CONSOLIDATED ANNUAL FINANCIAL STATEMENTS

for the year ended 31 December

2022

CONTENTS

Page reference for additional reading in this report.

Reference to online data at
https://www.jse.co.za/investor-relations/results

REPORTING SUITE

Reporting suite

Our full reporting suite is available at https://www.jse.co.za/investor-relations/results and comprises the following reports:

Annual financial statements

Sets out our financial results, with the GAC report, director's report and annual financial statements prepared in accordance with IFRS.

Integrated annual report

Sets out how the JSE creates value in the context of our business model, strategy, operating context, governance and operational performance.

Sustainability report

Sets out our approach to sustainability and our commitments to support and drive sustainable value creation.

Remuneration report (rewarding value creation)

Sets out the JSE's remuneration philosophy and policy, and how it was implemented in 2022.

Notice of AGM and proxy form

Sets out the notice of the JSE's AGM of shareholders to be held on 9 May 2023, together with the summarised report containing the required financial disclosures.

Disclaimer

Many of the statements in this report constitute forward-looking statements. These are not guarantees or predictions of future performance. The information on which forward-looking statements were based was not audited. Like all businesses, the JSE faces risks and other factors outside of its control. This may lead to outcomes unforeseen by the Group. These are not reflected in the report.

Readers are cautioned not to place undue reliance on forward-looking statements.

RESPONSIBILITY FOR FINANCIAL STATEMENTS

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

The preparation of these financial statements has been supervised by the Group chief financial officer, Fawzia Suliman, CA(SA), in terms of sections 29 and 30 of the Companies Act. The annual financial statements have been audited by Ernst & Young Inc. in compliance with the applicable requirements of the Companies Act.

F Suliman
Group Chief Financial Officer

JSE directors' responsibility statement
for the year ended 31 December 2022

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 2022, 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 (IFRS) 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 assessed 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 in the directors' responsibility statement, were approved by the Board of directors on 7 March 2023 and signed by:

P Nhleko
Chairman

L Fourie
Group Chief Executive Officer

Declaration by Group Chief Executive Officer and Group Chief Financial Officer
for the year ended 31 December 2022

The Group Chief Executive Officer and the Group Chief Financial Officer hereby confirm that:

(a) the consolidated and separate annual financial statements set out on pages 28 to 117 fairly present in all material respects the financial position, financial performance and cash flows of the JSE Limited in terms of IFRS;

(b) to the best of our knowledge and belief, no facts have been omitted or untrue statements made that would make the annual financial statements false or misleading;

(c) internal financial controls have been put in place to ensure that material information relating to JSE Limited and its consolidated subsidiaries have been provided to effectively prepare the financial statements;

(d) the internal financial controls are adequate and effective and can be relied upon in compiling the annual financial statements, having fulfilled our role and function as executive directors with primary responsibility for implementation and execution of controls;

(e) where we are not satisfied, we have disclosed to the audit committee and the auditors any deficiencies in design and operational effectiveness of the internal financial controls and have taken steps to remedy the deficiencies; and

(f) we are not aware of any fraud involving directors.

L Fourie
Group Chief Executive Officer

F Suliman
Group Chief Financial Officer

Declaration by Group Company Secretary
for the year ended 31 December 2022

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 Sector Conduct Authority. In terms of section 88 of the Companies Act, as amended, I declare that to the best of my knowledge the JSE has lodged with the Registrar of Companies all such returns as are required of a public company in terms of the Companies Act and that all such returns are true, correct and up to date.

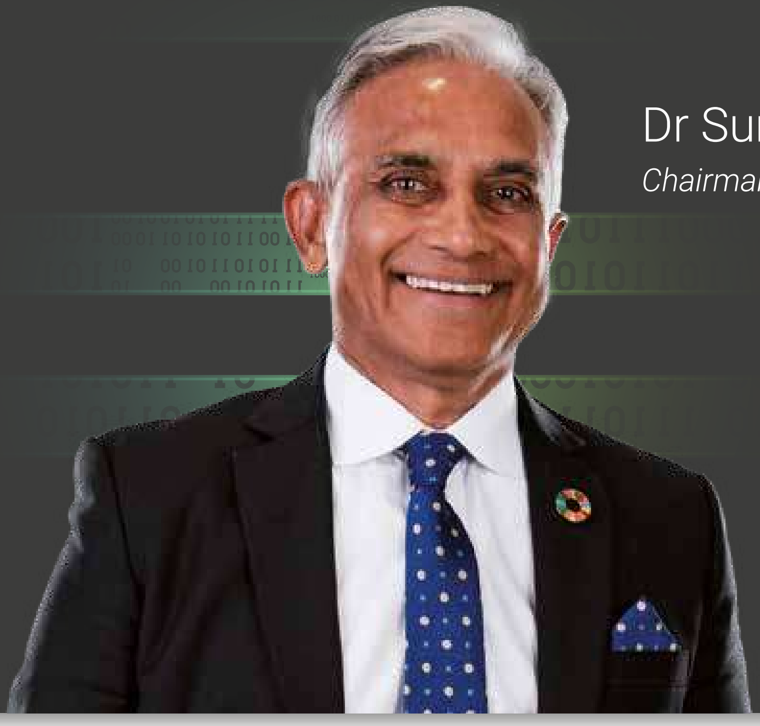
GA Brookes
Group Company Secretary

JSE GROUP STRUCTURE 2022

JSE Limited

- **Controlled and consolidated subsidiaries** — **100%**
  - JSE Clear Proprietary Limited
  - JSE Clear Derivatives Default Fund Proprietary Limited
  - JSE Trustees Proprietary Limited
  - JSE Private Placements Proprietary Limited
  - JSE Investor Services Proprietary Limited
    - 100% JSE Investor Services CSDP Proprietary Limited
      - 100% Pacific Custodians Nominees Proprietary Limited
- **Controlled and consolidated trusts** — **100%**
  - JSE Long-term Incentive Scheme 2010 Trust
  - JSE Long-term Incentive Scheme 2018 Trust
  - JSE Empowerment Fund Trust
- **Controlled and consolidated structured entities (JSE investor protection funds)** — **100%**
  - JSE Guarantee Fund Trust for the Equity Market
  - JSE Derivatives Fidelity Fund Trust for the Derivatives Market
  - JSE Debt Guarantee Fund Trust for the Interest rate Market
- **Equity-accounted investee** — **44.55%**
  - Strate Proprietary Limited
- **Discontinued operations controlled and consolidated subsidiaries** — **100%**
  - Nautilus MAP Holdings Proprietary Limited
- Structured entities not controlled by the Group
  - JSE Benevolent Fund *(JSE provides certain administration services)*

Group structure correct as at 31 December 2022.



Dr Suresh Kana

Chairman: Group Audit Committee

The Group Audit Committee seeks to promote a strong and transparent control environment throughout the JSE Group.

