members	–	–

20.6 Long-Term Incentive Scheme 2010 (LTIS 2010)

The Long-Term Incentive Scheme was approved by shareholders at the annual general meeting in April 2010.

Scheme objective and design

The main objective of LTIS 2010 is to retain and incentivise selected senior employees of the JSE over rolling three- and four-year time horizons. To this end, LTIS 2010 comprises a personal performance component and a corporate performance component, with the objectives, qualifying criteria and potential rewards applicable to each component being clearly distinguished. In particular, the corporate performance component is intended to align the interests of scheme participants with the interests of JSE shareholders.

LTIS 2010 is a full-value, restricted share scheme that provides scheme participants with ownership opportunities to JSE shares, these shares are acquired on an annual basis in the open market by a trust established by the JSE. A scheme participant gets immediate beneficial ownership of the JSE shares from the date of the award. However, this beneficial ownership is subject to restrictions, being the participant's continued employment and the JSE achieving certain Group-level performance conditions over the vesting period. Shares awarded under LTIS 2010 are forfeited if either the employment requirement or performance conditions are not met.

Allocation number 3 under LTIS 2010

The third award ("Allocation 3") under LTIS 2010 was granted in June 2012 with the following vesting profile:

Tranche 2: 50% of the total award, vesting on 1 June 2016 (during the period under review)

Tranche 2 – fully vested

114 350 Personal performance shares vested for those participants still in the employ of the JSE on 1 June 2016.

In respect of Tranche 2 corporate performance shares, the Board assessed performance over the four-year vesting term against the pre-set financial and strategic targets and determined that 80% of these Tranche 2 shares should vest for those participants still in the employ of the JSE on 1 June 2016. The remainder of the Tranche 2 corporate performance shares (being 9 770 shares) were forfeited by participants.

As at 31 December 2016, details of Tranche 2 were as follows:

	Retention shares	Corporate performance shares	Total shares
Original number of Tranche 2 shares awarded in June 2012	131 800	51 500	183 300
Forfeited by leavers to date	(17 450)	(2 650)	(20 100)
Tranche 2 shares forfeited for missing performance targets	–	(9 770)	(9 770)
Accelerated for good leavers	(7 300)	(5 360)	(12 660)
Tranche 2 shares vested on 1 June 2016	(107 050)	(33 720)	(140 770)
Tranche 2 shares outstanding	–	–	–

Allocation number 4 under LTIS 2010

The fourth award ("Allocation 4") under LTIS 2010 was granted in May 2013 with the following vesting profile:

	Personal performance shares	Corporate performance shares
Share price at grant date (rand per share)	76.92	76.92
Total number of shares granted	328 500	128 600
Dividend yield (%)	3	3
Vesting profile:		
50% of the shares awarded vest on 1 June 2016 (Tranche 1)	164 250	64 300
50% of the shares awarded vest on 1 June 2017 (Tranche 2)	164 250	64 300

The vesting of Tranche 1 was completed during the year under review.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

20. Employee benefits

20.6 Long-Term Incentive Scheme

Tranche 1 – fully vested

150 450 Personal performance shares vested for those participants still in the employ of the JSE on 1 June 2016.

In respect of Tranche 1 corporate performance shares, the Board assessed performance over the four-year vesting term against the pre-set financial and strategic targets and determined that 86.54% of these Tranche 1 shares should vest for those participants still in the employ of the JSE on 1 June 2016. The remainder of the Tranche 1 corporate performance shares (being 8 211 shares) were forfeited by participants.

As at 31 December 2016, details of Tranche 1 were as follows:

	Personal performance shares	Corporate performance shares	Total shares
Original number of Tranche 1 shares awarded in May 2013	164 250	64 300	228 550
Forfeited by leavers to date	(13 800)	(3 250)	(17 050)
Tranche 1 shares forfeited for missing performance targets	–	(8 211)	(8 211)
Accelerated for good leavers	(3 250)	(3 246)	(6 496)
Tranche 1 shares vested on 1 June 2016	(147 200)	(49 593)	(196 793)
Tranche 1 shares outstanding	–	–	–

As at 31 December 2016, details of Tranche 2 were as follows:

	Personal performance shares	Corporate performance shares	Total shares
Original number of Tranche 2 shares awarded in May 2013	164 250	64 300	228 550
Forfeited by leavers to date	(13 800)	(3 250)	(17 050)
Accelerated for good leavers to date	(3 250)	(3 750)	(7 000)
Tranche 2 shares available for vesting in June 2017	147 200	57 300	204 500

Allocation number 5 under LTIS 2010

The fifth award ("Allocation 5") under LTIS 2010 was granted in May 2014 with the following vesting profile:

	Corporate performance shares
Share price at grant date (rands per share)	76.92
Total number of shares granted	422 870
Dividend yield (%)	3
Vesting profile:	
50% of the shares awarded vest on 1 June 2017 (Tranche 1)	211 435
50% of the shares awarded vest on 1 June 2018 (Tranche 2)	211 435

Allocation number 6 under LTIS 2010

The sixth award ("Allocation 6") under LTIS 2010 was granted in June 2015 with the following vesting profile:

	Corporate performance shares
Share price at grant date (rands per share)	131.54
Total number of shares granted	302 340
Dividend yield (%)	3
Grant date	1 June 2015
Vesting profile:	
50% of the shares awarded vest on 31 May 2018 (Tranche 1)	151 170
50% of the shares awarded vest on 31 May 2019 (Tranche 2)	151 170

Allocation number 7 under LTIS 2010

At the annual general meeting held on 26 May 2016, shareholders approved two special resolutions authorising the acquisition of shares for the purposes of awards under the LTIS 2010 scheme as well as the provision of financial assistance to the JSE LTIS 2010 Trust for a period of two years, for the purpose of acquiring such JSE ordinary shares in the open market for allocation to selected employees in accordance with the rules of LTIS 2010. In accordance with the terms of these resolutions, the Board approved a fresh annual allocation of 342 090 shares ("Allocation 7") to selected employees for the 2016 year. These individual allocations were accepted by all scheme participants on 4 March 2016. As at this date, the grant date as defined in IFRS 2 had not been determined as the detailed terms of the vesting conditions were in the process of being finalised. These were finalised and communicated to all affected parties on 21 October 2016 which was established as the grant date as defined in IFRS 2. The initial award under Allocation 7 comprised a total of 342 090 JSE ordinary shares and these shares were acquired in the open market by 10 March 2016, at a volume-weighted average price (including all execution costs) of R158.25 per ordinary share. An additional purchase of 9 684 shares was executed in respect of the Human Resources Director who joined the Company on 25 November 2016, at a volume-weighted average price (including all execution costs) of R161.01 per ordinary share. All Allocation 7 shares are held in trust and are restricted until all vesting conditions are fulfilled whereupon the shares vest.