GROUP AUDIT COMMITTEE REPORT

The Group Audit Committee ("GAC") is pleased to present its report for the financial year ended 31 December 2022, in accordance with the provisions of the Companies Act, the JSE Listings Requirements, King IV™ and other applicable regulatory requirements.

GAC is a statutory committee constituted in terms of section 94(7) of the Companies Act. It serves as the audit committee for JSE Limited ("JSE" or "the Company") and all subsidiaries and structured entities within the Group, including JSE Clear Proprietary Limited ("JSEC"), JSE Investor Services Proprietary Limited ("JIS") and JSE Private Placements Proprietary Limited ("JPP").

GAC is an independent committee, accountable to both the Board and shareholders. It operates within a mandate approved by the Board and discharges its statutory duties and the delegated authority of the Board. GAC's terms of reference is reviewed annually and was most recently approved in November 2022.

GAC's primary objectives are to assist the Board in fulfilling its financial oversight responsibilities and to evaluate the adequacy and efficiency of accounting policies, internal controls, the audit process, the combined assurance arrangements, the financial reporting processes, and compliance with laws and regulations. GAC assesses the effectiveness of the internal auditors, and the independence and effectiveness of the external auditors. GAC recommends to shareholders the annual appointment of the external auditors and determines the fees to be paid to the external auditors.

This report outlines how GAC satisfied its various statutory obligations during the year and how the committee addressed the material matters within its remit.

COMPOSITION AND GOVERNANCE

Shareholders are required, on an annual basis at each annual general meeting ("AGM"), to approve the appointment of audit committee members in accordance with the provisions of the Companies Act. GAC is chaired by the JSE's lead independent director, and the Chairman of the Board is not a member of the committee, but attends by invitation only.

All members of the committee are independent non-executive directors of the Company and satisfy the requirements to serve as members of an audit committee, as provided in section 94 of the Companies Act and the King IV Code of Corporate Governance.

The composition of GAC and the attendance of meetings by its members during the 2022 financial year are set out below:

Members	Date appointed to committee	Attendance 2022 Feb	Feb	Jul	Nov	Regular invitees
Dr SP Kana (GAC chairman) *CA(SA); CD(SA); MCom; PhD (Honorary)*	**First appointed** 1 July 2015 **Recent appointment at AGM held on** 3 May 2022 **Vote in favour:** 99.9%	✓	✓	✓	✓	• P Nhleko (Chairman of the Board) (independent non-executive director) • L Fourie (Group CEO) • C Kander (Acting CFO) • G Brookes (Director: Governance and Assurance) • Representative of the Financial Sector Conduct Authority (FSCA) • Group internal audit • External auditors
		100% 4/4 meetings				
Ms ZBM Bassa *BAcc; DipAcc; CA(SA)*	**First appointed** 1 November 2018 **Recent appointment at AGM held on** 3 May 2022 **Vote in favour:** 95.7%	✓	✓	✓	✓	
		100% 4/4 meetings				
Ms MS Cleary *BA LLB; MA; MBA; MSc;* *Fellowship: Yale World Programme*	**First appointed** 6 August 2020 **Resigned at AGM held on** 3 May 2022	✓	✓	–	–	
		100% 2/2 meetings				
Ms FN Khanyile *BA (Hons); MBA; HDip Tax; PhD (Honorary)*	**First appointed** 1 November 2018 **Recent appointment at AGM held on** 3 May 2022 **Vote in favour:** 99.9%	✓	✓	✓	✓	
		100% 4/4 meetings				

Independence of Group Audit Committee: 100%

The collective skills of the committee include an understanding of financial and sustainability reporting, internal financial controls, the internal audit function, the external audit process, corporate law, risk management, information technology (IT) governance as it relates to integrated reporting, and the governance processes of the Company. However, it is not expected that each committee member should possess all the required qualifications, skills and experience.

GAC has the right to obtain independent outside professional advice to assist with the execution of its duties, at the Company's expense. During the year the committee did not engage any special advisors or take outside professional advice on any matter. 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 Board is satisfied that for 2022:

- the committee, acting as a collective, was adequately skilled to perform its role having regard to the size, circumstances and complexity of the Company;
- individual members of the committee held appropriate financial and related qualifications, technical skills, financial expertise and experience to discharge their responsibilities; and
- individual members of the committee were not involved in day-to-day management of the Company.

Meetings and regulatory engagements

Committee meetings – GAC convened for four scheduled meetings in 2022 in line with the Group's financial reporting cycle. These scheduled meetings included separate sessions where GAC convened as the audit committee for all group entities. The committee also held one ad hoc meeting in June 2022 to review and approve a trading statement (released on SENS on 29 June 2022) in advance of the publication of the interim results during August 2022.

Management engagements – The GAC Chairman engages regularly throughout the year with JSE executive management to discuss relevant financial and accounting matters directly.

Management changes in 2022 – Ms Aarti Takoordeen resigned as CFO and executive director of the JSE, effective 20 May 2022. GAC proposed that Ms Carmini Kander (Head: Commercial Finance) serve as Acting CFO in her place, and the Board accepted this recommendation. Ms Kander served as Acting CFO from 20 May 2022 until the appointment Ms Fawzia Suliman as Group CFO effective 9 January 2023. The role of Acting CFO did not encompass the responsibilities of executive director or prescribed officer, and Ms Kander was therefore not appointed to the JSE Board during her term of service as Acting CFO.

Auditor engagements – The GAC Chairman meets separately with the chief internal audit executive and with the designated external audit partner for three scheduled formal discussions during each year, for briefings on internal and external audit matters. Ad hoc meetings are arranged when required. The chief internal audit executive and the designated external audit partner also have direct access to the full committee, including closed sessions held during the year without management present.

Regulatory engagements – Representatives of the Financial Services Conduct Authority (FSCA) attend meetings of the committee. During 2022 one trilateral engagement was held with the Prudential Authority, attended by the GAC chairman, the chief internal audit executive and the external audit engagement partner. The Prudential Authority also met separately with the Group internal audit leadership and with the external audit engagement partner as part of the Prudential Authority's supervisory programme for 2022.

Annual general meeting – The GAC chairman attends annual general meetings and is available to answer any questions in relation to matters pertaining to the responsibilities of the committee.

Appointment of Group Audit Committee members

For the twelve months ended 3 May 2022, GAC compromised four members.

Ms MS Cleary completed her term of service at the AGM in May 2022 and retired as a committee member effective 3 May 2022.

For the twelve months commencing May 2022, the Board nominated three independent non-executive directors to serve on GAC for the ensuing year based on a formal recommendation by the Group Nominations and Governance Committee. These appointments were approved by shareholders at the AGM held on 3 May 2022.

For the twelve months commencing May 2023, the Board has nominated three independent non-executive directors to serve on GAC for the ensuing year based on a formal recommendation by the Group Nominations and Governance Committee. These appointments are to be considered by shareholders at the AGM to be held on Tuesday, 9 May 2023:

- Dr SP Kana (Lead independent director, and chairman of Group Audit Committee)
- ZBM Bassa (independent non-executive director)
- FN Khanyile (independent non-executive director)

The Board is satisfied that the proposed appointment to the Group Audit Committee of the three independent non-executive directors set out above will meet the requirements of the Companies Act and is therefore recommending their appointment for the ensuing year.

The election of members of the Group Audit Committee at the AGM to be held on Tuesday, 9 May 2023 will take place by way of separate resolutions to be considered by shareholders. The text of these ordinary resolutions is set out in the Notice of AGM to be distributed separately to shareholders and to be published on 30 March 2023 https://www.jse.co.za/investor-relations/results.

Areas of focus by the committee

Within the context of the Company's material matters and key financial risks, the committee focused its attention on the following key areas during the year:

Financial reporting, accounting and tax	Reviewed the full year results for 2021 and the interim results for 2022 and recommended these for approval and publication by the Board
Control management framework (internal controls)	Oversight over the plan implemented by the Acting CFO to improve the quality and robustness of the internal financial controls for financial reporting
Subsidiary oversight	*JSE Clear (Pty) Ltd (JSEC)* • Oversight over the transition of JSE Clear into an Independent Clearing House, especially with respect to the accounting and tax implications • Considered and endorsed a proposal for additional capitalisation of JSEC required to ensure that it will continue to meet regulatory capital requirements once it operates as an ICH *JSE Private Placements (Pty) Ltd (JPP)* • Considered and endorsed a proposal for additional capitalisation of JPP, by way of additional share capital, to sufficiently provide for solvency requirements and the operational needs of the business
Governance functional matters	• Oversaw and managed external audit partner transition for 2022/2023 in accordance with IRBA requirements and the JSE's external auditor rotation policy • Approved a proposal to amend the JSE's internal policy on closed periods to align with the requirements stipulated in the JSE Listings Requirements • Approved a proposal to shift oversight of all Own Fund investment strategies and of the Investor Protection Funds to the Group Investment Committee
Financial oversight, regulatory capital and budget matters	• Approved the operating budget for 2023 and the investment envelope for 2023

Discharge of duties in 2022

During the financial year, in the execution of its statutory duties and in accordance with its terms of reference, the committee effectively discharged the following responsibilities:

Financial reporting, accounting, tax and dividend matters
(2021: 35%)
30%

Financial oversight, regulatory capital and budget matters
(2021: 12%)
11%

Control management framework (internal financial controls)
(2021: 7%)
9%

Subsidiary oversight
(2021: 10%)
15%

External audit matters
(2021: 14%)
18%

Internal audit matters
(2021: 10%)
12%

Investment performance oversight
(2021: 7%)
0%

Governance functional matters
(2021: 5%)
5%

Finance function

Reviewed the expertise, resources and experience of the finance function

The performance, effectiveness and resourcing of the Company's finance function and that of the Acting CFO were assessed as part of the annual Board and Board Committee effectiveness review for the year ended December 2022.

In accordance with the JSE Listings Requirements, the committee considered the results of the effectiveness review and satisfied itself that Ms C Kander, CA(SA), being the Acting CFO in 2022, had the appropriate expertise and experience to meet the responsibilities of her appointed position. The committee similarly satisfied itself regarding the effectiveness of the finance function and the adequacy of the resources employed therein.

In evaluating the finance function, the committee considered and noted that:

- management of the finance function demonstrated a commitment to character and competence;
- the organisational structure of the finance function was appropriately designed, and the finance function assigned authority and responsibility in a manner that promoted accountability and control;
- appropriate and necessary information was obtained from and provided to management;
- the finance function's management philosophy and operating style were consistent with a sound control environment; and
- the finance function had properly applied accounting principles in the preparation of the financial statements, and the Group's financial reporting procedures were considered to be effective and reliable.

Subsequent to the year under review and prior to the release of the audited consolidated annual financial statements, Ms Fawzia Suliman CA(SA) was appointed as the permanent Group CFO, and also serves as executive director.

Evaluated financial reporting and accounting practices

The committee reviewed the integrity of the audited annual consolidated financial statements for the year ended 31 December 2021, the interim results for the six months ended 30 June 2022, and the audited annual consolidated financial statements for the year ended 31 December 2022, including the public announcements of the Group's financial results, and made recommendations to the Board for their approval.

In the course of its review, the committee:

- took steps to ensure that the financial statements were prepared in accordance with IFRS and in compliance with the provisions of the Companies Act and the Listings Requirements and recommended the interim and annual financial statements to the Board for approval;
- considered the appropriateness of the key audit matters reported in the external audit opinion;
- considered the appropriateness of significant accounting policies, key estimates, assumptions and disclosures made;
- completed a detailed review of the going concern status of the Group for the year ended 31 December 2022 and concluded that the Group is a going concern and that the consolidated annual financial statements for the year then ended have been prepared, in accordance with the going concern concept;
- reviewed the solvency and liquidity tests and recommended the proposed dividend for 2021 for approval by the Board;
- considered and noted the general proactive monitoring report issued by the JSE Issuer Regulation division in conjunction with FSCA for the year ended 31 December 2021, and noted that the proactive monitoring report did not reflect any material matters of concern affecting the Group's financial statements; and
- reviewed the dividend policy for the year ended 31 December 2022, retaining the dividend cover ratio without any change (1.5x – 1x earnings) and re-affirmed the aim of growing the nominal value of the ordinary dividend over time, subject to affordability and taking into account the regulatory capital and investment requirements of the Group, including possible acquisitions.

External audit matters

GAC is responsible for recommending on an annual basis to shareholders the appointment of the external auditors for the Group. The committee is also responsible for approving the compensation for the external auditors and for exercising oversight of their work.

At its meeting held in February 2022, GAC assessed the suitability of Ernst & Young Inc ("EY") for appointment as the company's independent external auditors for the 2022 financial year, in accordance with paragraphs 3.84(g)(iii) and 22.15(h) of the Listings Requirements. The committee also assessed Mr Imraan Akoodie of EY for appointment as the designated individual auditor.

GAC confirmed the suitability of EY and of Mr Akoodie for appointment as the Group's independent external auditor and designated individual auditor, respectively, and these recommendations were approved by shareholders at the AGM held on 3 May 2022.

Subsequent to the period under review, at its meeting held in February 2023, GAC assessed the suitability of EY for continued appointment as the company's independent external auditors for the 2023 financial year, in accordance with paragraphs 3.84(g)(iii) and 22.15(h) of the Listings Requirements.

The committee noted that Mr Akoodie had served for the prescribed period of five years as the designated individual auditor on the JSE external audit assignment and would rotate off the assignment effective May 2023. The committee assessed the credentials of Mr Kuben Moodley for appointment as the new EY audit engagement partner effective from May 2023.