Included in the total number of shares granted of 351 774, a total of 177 214 corporate performance shares have been granted to members of the JSE's Executive Committee. No personal performance shares were allocated under Allocation 7.

	Corporate performance shares
Share price at grant date (rands per share)	158.25
Total number of shares granted	342 090
Dividend yield (%)	3
Grant date	21 October 2016
Vesting profile:	
50% of the shares awarded vest on 1 March 2019 (Tranche 1)	171 045
50% of the shares awarded vest on 1 March 2020 (Tranche 2)	171 045
Share price at grant date (rands per share)	161.01
Total number of shares granted	9 684
Dividend yield (%)	3
Grant date	25 November 2016
Vesting profile:	
50% of the shares awarded vest on 1 March 2019 (Tranche 1)	4 842
50% of the shares awarded vest on 1 March 2020 (Tranche 2)	4 842

The profit or loss charge for the period, calculated using the Black-Scholes valuation methodology, in respect of allocations granted under LTIS 2010 is as follows:

	2016	2015
Allocation # 2 (granted in May 2011)	–	R0.7m
Allocation # 3 (granted in June 2012)	R1.1m	R5.3m
Allocation # 4 (granted in May 2013)	R8.3m	R6.6m
Allocation # 5 (granted in May 2014)	R8.7m	R5.5m
Allocation # 6 (granted in June 2015)	R9.5m	R3.1m
Allocation # 7 (granted October 2016)	R3.2m	–
	R30.8m	R21.2m

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Assets		Liabilities		Net	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000	2016 R'000	2015 R'000
21. Deferred tax assets and liabilities						
21.1 Deferred tax assets and liabilities are attributable to the following:						
Group						
Intangible assets	–	–	(204)	(394)	(204)	(394)
Operating lease liability	27 240	24 482	–	–	27 240	24 482
Operating lease asset	–	–	(51)	–	(51)	–
Employee benefits	48 247	41 161	(11 360)	(8 592)	36 887	32 569
Allowance for impairment losses	407	257	–	–	407	257
Prepayments	–	–	(6 156)	(4 634)	(6 156)	(4 634)
Loan to the JSE Empowerment Fund Trust	476	427	–	–	476	427
Income received in advance	1 213	930	–	–	1 213	930
Total	77 583	67 257	(17 771)	(13 620)	59 812	53 637

	Balance 1 January 2015 R'000	Recognised in profit or loss R'000	Balance 31 December 2015 R'000	Recognised in profit or loss R'000	Balance 31 December 2016 R'000
21.2 Movement in temporary differences during the year:					
Group					
Intangible assets	(584)	190	(394)	190	(204)
Operating lease liability	20 820	3662	24 482	2 758	27 240
Operating lease asset	–	–	–	(51)	(51)
Employee benefits	34 144	(1 575)	32 569	4 318	36 887
Allowance for impairment losses	168	89	257	150	407
Prepayments	(3 814)	(820)	(4 634)	(1 522)	(6 156)
Finance lease asset	(4 651)	4 651	–	–	–
Finance lease liability	3 008	(3 008)	–	–	–
Loan to the JSE Empowerment Fund Trust	(28)	455	427	49	476
Income received in advance	838	92	930	283	1 213
Total	49 901	3 736	53 637	6 175	59 812

There are no current and deferred tax implications relating to items charged/credited directly to other comprehensive income or equity, since these relate to investor protection funds, which are exempt from tax.

	Assets		Liabilities		Net	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000	2016 R'000	2015 R'000
21.3 Deferred tax assets and liabilities are attributable to the following:						
Company						
Operating lease liability	27 240	24 482	–	–	27 240	24 482
Operating lease asset	–	–	(51)	–	(51)	–
Employee benefits	48 247	41 161	(11 360)	(8 592)	36 887	32 569
Allowance for impairment losses	407	256	–	–	407	256
Prepayments	–	–	(6 156)	(4 634)	(6 156)	(4 634)
Loan to the JSE Empowerment Fund Trust	476	428	–	–	476	428
Income received in advance	1 213	930	–	–	1 213	930
Total	77 583	67 257	(17 567)	(13 226)	60 016	54 031

	Balance 1 January 2015 R'000	Recognised in profit or loss R'000	Balance 31 December 2015 R'000	Recognised in profit or loss R'000	Balance 31 December 2016 R'000
21.4 Movement in temporary differences during the year					
Company					
Operating lease liability	20 820	3 662	24 482	2 758	27 240
Operating lease asset	–	–	–	(51)	(51)
Employee benefits	34 144	(1 575)	32 569	4 318	36 887
Allowance for impairment losses	168	88	256	151	407
Prepayments	(3 814)	(820)	(4 634)	(1 522)	(6 156)
Finance lease asset	(4 651)	4 651	–	–	–
Finance lease liability	3 008	(3 008)	–	–	–
Loan to the JSE Empowerment Fund Trust	(28)	456	428	48	476
Income received in advance	838	92	930	283	1 213
Total	50 485	3 546	54 031	5 985	60 016

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
22. Trade and other payables				
Trade payables	154 387	146 768	149 060	145 150
Interest payable	276 156	188 838	2 708	4 686
Receipts in advance	3 899	3 955	3 899	3 955
	434 442	339 561	155 667	153 791
23. Due to Safex members				
Non-current liability	1 347	1 347	1 347	1 347
Relates to unclaimed funds	1 347	1 347	1 347	1 347
24. Notes to the cash flow statement				
24.1 Cash generated by operations				
Profit for the year before tax	1 247 913	1 235 118	1 196 292	1 192 714
Adjustments for:				
– depreciation of property and equipment	46 750	51 974	46 750	51 974
– amortisation of intangible assets	52 261	48 005	51 581	47 064
– JSE LTIS 2010	40 732	21 665	40 732	21 665
– share of profit of equity-accounted investee	(59 066)	(46 569)	–	–
– interest expense	3 035 497	1 967 342	37 436	29 736
– interest income	(3 249 286)	(2 133 136)	(165 944)	(127 919)
– dividend income	(3 546)	(6 455)	(22 945)	(18 823)
– non-cash items in respect of employee benefits	(123 428)	(125 231)	(123 428)	(125 231)
– profit on sale of property and equipment	(68)	(201)	(68)	(201)
– change in fair value of loan to JSE Empowerment Fund	173	(11 347)	173	(11 347)
– gain on disposal of investment securities	(16 328)	(20 644)	–	–
Surplus from operations	971 604	980 521	1 060 579	1 059 632
Changes in:				
– increase in trade and other receivables	9 820	(79 123)	13 154	(100 595)
– increase in trade and other payables	155 574	156 780	143 988	146 285
Cash generated by operations	1 136 998	1 058 178	1 217 721	1 105 322

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
24. Notes to the cash flow statement				
24.2 Taxation paid				
Taxation payable at beginning of year	32 119	31 772	32 713	32 377
Deferred tax effects	6 175	3 736	5 985	3 546
Current tax charge	328 211	335 640	327 567	335 099
Taxation receivable/(payable) at end of year	1 064	(32 119)	451	(32 713)
	367 569	339 029	366 716	338 309

		Basic salary ¹	Defined contribution pension plan	Medical aid ¹ , UIF and other
		R'000	R'000	R'000
25. Directors' and executives' remuneration⁴				
25.1 Executive directors – Current year remuneration				
2016				
NF Newton-King	Chief executive officer	3 678	304	132
A Takoordeen	Chief financial officer	2 132	121	77
L Fourie ⁵	Director of Post-Trade and Information Services	1 172	104	42
		6 982	529	251
2015				
NF Newton-King	Chief executive officer	3 474	228	121
A Takoordeen	Chief financial officer	1 999	92	105
L Fourie ⁵	Director of Post-Trade and Information Services	2 170	143	61
		7 643	463	287
25.2 Other key executives – Current year remuneration				
2016				
GA Brookes	Director of Governance, Risk and Compliance	1 853	–	50
JH Burke	Director of Issuer Regulation	2 179	190	168
A Greenwood ⁶	Director of Post-trade Services	2 125	152	2
Z Jacobs	Director of Marketing and Corporate Affairs	2 051	124	50
D Khumalo ⁷	Director of Human Resources	295	19	7
TJ Matsena ⁸	Director of Trading and Market Services	844	68	25
D Nemer	Director of Capital Markets	2 416	184	161
LV Parsons	Director of Information Services	2 106	205	142
R van Wamelen	Chief information officer	2 322	133	115
		16 191	1 075	720
2015				
GA Brookes	Director of Governance, Risk and Compliance	1 767	–	429
JH Burke	Director of Issuer Regulation	2 048	145	155
S Cleary	Director of Strategy and Public Policy	380	25	141
Z Jacobs	Director of Marketing and Corporate Affairs	1 955	94	46
N Mashigo	Director of Human Resources	1 252	81	473
D Nemer	Director of Capital Markets	2 294	137	115
LV Parsons	Director of Trading and Market Services	1 875	519	167
R van Wamelen	Chief information officer	2 173	99	106
		13 744	1 100	1 632

Footnotes 1 – 8 below are applicable to notes 25.1 – 25.3

¹ Represents short-term employee benefits.

² Contractual bonuses are subject to personal performance and are calculated according to a fixed percentage of basic salary (which percentage varies on a sliding scale based on grade). Altogether 50% of all contractual bonuses are subject to six-month deferral linked to continued employment. The full contractual bonus award is reflected here, together with interest on the deferred portion at 5%, in accordance with the contractual bonus policy.

³ Discretionary bonuses are subject to both personal performance and the achievement of specific corporate deliverables (per the annual corporate scorecard approved by the Board at the beginning of each financial year). These awards are not subject to deferral, unless otherwise so determined by the Board in any particular year. A portion of the discretionary bonus may be paid in equity, at the discretion of the Group Human Resources Committee.

Total guaranteed pay	Contractual bonus ^{1,2} (includes deferral)	Discretionary bonus ^{1,3}	Total annual incentives	Total current year remuneration	Total long-term and other benefits ¹⁰	Total number of shares granted for LTIS 2010 scheme ¹¹	Total number of shares granted for restraint of trade ¹²
R'000	R'000	R'000	R'000	R'000	R'000		
4 113	4 152	4 700 ⁹	8 852	12 965	6 129	149 140	–
2 330	736	2 075	2 811	5 141	1 269	54 560	15 000
1 318	–	–	–	1 318	2 479	42 460	–
7 761	4 888	6 775	11 663	19 424	9 877	246 160	15 000
3 823	3 917	4 600	8 517	12 340	3 178	147 550	–
2 196	701	2 050	2 751	4 947	–	47 410	–
2 374	772	2 250	3 022	5 396	843	58 060	–
8 393	5 390	8 900	14 290	22 683	4 021	253 020	–
1 903	607	1 350	1 957	3 860	862	33 230	12 390
2 537	811	2 200	3 011	5 548	2 781	61 430	16 540
2 279	783	2 075	2 858	5 137	–	15 960	–
2 225	702	2 075	2 777	5 002	1 278	52 610	14 320
321	–	–	–	321	–	9 684	–
937	591	1 450	2 041	2 978	–	5 860	–
2 761	870	2 400	3 270	6 031	–	33 500	17 730
2 453	872	2 300	3 172	5 625	2 988	66 050	17 790
2 570	812	2 325	3 137	5 707	2 479	58 750	16 560
17 986	6 048	16 175	22 223	40 209	10 388	337 074	95 330
2 196	578	1 250	1 828	4 024	622	25 790	–
2 348	772	2 200	2 972	5 320	2 031	62 390	–
546	–	–	–	546	–	–	–
2 095	669	2 050	2 719	4 814	–	46 190	–
1 806	–	–	–	1 806	–	–	–
2 546	813	2 300	3 113	5 659	–	15 770	–
2 561	830	2 300	3 130	5 691	2 118	67 060	–
2 378	759	2 250	3 009	5 387	1 719	57 790	–
16 476	4 421	12 350	16 771	33 247	6 490	274 990	–

⁴ All executive directors and other key executives are full-time employees of JSE Limited.