GAC confirmed the suitability of EY and of Mr Moodley for appointment as the Group's independent external auditor and designated individual auditor, respectively, and these recommendations will be tabled for shareholder consideration and approval at the AGM to be held on 9 May 2023.

External audit independence, objectivity and effectiveness during the 2022 financial year

Evaluation

The committee formally assessed the effectiveness of the 2022 external audit process and quality of the audit. The assessment covered all aspects of the audit service provided by EY. The evaluation focused on:

- robustness of the audit process;
- audit quality, including quality controls and indicators;
- appropriateness of the audit partner and the dedicated team, including their skills, knowledge and character;
- independence and objectivity; and
- formal reporting.

Key inputs

During the period, the committee:

- monitored audit performance, independence and objectivity throughout the year;
- approved the proposed audit fee of R7.8 million (2021: R6.8 million) and terms of engagement for the 2022 financial year. The committee agreed to rebase the audit fee to take account of the increasing size and complexity of the Group and the increasing scope of the external audit work;
- monitored adherence to the Group's audit and non-audit services policy and the extent of non-audit services. The committee confirmed that EY did not provide any non-audit services, as defined, to the JSE during 2022;
- reviewed and approved the external audit plan and related scope of work;
- reviewed the quality of reporting to the committee, the level of challenge and professional scepticism, and understanding demonstrated by EY of the business of the Group;
- reviewed the quality of the audit team, technical skills and experience, and the allocation of resources during the audit, and with input from the Acting CFO concluded that the services were of the appropriate standard;
- held regular meetings with the audit engagement partner;
- considered the effectiveness of the company's policies and procedures for maintaining auditor independence; and
- confirmed that no reportable irregularities were identified and reported by EY in terms of the Auditing Profession Act, 26 of 2005.

Key outputs

- The quality of the audit partner and the team were confirmed, with no material issues raised in the feedback received.
- EY demonstrated a good understanding of the Group and had identified and focused on the areas of greatest risk.
- EY's reporting to the committee was clear, transparent and thorough, and included explanations of the rationale behind particular conclusions as appropriate.
- The audit had been well-planned and delivered, and management were comfortable that key findings had been raised appropriately.
- There had been active engagement on misstatements and appropriate judgements on materiality.
- It was confirmed that there had been an appropriate level of challenge and that EY had functioned in accordance with their mandate for the 2022 financial year.

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 the misstatement of financial performance. GAC bears ultimate responsibility to ensure that the implemented systems of internal control are suitably designed and operating effectively to address the inherent risks to which the JSE is exposed.

During the year the committee reviewed and approved the internal audit charter and internal audit plan for the financial year ended 31 December 2022, ensuring that material risk areas were included, and that coverage of significant business processes was acceptable. PricewaterhouseCoopers (PwC) is contracted to assist the internal audit function and provides additional specialised resources and expertise to support Group internal audit in carrying out its duties and to ensure the required degree of independence.

Furthermore, the committee oversaw and monitored the internal audit function by:

- objectively assuring the effectiveness of risk management, governance, and internal control frameworks;
- analysing and assessing business processes and associated controls; and
- ensuring that the internal audit function reported significant audit findings and recommendations to management and the committee.

Internal financial controls

The committee reviewed the reports of both the internal and external auditors in respect of audits conducted on the internal control environment, took note of any matters arising from these audits, and considered the appropriateness of the responses received from management.

The Group has appropriate financial reporting procedures and is satisfied that these procedures are operating adequately. This is supported by internal controls effectively maintained at a robust standard, translating into accurate financial and related information presented to stakeholders in integrated reports.

Furthermore, the committee:

- fulfilled an oversight function regarding tax governance, receiving regular feedback from management on both tax compliance and tax risk matters of the Group, and is satisfied that no material non-compliance has occurred; and
- considered and, where appropriate, made recommendations on internal financial controls.

The committee was not required to deal with any complaints relating to accounting practices or internal audit, nor to the content or audit of the financial statements, nor internal financial controls or related matters.

The performance of the committee is reviewed annually as part of the effectiveness review of the Board and its committees. The latest review concluded that the committee continued to operate effectively and had successfully discharged its duties and responsibilities in 2022.

Dr SP Kana
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 in the integrated annual report available at https://www.jse.co.za/investor-relations/results.

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

Regulatory and supervisory structure

The JSE is subject to supervisory oversight by the Financial Services Conduct Authority (FSCA) and the Prudential Authority (PA) of the South African Reserve Bank in accordance with the "twin peaks" model of regulation for financial markets in South Africa.

FSCA is responsible for supervising the JSE's listing and regulates its ongoing compliance with the 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.

The PA is responsible for the prudential regulation of the JSE and of JSE Clear and undertakes an annual programme of onsite supervisory engagements with the Board, relevant Board committees and executive officers.

To mitigate the possibility of any potential conflict of interest between the JSE's commercial operations and its role as a front-line regulator of markets, the Group Self-Regulatory Organisation Oversight Committee (Group SRO Oversight Committee) was established in 2011 as a standing committee of the Board. This committee has an independent role, providing oversight of the JSE's Issuer Regulation and Market Regulation functions. The Group 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 consider the requirements of the Financial Markets Act, 2012 (Financial Markets Act) and to report to the FSCA where required.

Corporate governance

The governance report forms part of the integrated annual report which can be obtained online at https://www.jse.co.za/investor-relations/results as from the date of release on 30 March 2023.

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 statement of comprehensive income, statement of changes in equity, statement of cash flows and notes thereto.

The CFO's review is available in the integrated annual report available online at https://www.jse.co.za/investor-relations/results.

It should be noted that the JSE maintains the JSE Guarantee Fund Trust, the JSE Debt Guarantee Fund Trust (previously 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 consolidates them into the results of the Group in terms of IFRS.

Operating subsidiaries

JSE Clear (Pty) Limited

JSE Clear (Pty) Limited (JSEC or JSE Clear) is a wholly owned subsidiary of JSE Limited and originally licensed as an associated clearing house in terms of the provisions of the Financial Markets Act and subject to an annual review conducted by the FSCA. On 1 September 2022, JSE Clear was granted a licence to operate as an Independent Clearing House (ICH) by FSCA. It commenced operations as an ICH on 1 January 2023 after the JSEC rules and the consequential changes to the JSE rules were approved by FSCA.

JSE Clear is deemed a qualifying CCP by FSCA in terms of the Principles for Financial Market Infrastructures issued by global regulators (CPSS-IOSCO) and is adequately capitalised.

JSE Investor Services (Pty) Limited

JSE Investor Services (Pty) Limited ("JIS") is a wholly owned subsidiary of JSE Limited and is an approved Central Securities Depository Participant (CSDP) for Equities in terms of the provisions of the Financial Markets Act, and subject to annual review conducted by FSCA. JSE Investor Services primarily offers transfer secretarial and registry services, including registry maintenance, treasury services, and corporate actions. JIS's service offering also includes the administration of share plans.