⁵ Resigned on 18 July 2016.

⁶ Appointed to Executive Committee on 1 February 2016.

⁷ Appointed to Executive Committee on 1 November 2016.

⁸ Appointed to Executive Committee on 1 July 2016.

⁹ Portion of CEO's discretionary bonus made up as follows:

– R4 400 000 in cash; and

– R300 000 in JSE Limited shares vesting over three years.

¹⁰ Represents the net value (after forfeiture for corporate performance) of share awards granted under provisions of the LTIS 2010 Long Term Incentive Scheme in 2012 and 2013 that vested during the current financial year.

¹¹ Represents unvested shares as at 31 December 2016, granted under the provisions of the LTIS 2010 Long Term Incentive Scheme.

¹² Represents shares granted to certain Executive Committee members as part of a three-year share based restraint arrangement implemented during the current financial year.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

		Total R'000	Board member fees R'000	Committee member fees R'000
25. Directors' and executives' remuneration (continued)				
25.3 Non-executive director emoluments				
2016				
AD Botha	Chairman of Human Resources, Social and Ethics Committee	840	310	530
M Jordaan		310	310	–
SP Kana		695	310	385
DM Lawrence		608	310	298
MA Matookane	Chairman of Risk Committee	673	310	363
AM Mazwai	Chairman of SRO Committee, Chairman of Investment of Funds Committee	930	310	620
NP Mnxasana		690	310	380
NMC Nyembezi-Heita	Board Chairman, Chairman of Nominations Committee	1 850	1 850	–
NG Payne	Chairman of Risk Committee	870	310	560
		7 466	4 330	3 136
2015				
AD Botha	Chairman of Human Resources, Social and Ethics Committee	782	290	492
M Jordaan		290	290	–
SP Kana		320	145	175
DM Lawrence		543	290	253
MA Matookane	Chairman of Risk Committee	522	290	232
AM Mazwai	Chairman of SRO Committee, Chairman of Investment of Funds Committee	802	290	512
NP Mnxasana		554	290	264
NS Nematswerani	Chairman of Audit Committee	316	113	203
NMC Nyembezi-Heita	Board Chairman, Chairman of Nominations Committee	1 716	1 716	–
NG Payne	Chairman of Audit Committee	787	290	497
		6 632	4 004	2 628

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
26. Deferred income				
Investor protection levy	12 190	13 217	12 190	13 217
Distribution from the JSE Guarantee Fund Trust	–	–	26 963	34 837
	12 190	13 217	39 153	48 054

Investor protection levy

This amount represents unexpended levies received from investors in terms of the Investor protection levy. These levies are raised to finance the market regulatory activities of the Financial Services Board and are committed to this purpose. These funds are included in the cash and cash equivalents balances.

Distribution from the JSE Guarantee Fund Trust

This represents the monies distributed by the JSE Guarantee Fund Trust for the specific purpose of funding the establishment of the JSE's disaster recovery site (2010: R50m) and data centre (2011: R51m). This is a transaction between related parties as disclosed in note 27 and is eliminated on consolidation. The income transferred from deferred income to profit or loss is based on the relating depreciation charge of the disaster recovery site and the data centre.

27. Related parties

27.1 Identity of related parties

The JSE is the main provider of risk management, clearing and settlement, and accounting systems to equity member firms (many of whom are shareholders). Revenue earned from this source, and from providing trading and market data to member firms, amounted to R1.7bn (2015: R1.6bn) for the year. These transactions are conducted on an arm's length basis.

The associated companies and subsidiaries of the Group are identified in notes 12 and 13 respectively.

The directors and key executives are listed in note 25.

27.2 Material related-party transactions and balances

Strate ad valorem fees	– see notes 6.1 and 7.2
Amounts due to and from related parties	– see notes 13.3 and 13.4
Directors' emoluments	– see note 25
Other key executives' remuneration	– see note 25
Income recognised from deferred income (data centre and disaster recovery)	– see note 6.2

During the previous financial years, surplus assets amounting to R101m were distributed by the JSE Guarantee Fund Trust to the JSE for the establishment of the JSE's data centre and disaster recovery site. The transfer of the funds was formally approved by the Financial Services Board. The funds received are recognised in deferred income in the JSE's separate financial statements and are released to profit or loss on a systematic basis over the useful life of the assets comprising the data centre and the disaster recovery site. Also refer to note 26.

Management fees from related entities R138.0m (2015: R118.0m)

The JSE provides secretarial services to all the Group entities (excluding Strate (Pty) Limited) for no consideration.

28. Commitments

28.1 Commitments

	Group		Company	
	2016 R'000	2015 R'000	2016 R'000	2015 R'000
28.1.1				
These payments relate to operating lease agreements in respect of buildings from which the JSE conducts its business.				
Total future minimum lease payments under a non-cancellable operating lease:				
Not later than one year	48 641	43 903	48 641	43 903
Between one and five years	236 708	214 945	236 708	214 945
Later than five years	288 029	353 287	288 029	353 287
	573 378	612 135	573 378	612 135
<i>Note: The disclosure on the face of the statement of financial position represents the accrual from the straight-lining of the rental income.</i>				
28.1.2				
The JSE sub-leases areas of the buildings in which it operates (refer note 6.2). The minimum lease payments expected from sub-leases are set out below:				
Total future minimum lease receipts				
Not later than one year	1 504	2 615	1 504	2 615
Between one and five years	2 185	4 389	2 185	4 389
	3 689	7 004	3 689	7 004

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

29. Financial risk management

The Group has exposure to the following risks from its use of financial instruments:

- Operational risk;
- Market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and other market risk);
- Liquidity risk;
- Credit risk; and
- Capital risk

Risk management framework

The Board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board has established the Risk Management Committee, which is responsible for developing and monitoring the Group's risk management policies. The committee reports regularly to the Board of directors on its activities.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, has developed a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group Risk Committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group Risk Committee is assisted in its role by the Group risk management function and Internal Audit. Internal Audit undertakes both regular and ad hoc reviews of the risk management controls and procedures, the results of which are reported to the Risk Committee.

29.1 Operational risk

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems, and from external factors other than credit, market and liquidity risks, such as those arising from legal and regulatory requirements and generally accepted standards of corporate behaviour. Operational risk arises from all of the Group's operations.

The Board accepts overall responsibility for operational risk, with the responsibility for day-to-day management of operational risk delegated to management within each business unit. This responsibility is supported by the development of overall standards for the management of operational risk in the following areas:

- Requirements for appropriate segregation of duties, including the independent authorisation of transactions;
- Requirements for the reconciliation and monitoring of transactions;
- Compliance with regulatory and other legal obligations;
- Documentation of controls and procedures;
- Requirements for the periodic assessment of operational risks faced, and the adequacy of controls and procedures to address the risks identified;
- Requirements for the reporting of operational losses and proposed remedial action;
- Development of contingency plans;
- Training and professional development;
- Ethical and business standards; and
- Risk mitigation, including insurance where this is effective

29.2 Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

29.2.1 Currency risk

The majority of the JSE's transactions are concluded in its functional currency (South African rand), with the result that its exposure to foreign currency risk from operating transactions is limited. US Dollar revenue earned from the Market Data Division is maintained in a US Dollar denominated bank account. US Dollar costs (mainly in technology) for both business as usual and projects are funded out of this account. As such, there is a natural hedge relating to foreign currency denominated expenditure in the Group.

The Group's exposure to foreign currency risk based on notional amounts was as follows:

	Group			Company		
	USD R'000	GBP R'000	EUR R'000	USD R'000	GBP R'000	EUR R'000
2016						
Financial assets	164 513	–	–	164 513	–	–
Trade receivables	21 684	–	–	21 684	–	–
Cash and cash equivalents	142 829	–	–	142 829	–	–
Financial liabilities	(594)	–	–	(594)	–	–
Trade payables	(594)	–	(104)	(594)	–	(104)
Net exposure	163 919	–	(104)	163 919	–	(104)
2015						
Financial assets	354 947	–	–	354 947	–	–
Trade receivables	18 633	–	–	18 633	–	–
Cash and cash equivalents	336 314	–	–	336 314	–	–
Financial liabilities	(399)	–	(26)	(399)	–	(26)
Trade payables	(399)	–	(26)	(399)	–	(26)
Net exposure	354 548	–	(26)	354 548	–	(26)

As at 31 December 2016

Bank buying rates	Bank selling rates
USD – 13.4767 (2015: 15.2016)	USD – 13.9779 (2015: 15.7371)
GBP – 16.5661 (2015: 22.3691)	GBP – 17.2795 (2015: 23.2821)
EUR – 14.1647 (2015: 16.4859)	EUR – 14.7381 (2015: 17.1276)

Sensitivity analysis

A 10% (2015: 10%) strengthening of the rand against the USD and a 5% (2015: 5%) strengthening of the rand against the GBP and EUR respectively, at 31 December, would have increased profit by R16.4m (2015: R35.5m) and equity by Rnil (2015: Rnil). This analysis assumes that all other variables remain constant. The analysis is performed on the same basis as 2015.

	Group		Company	
	Profit or loss R'000	Equity R'000	Profit or loss R'000	Equity R'000
2016				
USD	16 392	–	16 392	–
GBP	–	–	–	–
EUR	(10)	–	(10)	–
Net impact	16 382	–	16 382	–
2015				
USD	35 455	–	35 455	–
GBP	–	–	–	–
EUR	(1)	–	(1)	–
Net impact	35 454	–	35 454	–

A 10% (2015: 10%) weakening of the rand against the USD and a 5% (2015: 5%) weakening of the rand against the GBP and EUR respectively, at 31 December, would have had an equal and opposite effect on the amounts shown above, on the basis that all other variables remained constant.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

29. Financial risk management (continued)

29.2 Market risk

29.2.2 Cash flow and fair value interest rate risk

Interest rate risk is the risk of the JSE being exposed to fluctuations in the fair values or future cash flows of financial instruments because of changes in market interest rates. The Group is exposed to cash flow interest rate risk in respect of its floating rate financial assets and financial liabilities as set out below and to fair value interest rate risk in respect of fixed rate bonds classified as available-for-sale financial assets. Cash flow interest rate risk is managed by the JSE, ensuring that the floating rate financial assets are at least equal to or greater than the floating rate financial liabilities. The fair value interest rate risk arising from fixed rate bonds is managed by a reputable asset manager according to approved guidelines. There is no interest rate risk on the margin and collateral as there is an equal liability to offset the asset.

The following table analyses the interest rate risk profile for assets and liabilities at year-end:

	Group		Company	
	Fixed rate R'000	Floating rate R'000	Fixed rate R'000	Floating rate R'000
2016				
Assets	27 795 245	16 380 545	1 180 000	1 009 908
Investments	18 245	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	347 000	153 000	–	100 000
Margin and collateral deposits	26 250 000	15 312 761	–	163 216
Cash and cash equivalents	1 180 000	914 784	1 180 000	746 692
Liabilities	(26 527 600)	(15 435 161)	–	(163 216)
JSE Clear Derivatives Default Fund contributions	(277 600)	(122 400)	–	–
Margin and collateral deposits	(26 250 000)	(15 312 761)	–	(163 216)
Net exposure	1 267 645	945 384	1 180 000	846 692
2015				
Assets	20 345 690	16 678 382	860 000	1 292 929
Investments	28 690	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	397 000	103 000	–	100 000
Margin and collateral deposits	19 060 000	15 527 753	–	316 303
Cash and cash equivalents	860 000	1 047 629	860 000	876 626
Liabilities	(19 377 600)	(15 610 153)	–	(316 303)
JSE Clear Derivatives Default Fund contributions	(317 600)	(82 400)	–	–
Margin and collateral deposits	(19 060 000)	(15 527 753)	–	(316 303)
Net exposure	968 090	1 068 229	860 000	976 626

Floating rate assets yield interest at call rates.