JSE Private Placements (Pty) Limited

JSE Private Placements (Pty) Limited ("JPP") is a wholly owned subsidiary of JSE Limited that operates a private placements platform to address the needs of companies that seek to raise capital but wish to remain private. The platform operated by JPP is supplied by Globacap Technology, a leading UK-based fintech, in which the JSE has a minority investment. This streamlined capital raising process is intended to facilitate the growth of private companies in South Africa and across the rest of the continent.

JSE Clear Derivatives Default Fund (Pty) Limited

JSE Clear operates as an ICH and central counterparty by interposing itself between parties to derivative contracts listed on the JSE.

The clearing functions of JSE Clear are supported by JSE Clear Derivatives Default (Pty) Limited ("JSE Clear DDF"), which is intended to limit 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.

JSE Clear DDF is a legal entity separate from JSE Clear, and holds contributions from clearing members and the JSE, which may be used only in the event of a clearing member default. The JSE contributes R100 million to this Fund.

Subsequent to the year under review and prior to the release of the audited consolidated annual financial statements, the shareholding in JSEC DDF was switched from JSE to JSE Clear, with JSEC DDF now being a wholly owned subsidiary of JSE Clear as required by its ICH licensing conditions.

Authorised users of the JSE (members of the JSE)

As at 31 December 2022, there were 227 authorised users (2021: 242), categorised as follows:

Category of members	**2022**	2021
Equity members	**45**	48
Equity Derivatives members	**56**	67
Commodities Derivatives members	**48**	48
Interest Rate and Currency Derivatives members	**71**	72
Clearing members	**7**	7
Total	**227**	242

The decline in the number of authorised users arises primarily from rationalisation among large equity and derivatives 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 on page 80.

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' interests and shareholding
As at 31 December 2022

Director	Status of director	Direct beneficial Share register (own name)	LTIS 2018 Trust and other: Unvested[1]	**2022 Total**	% of issued share capital	2021 Total
L Fourie (CEO)[1]	Executive	12 000	333 504	**345 504**	0.397	230 914
MS Cleary	Independent non-executive	5 650		**5 650**	0.006	5 650
BJ Kruger	Independent non-executive	2 500		**2 500**	0.003	2 500
NMC Nyembezi	Independent non-executive *Resigned May 2022*	2 050		**2 050**	0.002	2 050
A Takoordeen (CFO)[1]	Executive *Resigned May 2022*	27 410	57 481[2]	**27 410**	0.031	109 926
Total		49 610	390 985	**383 114**		351 040
GA Brookes (Group Company Secretary)[1]		25 189	40 512	**68 701**	0.079	57 650

There has been no change in directors' interest from the end of the financial year until the approval of the JSE annual results and release thereof on SENS on 8 March 2023. All shareholdings are direct beneficial, and there are no indirect beneficial or associate interests, and no shareholdings are encumbered.

Details of transactions in JSE Limited shares by directors and prescribed officers were disclosed on SENS during 2022 and are summarised in the table below. For the executive directors, the prescribed officers, and the Group Company Secretary, the purchases are in relation to the grant of shares under allocation 5 of the LTIS 2018 scheme.

Name	Status	Number of ordinary shares awarded	Value of transaction Rands	Number of LTIS 2018 shares sold	Value of transaction Rands
L Fourie	CEO & executive director	114 590	13 018 668		
A Greenwood	Prescribed Officer	54 720	6 158 702	1 883	211 957
V Lee	Prescribed Officer	22 500	2 573 856		
I Monale	Prescribed Officer	26 130	2 989 105		
P Ntoagae	Prescribed Officer	16 750	1 916 093		
M Randall	Prescribed Officer	25 420	2 907 885	1 474	165 919
V Reddy	Prescribed Officer	56 200	6 316 782		
G Brookes	Group company secretary	13 160	1 505 420		

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

1 These directors and officers participate in the LTIS 2018 scheme.
2 Unvested shares in the LTIS 2018 scheme forfeited upon resignation.

Shareholders other than directors

Information on shareholders is set out in the tables below and in the integrated annual report available online at https://www.jse.co.za/investor-relations/results.

Major shareholders

Pursuant to the Companies Act, the following beneficial shareholdings equal to or exceeding 4% as at 31 December 2022 were disclosed or established from enquiries:

Names	% of total issued ordinary shares	Number of ordinary shares held
Ninety One SA Pty Limited	13.72	11 919 348
Public Investment Corporation (SOC) Limited	13.30	11 550 345
PSG Asset Management (Pty) Limited	9.24	8 026 708
Allan Gray Proprietary Limited	8.01	6 960 878
Goldman Sachs Asset Management, L.P.	5.84	5 071 821

Fund managers

The directors have ascertained that some of the shares registered in the names of nominee holders are managed by various fund managers. At 31 December 2022, the following fund managers were responsible for managing investments of 2.5% or more of the issued share capital of the JSE:

Names	% of total issued	ordinary shares held
Ninety One SA Pty Limited	13.72	11 919 348
Public Investment Corporation (SOC) Limited	13.30	11 550 345
PSG Asset Management (Pty) Limited	9.24	8 026 708
Allan Gray Proprietary Limited	8.01	6 960 878
Goldman Sachs Asset Management International	5.84	5 071 821
The Vanguard Group, Inc.	3.62	3 144 356
JPMorgan Chase & Co	2.77	2 405 302
Sasol	2.54	2 210 907

Dividend policy

In considering the payment of dividends, the Board, assisted by the Group Audit Committee, takes all the following into account:

- Current financial results of the Company.
- Solvency and liquidity, as per the test set out in the Companies Act.
- Future funding and investment needs.
- Regulatory capital requirements of the Company.

The Group Audit Committee reviews the dividend policy of the Company annually and makes recommendations on any amendments to the policy from time to time.

For 2022 the Board reviewed the recommendation of the Group Audit Committee in respect of the Company's dividend policy, and:

- Adjusted the JSE's dividend policy to reflect a more appropriate balance between cash returns to shareholders and reinvestment into the business.
- As such, the updated policy no longer reflects a commitment to progressively growing the nominal value of the ordinary dividend.
- The JSE will maintain a pay-out ratio of between 67%-100% of earnings in respect of the annual ordinary dividend.

The Board is confident that the updated dividend policy is congruent with the Group's growth strategy over the medium term.

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 2022 were funded from own resources.

Declaration of ordinary cash dividend

The Board has declared an ordinary cash dividend for the year ended 31 December 2022, as follows:

Dividend	Annual gross amount per share	Withholding tax %	Net amount per share
Ordinary	769 cents	20%	615.20000 cents

The JSE's practice has been to return distributable cash to shareholders after ring-fencing cash for regulatory capital requirements and investments (both capital expenditure and inorganic opportunities) as well as working capital.

The ordinary dividend of 769 cents per share represents a 2% increase on the 754 cents per share paid in 2021. The ordinary cash 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 JSE at close of business on Friday, 31 March 2023. In compliance with the Companies Act, 71 of 2008 (as amended) (the Companies Act), the directors confirm that the JSE 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 cash dividends are applicable:

Dividend paid in year in respect of financial year ended	**31 December 2022**	31 December 2021
Ordinary dividend per share	**769 cents**	754 cents
Total rand value	**R668 million**	R741 million
Declaration date	**Wednesday, 8 March 2023**	Monday, 28 February 2022
Last date to trade JSE shares cum dividend	**Tuesday, 28 March 2023**	Tuesday, 22 March 2022
JSE shares commence trading ex-dividend	**Wednesday, 29 March 2023**	Wednesday, 23 March 2022
Record date for purposes of determining the registered holders of JSE shares to participate in the dividend at close of business on	**Friday, 31 March 2023**	Friday, 25 March 2022
Dividend payment date	**Monday, 3 April 2023**	Monday, 28 March 2022

Share certificates may not be dematerialised or rematerialised from Wednesday, 29 March 2023 to Friday, 31 March 2023, both days inclusive. On Monday, 3 April 2023, the dividend will be electronically transferred to the bank accounts of certificated shareholders. 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 Monday, 3 April 2023.

The issued share capital of the JSE as at the declaration date was 86 877 600 ordinary shares.

The tax number of the JSE is 9313008840.

Service contracts with directors

The Group CEO, all executive directors, the Group Company Secretary and the executive management of the JSE have signed contracts of employment with the JSE. All such contracts have a three-month notice period for resignation or termination of employment except for the CEO whose notice period is six months. The CEO's service contract makes provision for a 12-month restraint of trade on termination of the CEO's employment, which may be enforced at the election of the Company. 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.

Resolutions passed at the AGM held on 3 May 2022

The following resolutions were adopted by shareholders in 2022:

	Resolutions	% vote in favour
1.1	To elect Mr Phuthuma Nhleko as a director	**96.62%**
2.1	To re-elect Dr Suresh Kana as a director	**99.80%**
2.2	To re-elect Ms Faith Khanyile as a director	**99.87%**
2.3	To re-elect Ms Zarina Bassa as a director	**95.39%**
2.4	To re-elect Mr Ben Kruger as a director	**99.55%**
3.	To re-elect Dr Mantsika Matooane as a director	**99.02%**
4.	To reappoint Ernst & Young Inc. as the independent auditors of the Company for the ensuing year and Mr I Akoodie as the designated auditor for the ensuing year	**99.81%**
5.1	To reappoint Dr S Kana to serve as a member and chairman of the Group Audit Committee	**99.99%**
5.2	To reappoint Ms F Khanyile to serve as a member of the Group Audit Committee	**99.90%**
5.3	To reappoint Ms Z Bassa to serve as a member of the Group Audit Committee	**95.65%**
6.	Authorisation for a director or Group company secretary of the Company to implement resolutions	**99.99%**
7.	Non-binding advisory vote on the remuneration policy of the Company	**89.67%**
8.	Non-binding advisory resolution 1: Non-binding advisory vote on the remuneration policy as set out in the remuneration report of the Company	**87.30%**
9.	Non-binding advisory resolution 2: Non-binding advisory vote on the implementation report as set out in the remuneration report of the Company	**86.25%**
10.	Special Resolution 1: General authority to repurchase shares	**96.79%**
11.	Special Resolution 2: General authority to provide financial assistance to subsidiaries in terms of sections 44 and 45 of the Companies Act	**99.27%**
12.	Special resolution number 3: Specific authority to provide financial assistance solely for the LTIS 2018 scheme	**99.43%**
13.	Special Resolution 4: Non-executive directors' emoluments for 2021	**88.07%**

Re-election of directors

Triennial rotation

The following directors are required to retire, and being eligible, are standing for re-election by shareholders for a further term:

- L Fourie (executive director).
- MS Cleary (independent non-executive director).

Retiring in terms of the Company's policy on non-executive director tenure

- MA Matooane will retire as an independent non-executive director at the next AGM to be held on 9 May 2023, having served for a consecutive term of ten years on the Board.

First election as director

- F Suliman (Group CFO and executive director) will stand for election by shareholders at the AGM to be held on 9 May 2023, as required by the MOI, following her appointment to the Board on 9 January 2023.

Changes to the Board during the reporting period

The following changes, as previously announced, took effect during the period under review:

At the AGM held on 3 May 2022:

- Ms Nonkululeko Nyembezi retired as a director and as Chairman of the Board, in accordance with the JSE's policy on non-executive director tenure, having served the maximum 12-year term.
- Mr Phuthuma Nhleko, who joined the Board as an independent non-executive director on 1 July 2021, assumed the Chairmanship of the Board as part of the Board's planned succession process.
- Ms Siobhan Cleary, independent non-executive director, completed her term of service as a member of the Group Audit Committee and retired as a committee member. She continues to serve as a member of the Group Sustainability and Group SRO Oversight committees of the Board.
- Dr Mantsika Matooane, independent non-executive director, stepped down as Chairman of the Group Risk Management Committee as part of a planned succession process. She continues to serve as a member of the Group Risk Management and Group Sustainability committees of the Board.
- Mr Ian Kirk, independent non-executive director, assumed the Chairmanship of the Group Risk Management Committee of the Board.

On 20 May 2022:

- Ms Aarti Takoordeen, Chief Financial Officer (CFO) of JSE Limited, resigned as CFO and executive director.
- Upon the recommendation of the Group Audit Committee, the Board appointed Ms Carmini Kander as Acting CFO, effective 20 May 2022. This role did not encompass the responsibilities of executive director or prescribed officer. The JSE received (from the Financial Sector Conduct Authority) the required exemption from the requirements under paragraph 3.84(f) of the JSE Listings Requirements to appoint a permanent executive director as CFO for the duration of the executive search process.

On 5 August 2022:

- Ms Nolitha Fakude, independent non-executive director, stepped down as a member of the Group Sustainability Committee. She continues to serve as chairman of the Group Remuneration Committee.

Subsequent to the period under review, and as previously announced:

- Ms Fawzia Suliman was appointed as Group CFO and as executive director effective 9 January 2023. Ms Suliman leads the finance function of the Group, which also includes the Group strategy and M&A portfolios, and she serves as a member of the Group Executive Committee. Ms Suliman will stand for election as a director at the AGM to be held on 9 May 2023.