Sensitivity analysis

A change of 100 (2015: 100) basis points on the fixed rate bonds and 100 (2015: 100) basis points in the floating rate instruments at the reporting date would have increased/(decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables remain constant. The analysis is performed on the same basis as 2015.

	Group		Company	
	Profit or loss R'000	Equity R'000	Profit or loss R'000	Equity R'000
2016				
Fixed-rate bond: +100 bps	–	(702)	–	–
Fixed-rate bond: -100 bps	–	702	–	–
Floating-rate instruments: +100 bps	9 148	–	7 467	–
Floating-rate instruments: -100 bps	(9 148)	–	(7 467)	–
2015				
Fixed-rate bond: +100 bps	–	(1 114)	–	–
Fixed-rate bond: -100 bps	–	1 189	–	–
Floating-rate instruments: +100 bps	10 476	–	8 766	–
Floating-rate instruments: -100 bps	(10 476)	–	(8 766)	–

29.2.3 Other market price risk

The Group is exposed to the risk of fluctuations in the fair value of the available-for-sale financial assets because of changes in market prices (other than changes in interest rates and currencies). With regard to the unit trusts, the Group is exposed to fluctuations in the fair value of the unit trusts (which is determined by the fair value movement of the underlying instruments).

To manage its other market price risk arising from the available-for-sale financial assets, the investments are managed by a reputable asset manager according to approved guidelines. The JSE's Finance department monitors the investments in unit trusts and equity instruments by review of the monthly reports from the asset manager. The portfolio of instruments held is regularly reviewed and amended to manage the Group's exposure to market risk.

Sensitivity analysis – other market price risk

The available-for-sale financial assets considered in the sensitivity analysis below exclude the listed bonds, as management believes that the majority of the sensitivity of these instruments lies in their exposure to interest rates, which is included in the interest rate sensitivity analysis in note 29.2.2.

The equity investments are listed on JSE Limited, with the majority of the investments included in the JSE All Share Index.

A 4% (2015: 4%) increase in the JSE All Share Index at the reporting date, with all other variables held constant, would have increased equity by R5.4m (2015: R6.2m) and profit by Rnil (2015: Rnil); an equal change in the opposite direction would have decreased equity by R5.4m (2015: R6.2m) and profit by Rnil (2015: Rnil). This analysis is performed on the same basis as 2015.

The unit trusts are predominantly benchmarked against the MSCI World Index. A 5% (2015: 5%) increase in the MSCI World Index at the reporting date, with all other variables held constant, would have increased equity by R6.7m (2015: R6.2m); an equal change in the opposite direction would have decreased equity by R6.7m (2015: R6.2m). The analysis is performed on the same basis as 2015.

29.3 Liquidity risk

Liquidity risk is the risk that the JSE will be unable to meet its short-term funding requirements. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

This risk is managed by the JSE by maintaining the members' funds and the JSE's own funds in current and call accounts. Typically the Group ensures that it has sufficient cash on demand to meet expected operational expenses for a minimum period of 60 days, including the servicing of financial obligations. This excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The following table analyses the terms of receipt of financial assets and repayment of financial liabilities existing at year-end.

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

29. Financial risk management (continued)

29.3 Liquidity risk

	Group			Company		
	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000
2016						
Financial assets	44 953 436	–	25 099	2 450 971	–	46 692
Other investments	293 469	–	1	–	–	1
Loan to the JSE Empowerment Fund Trust	–	–	25 098	–	–	25 098
Trade and other receivables (excluding payments in advance)	216 831	–	–	205 303	–	–
Interest receivable	285 591	–	–	7 932	–	–
Due from Group entities	–	–	–	47 828	–	21 593
Margin and collateral deposits	41 562 761	–	–	163 216	–	–
JSE Clear Derivatives Default Fund collateral deposit	500 000	–	–	100 000	–	–
Cash and cash equivalents	2 094 784	–	–	1 926 692	–	–
Financial liabilities	(42 397 203)	–	(1 347)	(318 883)	–	(1 347)
Due to Safex members	–	–	(1 347)	–	–	(1 347)
Trade payables	(158 286)	–	–	(152 959)	–	–
Interest payable	(276 156)	–	–	(2 708)	–	–
JSE Clear Derivatives Default Fund collateral deposit	(400 000)	–	–	–	–	–
Margin and collateral deposits	(41 562 761)	–	–	(163 216)	–	–
Net exposure	2 556 233	–	23 752	2 132 088	–	45 345
2015						
Financial assets	37 724 859	–	25 272	2 427 349	–	47 819
Other investments	312 563	–	1	–	–	1
Loan to the JSE Empowerment Fund Trust	–	–	25 271	–	–	25 271
Trade and other receivables (excluding payments in advance)	229 303	–	–	216 320	–	–
Interest receivable	187 611	–	–	6 170	–	–
Due from Group entities	–	–	–	51 930	–	22 547
Margin and collateral deposits	34 587 753	–	–	316 303	–	–
JSE Clear Derivatives Default Fund collateral deposit	500 000	–	–	100 000	–	–
Cash and cash equivalents	1 907 629	–	–	1 736 626	–	–
Financial liabilities	(35 327 314)	–	(1 347)	(470 094)	–	(1 347)
Due to Safex members	–	–	(1 347)	–	–	(1 347)
Trade payables	(150 723)	–	–	(149 105)	–	–
Interest payable	(188 838)	–	–	(4 686)	–	–
Due to Group entities	–	–	–	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	(400 000)	–	–	–	–	–
Margin and collateral deposits	(34 587 753)	–	–	(316 303)	–	–
Net exposure	2 397 545	–	23 925	1 957 255	–	46 472

29.4 Credit risk

Credit risk is the risk of financial loss to the Group if a client or counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises from cash and cash equivalents, margin and collateral deposits, trade and other receivables (excluding payments in advance), interest receivable, other investments and amounts due from Group entities. Credit risk on cash and cash equivalents, margin and collateral deposits, and interest receivable is minimised by ensuring funds are only placed with F1/A1 and F1+/A1+ rated banking institutions, with no concentration of funds in one specific banking institution. Segregation of duties, multiple signatories, third party confirmation of investments and monitoring of compliance with investment mandates are applied daily to monitor and control exposure to credit risk associated with other investments. Trade and other receivables are monitored by the JSE's Finance department on an ongoing basis.

The JSE is exposed to credit losses in the event of default by a clearing member. The Group's exposure to credit risk is influenced mainly by the individual characteristics of each client. A significant number of the Group's clients have been transacting with the Group for over four years and losses have occurred infrequently. In monitoring customer credit risk, customers are grouped according to their credit characteristics, including whether they are an individual or a legal entity, whether they are a wholesale, retail or end-user customer, geographic location, industry, ageing profile, maturity and existence of previous financial difficulties.

During 2013, JSE Clear established a separate legal entity to house a formal default fund to clarify and limit clearing members' and the JSE's obligations in the case of a clearing member default. This is a pre-funded resource whereby, in the case of any clearing member default, the defaulting clearing members' contributions are used first, thereafter the JSE's contribution, and last, the contributions of the non-defaulting clearing members are used to fund losses.

29.5 Capital risk

The JSE Board monitors the level of capital, which the Group defines as total share capital and reserves (refer to note 19). In order to maintain or adjust the level of capital, the Group may issue new shares, adjust the amount of dividends paid to shareholders or return capital to shareholders. In addition, the Board of Directors monitors the return on capital, which the Group defines as the result of operating activities divided by total shareholders' equity. The JSE Board also monitors the level of dividends declared to ordinary shareholders.

The Group considers capital risk to reside in three main areas:

- Settlement guarantee
- Operating costs
- Capital or opportunity needs

Settlement guarantee is the money that would be required to settle a failed trade by replacing the defaulting party. This would either entail a settlement in cash or the acquisition of equities required to settle a trade. If it is the latter, the risk is that the price of the equities moves against the JSE. (Although the cash would be forthcoming, it may be less than the original transaction).

Operating costs: Globally, the prudential requirements for operating reserves are between two and six months of operating costs. The JSE Board considers six months to be appropriate.

Capital or opportunity needs: The need to maintain a world-class technology environment requires that a high level of cash be maintained. This level of cash is also maintained to allow flexibility in negotiating potential corporate actions. This cash is managed by the JSE's Treasury department and is invested with only F1/A1 and F1+/A1+ rated institutions, with a view to maximising interest received.

There were no changes to the Group's approach to capital management during the year.

The Board has noted the increased global attention on the capitalisation of key financial market infrastructures, such as exchanges and clearing houses. The Board believes that the JSE is appropriately capitalised, given the nature of the risks we currently face and given the uncertain nature of future regulatory capital requirements.

30. Fair value estimation

Financial instruments measured in the statement of financial position at fair value require disclosure. The following is the fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- Inputs other than quoted prices included in level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

Notes to the consolidated financial statements (continued)

For the year ended 31 December 2016

30. Fair value estimation (continued)

The following table presents the Group's assets and liabilities that are measured at fair value.

	Notes	Level 1 R'000	Level 2 R'000	Level 3 R'000	Total balance R'000
2016					
Assets					
Other investments					
– Equity securities (available-for-sale)	14.1/2	135 108	140 116	–	275 224
– Debt investments (available-for-sale)	14.1/2	18 245	–	–	18 245
Total assets		153 353	140 116	–	293 469
2015					
Assets					
Other investments					
– Equity securities (available-for-sale)	14.1/2	154 775	129 098	–	283 873
– Debt investments (available-for-sale)	14.1/2	28 690	–	–	28 690
Total assets		183 465	129 098	–	312 563

The fair value of financial instruments traded in active markets is based on quoted market prices, which represent actual and regularly occurring market transactions between market participants at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker or industry group pricing market transactions on an arm's length basis and transactions occur regularly. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprise primarily FTSE 100 equity investments classified as available-for-sale.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

For all other financial assets and liabilities, the carrying value approximates the fair value.

31. Funds under management

31.1 JSE Trustees (Pty) Limited

	Year ended 31 December	
	2016 R'000	2015 R'000
Assets under administration		
Interest receivable	214 251	178 395
Fixed deposits	24 300 000	26 200 000
Current and call accounts	18 088 997	12 471 296
Total assets under administration	42 603 248	38 849 691

In terms of rule 2.100.7 of the JSE rules, the JSE Trustees act as an agent on behalf of members, who in turn, act as agents on behalf of their clients. JSE Trustees' principal activities while acting as an agent are the acceptance of monies on deposit for account of clients of members of the Exchange and the later repayment of such monies. These monies are invested in various interest-earning bank accounts. JSE Trustees earns an administration fee for the services rendered. Funds so deposited or invested neither form part of the assets of JSE Trustees nor of any member acting on behalf of a client.

Credit risk on assets under administration is minimised by ensuring funds are only placed with F1/A1 and F1+/A1+ rated banking institutions.

To monitor liquidity risk, duration limits have been set and authorised for JSE Trustees. The authorised duration limits have been tailored to the liquidity requirements of JSE Trustees and the weighted average duration of funds invested may not exceed 40 (2015: 40) days.

31.2 Total assets under management on the Nautilus Managed Account Platform

Nautilus MAP RF (Pty) Limited (“Nautilus”) is registered as a Management Company for hedge fund portfolios under the Collective Investment Schemes Control Act of 2002 (“the Act”). Nautilus has registered both a qualified hedge fund scheme and a retail hedge fund scheme with the FSB, each scheme exists under a trust as defined under the Act. Each hedge fund portfolio exists as a supplemental portfolio and is managed by a supplemental deed under its relevant scheme. The Act limits the liability of the investors into said portfolios and also does not allow for contagion of assets between portfolios under the same scheme.