State of affairs at the Company – material matters

Material matters are those matters that substantially affect the organisation's ability to create value over the short, medium and long term. Our material matters and the process for determining materiality are disclosed in our integrated annual report. In 2022 we determine the following material matters:

1. Attractiveness of the JSE as a capital raising and investment platform;
2. Level of trading activity;
3. Operational availability and stability;
4. Enabling technology to provide innovative solutions;
5. Attractiveness of the JSE as an employer;
6. Robust clearing and settlement for all transactions; and
7. Competition and disruptors.

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 a 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 2022.

Events after the reporting date

Strate Proprietary Limited, an associate of the JSE Group, acquired a 100% stake in Trustlink Proprietary Limited, a swift bureau business, effective 1 January 2023. The transaction did not impact JSE's effective holding of 44.5% and the classification of the investment as an associate. The estimate of the financial effect for this transaction cannot be made as yet.

There have been no other 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 2022 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 and its subsidiaries ("the group") and company set out on pages 28 to 117 which comprise the consolidated and separate statements of financial position as at 31 December 2022, and the consolidated and separate statements of comprehensive income, the consolidated and separate statements of changes in equity and the consolidated and separate statements of cash flows for the year then ended, and notes to the consolidated and separate 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 group and company as at 31 December 2022, and its consolidated and separate financial performance and 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 of the group and company and 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 of the group and company and in South Africa. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards). 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 judgment, were of most significance to 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated and separate financial statements. The results of our audit procedures, including the procedures performed to address the matter below, provide the basis for our audit opinion on the accompanying consolidated and separate financial statements.

The Key Audit Matter applies equally to the audit of the Consolidated and Separate Financial Statements.

Key Audit Matter	

Fair value of Other Investments
 	
The acquisition of a minority stake interest for R82 million (13% of Other Investments) in the unlisted entity GlobaCap Technology Ltd (GlobaCap) has been classified as an Investment at Fair Value through Other Comprehensive Income. As the most significant assumptions in determining fair value are unobservable, the determination of the fair value of the JSE's investment at the reporting date is subject to significant management judgement.
 	
The key areas of judgement include:
• The selection of appropriate valuation models and techniques to estimate the fair value, given the start-up nature of the underlying GlobaCap business.
• Estimating reasonable and supportable forecasts of expected future performance.
• Determining valuation model inputs which are unobservable as the investee is a start-up business with limited history.
• The weighted probability to be applied at 31 December 2022 to the successful conclusion of a funding raise that was in progress by GlobaCap.
 	
Accordingly, due to the significant judgement involving unobservable inputs and the significant value of the investment, the above audit matter is considered a key audit matter.
 	
Refer to note 29 – fair value estimation for further details.
	We performed the following procedures, amongst others:
	• We obtained an understanding of management's internal controls and assessment process over the valuation of financial investments measured at fair value.
	• We assessed the inherent risk of material misstatement by considering the inherent risk factors such as the degree of estimation uncertainty, the complexity of valuation techniques and models, the subjectivity of management's judgements and assumptions in selecting valuation techniques, models and inputs and susceptibility to management bias.
	
	With the support of our internal valuation specialists, we performed the following procedures amongst others:
	• Benchmarked the Group's valuation model against common market approaches, taking into consideration the investment characteristics and industry practice;
	• Developed an independent valuation range through an independent model, using externally and internally sourced unobservable inputs and applying probabilities to possible outcomes.
	• Compared the independent valuation range to management's estimate and investigated the differences between our estimate and that of management.
	• Inspected draft transaction documents at 31 December 2022 relating to the funding raise obtained directly from GlobaCap. Including but not limited to a draft term sheet.
	• We engaged directly with the Executive Management of GlobaCap and obtained written representations from the Executive Management regarding:
	  o The existence of a strategic investor and draft term sheet at 31 December 2022;
	  o The accuracy and completeness of the draft transaction documents including but not limited to the draft term sheet.
	  o That appropriate internal approvals from the strategic investor has been obtained to proceed with the round of funding subject to terms and conditions; and
	  o GlobaCap's historical results and confirming that these have been extracted from the accounting records of GlobaCap.
	• Performed a sensitivity analysis over the valuation taking into account a range of outcomes;
	• Obtained written representation from JSE Executive Management supporting the significant assumptions applied in the valuation; and
	• Evaluated the presentation and disclosures relating to the fair value estimation in the annual financial statements and assessed the appropriateness thereof in terms of the requirements of IFRS 7 and IFRS 13 – *Fair Value Measurement*.

Other information

The directors are responsible for the other information. The other information comprises of the information included in the 120 page document titled "JSE Limited Consolidated Annual Financial Statements for the year ended 31 December 2022", which includes the Responsibility For Financial Statements, JSE Group Structure, the Group Audit Committee Report, the Directors' Report, the Corporate Information and directorate as required by the Companies Act of South Africa, which we obtained prior to the date of this report, and the Annual Integrated Report which is expected to be made available to us after that date. The other information does not include the consolidated or the 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 on the other information obtained prior to the date of this auditor's report, 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 due to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the group 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 the company or to cease operations, or have no realistic alternative but to do so.

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 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 and 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 and 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 and separate 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, actions taken to eliminate threats or safeguards applied.

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 when, 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 the Government Gazette Number 39475 dated 4 December 2015, we report that Ernst & Young Inc. has been the auditor of JSE Limited for six years.

Ernst & Young Inc.

Ernst & Young Inc.
Director – Imraan Akoodie CA (SA)
Registered Auditor
7 March 2023
102 Rivonia Road
Sandton
2146

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2022

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Revenue	6.1	**2 649 979**	2 517 467	**2 533 600**	2 440 864
Other income	6.2	**54 167**	58 755	**87 672**	99 219
Personnel expenses	7.1	**(692 697)**	(649 896)	**(603 045)**	(593 707)
Other expenses	7.2	**(1 213 036)**	(1 126 086)	**(1 082 134)**	(1 021 216)
Expected credit loss (ECL) impairments		**(5 936)**	(2 526)	**(6 098)**	(2 626)
Profit from operating activities before net finance income		**792 477**	797 714	**929 995**	922 535
Finance income	7.3	**3 391 561**	1 996 538	**133 515**	94 294
Finance costs	7.4	**(3 188 197)**	(1 850 862)	**(52 316)**	(44 988)
Net finance income		**203 364**	145 676	**81 199**	49 306
Share of profit from associate (net of income tax)	12.1	**40 997**	51 597	**–**	–
Profit before income tax		**1 036 838**	994 987	**1 011 194**	971 841
Income tax expense	8.1	**(288 282)**	(271 812)	**(281 990)**	(263 917)
Profit for the year		**748 556**	723 175	**729 204**	707 924
Attributable to:					
Equity holders of the parent		**748 556**	722 443	**–**	–
Non-controlling interests		**–**	732	**–**	–
		748 556	723 175	**–**	–
Other comprehensive income					
Change in financial instruments at fair value through other comprehensive income that will not be reclassified to profit or loss (net of tax)		**(22 167)**	68 748	**(3 578)**	1 926
Change in financial instruments at fair value through other comprehensive income that may be reclassified to profit or loss in subsequent periods (net of tax)		**872**	(1 219)	**1 892**	–
Other comprehensive income for the year, net of income tax		**(21 295)**	67 529	**(1 686)**	1 926
Total comprehensive income for the year for the period		**727 261**	790 704	**727 518**	709 850
Attributable to:					
Equity holders of the parent company		**727 261**	789 972	**–**	–
Non-controlling interests		**–**	732	**–**	–
		727 261	790 704	**–**	–
Total earnings per share					
Total Basic earnings per share (cents)	9.1	**911.1**	874.1	**865.1**	835.0
Diluted earnings per share (cents)	9.2	**901.1**	866.4	**855.8**	827.9