As at 31 December 2016, the combined assets under management of Nautilus amounted to R6.1bn (2015: R4.8bn).

Liquidity risk is managed through ensuring that the period it would take to unwind a significant portion of a portfolio is consistent with the redemption terms on the same portfolio. This is practically managed through determining how long it would take to unwind a portfolio based on historic volumes of the positions in the portfolio.

Credit risk is mitigated by Nautilus MAP Operations (Pty) Ltd in only taking counterparty risk to entities who are required by an independent regulatory body to hold capital against over-the-counter products that are not traded or regulated on an exchange; for example banks and insurance companies.


Shareholder information

Shareholder diary

Events or reports in relation to the 2017 financial year

Summarised annual financial statements with the declaration of a dividend	28 February 2017
Annual results presentation	1 March 2017
Record date to determine which shareholders are entitled to receive the AGM Notice	17 March 2017
Publication of 2016 integrated annual report	24 March 2017
Record date for annual general meeting	12 May 2017
Annual general meeting	18 May 2017
Summarised interim report for the six months ended 30 June 2017	3 August 2017

Ordinary dividend

 A gross dividend of 560 cents per share was declared and approved by the Board on 28 February 2017. Refer to page 65 of the directors' report.

Salient dates for dividend

Last day to trade JSE shares cum dividend	Monday, 20 March 2017
Record date to participate in the dividend	Friday, 24 March 2017
Payment date of dividend	Monday, 27 March 2017

Share information

The JSE Limited has a primary listing on the Johannesburg Stock Exchange. There are no secondary listings.

Share code: JSE

ISIN: ZAE000079711

Sector: Financial Services

Subsector: Investment Services

	Shares in issue	Closing price (R)	Market capitalisation (R)
31 December 2016	86 877 600	164.14	14 260 089 264
30 June 2016	86 877 600	185.02	16 074 093 552
31 December 2015	86 877 600	128.00	11 120 332 800

Analysis of shareholdings

Shareholder spread as at 31 December 2016

	Number	Direct holdings	Indirect holdings			Total	% of total issued shares
			LTIS ¹	Other ²	Associates ³		
Total: Public shareholders	6 224					85 008 206	97.85
Total: Non-public shareholders	459	335 672	1 355 599	105 163	72 960	1 869 394	2.15
Directors	9	102 391	380 510	4 751	72 960	560 612	0.65
Prescribed officers	6	28 420	270 594	694	–	299 708	0.34
Other employees	444	204 861	704 495	99 718	–	1 009 074	1.16
Overall totals	6 683					86 877 600	100.00

The following registered shareholders also indirectly hold shares on behalf of non-public shareholders:

¹ The JSE LTIS 2010 Trust is the registered shareholder that holds unvested shares on behalf of various executives and senior employees.

² The 2005 broadbased employee share and JSE bonus share scheme (various employees).

³ The Imalivest flexible fund is an associate of A Botha.

Major shareholders

Pursuant to section 56(7) of the South African Companies Act, 71 of 2008, the following beneficial shareholdings equal to or exceeding 5% as at 31 December 2016 were disclosed or established from enquiries:

Name	Number of shares held	% of total issued ordinary shares
Government Employees Pension Fund	11 142 164	12.83
Northern Trust Global Services	8 887 355	10.23

No individual shareholder's beneficial shareholding in the any JSE employee incentive scheme is equal to or exceeds 5%.

Furthermore, the directors have ascertained that some of the shares registered in the names of nominee holders are managed by various fund managers and that, at 31 December 2016, the following fund managers were responsible for managing investments of 2.5% or more of the share capital of JSE Limited.

Fund managers

Name	Number of shares held	% of total issued ordinary shares
Public Investment Corporation Limited	11 128 817	12.81
Somerset Capital Management, LLP	4 729 163	5.44
Investec Asset Management (Pty) Ltd	4 460 264	5.13
Skagen AS	3 514 971	4.05
Abax Investments (Pty) Ltd	3 136 212	3.61
Acadian Asset Management LLC	2 767 398	3.19
The Vanguard Group, Inc.	2 645 013	3.04
Aberdeen Asset Managers Ltd	2 420 326	2.79
36ONE Asset Management (Pty) Ltd	2 168 420	2.50

Corporate information and directorate

Administration

JSE Limited (Incorporated in the Republic of South Africa) Registration number: 2005/022939/06

Share code: JSE

ISIN: ZAE000079711

Registered office	One Exchange Square 2 Gwen Lane Sandown Sandton 2196	Transfer secretary	Computershare Investor Services (Pty) Ltd Rosebank Tower 15 Biermann Avenue Rosebank 2196
Postal address	Private Bag X991174 Sandton 2146	Telephone	+27 (0) 11 370 5000
Telephone	+27 (0) 11 520 7000	Auditors	KPMG Inc, 85 Empire Road, Parktown, 2193
Web	www.jse.co.za	Sponsor	Rand Merchant Bank, 1 Merchant Place, Corner Fredman and Rivonia Road, Sandton, 2196
IR email	ir@jse.co.za	Bankers	First National Bank of SA Limited, Corporate Account Services, 4 First Place, Bank City, Simmonds Street, Johannesburg, 2001

Directors*	N Nyembezi-Heita (chairman) NF Newton-King (CEO) A Takoordeen (CFO) AD Botha (lead independent director; chairman of the Group Human Resources Committee) NG Payne (chairman of the Group Audit Committee) AM Mazwai (chairman of the SRO Oversight Committee) DM Lawrence Dr MA Matooane (chairman of the Group Risk Management Committee)* NP Mnxasana Dr M Jordaan Dr SP Kana
Alternate directors	LV Parsons JH Burke
Group Company Secretary	GA Brookes

* Refer to pages 38 – 39 for brief biographies of the directors.

All investor queries directed to ir@jse.co.za will be attended to and, where applicable, redirected to the chairman, the CEO or another mandated officer for an appropriate response.