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

for the year ended 31 December 2022

		GROUP		COMPANY	
	Notes	**2022 R'000**	2021 R'000	**2022 R'000**	2021 R'000
Assets					
Non-current assets		**1 991 829**	1 966 659	**1 563 576**	1 454 725
Property and equipment	10.3/6	**165 494**	175 845	**163 807**	172 657
Intangible assets	11.3/6	**696 200**	726 507	**366 813**	460 122
Investment in associate	12.1	**328 989**	328 262	**21 416**	21 416
Investments in subsidiaries	13.1	**–**	–	**641 426**	511 426
Other investments	14	**649 831**	529 238	**224 397**	86 481
Right-of-use-assets	27	**98 078**	137 723	**97 648**	135 574
Deferred taxation	21.1/3	**53 237**	69 084	**48 069**	67 049
Current assets		**59 344 643**	59 070 941	**2 806 904**	3 010 918
Trade and other receivables	15	**793 033**	593 423	**395 746**	344 382
Income tax receivable		**5 401**	1 880	**–**	–
Due from Group entities	13.4	**–**	–	**95 500**	74 626
Safe note – Globacap	29	**10 234**	–	**10 234**	–
JSE Clear Derivatives Default Fund collateral deposits	16.3	**500 000**	500 000	**–**	100 000
Margin deposits	16.1	**55 792 547**	55 412 674	**508 088**	339 964
Collateral deposits	16.2	**20 267**	169 962	**20 267**	169 962
Cash and cash equivalents	17	**2 223 161**	2 393 002	**1 600 178**	1 981 984
Non current assets held for sale	18	**–**	–	**176 891**	–
Total assets		**61 336 472**	61 037 600	**4 370 480**	4 465 643

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Equity and liabilities					
Total equity	19.3	**4 173 147**	4 218 981	**3 304 230**	3 367 994
Stated capital		**(118 697)**	(67 741)	**(112 983)**	(62 027)
Reserves		**754 650**	757 488	**89 442**	94 259
Retained earnings		**3 537 194**	3 529 234	**3 327 771**	3 335 762
Equity attributable to equity holders of the parent		**4 173 147**	4 218 981	**3 304 230**	3 367 994
Non-current liabilities		**190 941**	258 004	**159 922**	222 635
Employee benefits	20.1	**7 257**	4 035	**7 257**	4 035
Deferred taxation	21.1/3	**31 019**	34 666	**–**	–
Lease liability	27	**131 195**	196 657	**131 195**	195 951
Deferred income	25	**21 470**	22 646	**21 470**	22 649
Current liabilities		**56 972 384**	56 560 615	**906 328**	875 014
Trade and other payables	22	**544 513**	380 296	**169 417**	172 957
Income tax payable		**18 035**	9 089	**17 903**	8 426
Deferred income	25	**1 745**	1 844	**1 745**	1 844
Employee benefits	20.1	**136 198**	130 699	**130 355**	128 446
Lease liability	27	**59 079**	56 051	**58 553**	53 415
JSE Clear Derivatives Default Fund collateral contribution	16.3	**400 000**	400 000	**–**	–
Margin deposits	16.1	**55 792 547**	55 412 674	**508 088**	339 964
Collateral deposits	16.2	**20 267**	169 962	**20 267**	169 962
Total equity and liabilities		**61 336 472**	61 037 600	**4 370 480**	4 465 643

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2022

	Notes	Stated capital and treasury shares* R'000	NDR R'000	Share-based payments reserve R'000	Fair value reserve[2] R'000	Total reserves R'000	Retained earnings R'000	Total R'000	Non-controlling interests R'000	Total equity R'000
Group										
Balance at 1 January 2021		(32 514)	601 191	75 387	–	676 578	3 472 638	4 116 701	37 586	4 154 287
Profit for the year		–	–	–	–	–	722 443	722 443	732	723 175
Other comprehensive income		–	65 603	–	1 926	67 529	–	67 529	–	67 529
Total comprehensive income for the year		–	65 603	–	1 926	67 529	722 443	789 972	732	790 704
LTIS 2010 Allocation 8 – shares vested	20.5	11 127	–	(11 127)	–	(11 127)	–	–	–	–
LTIS 2018 Allocation 1 – shares vested	20.5	13 953	–	(13 953)	–	(13 953)	–	–	–	–
Distribution from the JSE Debt Guarantee Fund Trust[1]		–	(2 138)	–	–	(2 138)	2 138	–	–	–
Dividends paid to owners	19.4	–	15 440	–	–	15 440	(628 225)	(612 785)	–	(612 785)
Equity-settled share-based payment	20.5	–	–	22 532	–	22 532	–	22 532	–	22 532
Transfer of profit to investor protection funds		–	4 415	–	–	4 415	(4 415)	–	–	–
Transfer of qualifying deductible expenses related to Fines – Issuer Regulation		–	(1 788)	–	–	(1 788)	1 788	–	–	–
Treasury shares – acquisitions and sales		(59 951)	–	–	–	–	–	(59 951)	–	(59 951)
Treasury shares – transaction costs		(356)	–	–	–	–	–	(356)	–	(356)
Transactions with owners recognised directly in equity – Acquisition of Non-controlling interest		–	–	–	–	–	(37 132)	(37 132)	(38 318)	(75 450)
Total contributions by and distributions to owners of the Company recognised directly in equity		(35 227)	15 929	(2 548)	–	13 381	(665 846)	(687 692)	(38 318)	(726 010)

[1] The JSE Debt 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, R3.4 million (December 2021: R2.1 million) before intercompany adjustments was transferred to the JSE Limited to defray market regulatory expenditure.

[2] This reserve relates to the equity investment in Globacap Technology Limited net of deferred tax. Refer to note 29 for details on this transaction

* Debit balance due to treasury shares held by the JSE Empowerment Fund Trust and shares held to facilitate the settlement of Long-Term Incentive Schemes. Refer to note 19 for further details.

	Notes	Stated capital and treasury shares[3] R'000	NDR R'000	Share-based payments reserve R'000	Fair value reserve[2] R'000	Total reserves R'000	Retained earnings R'000	Total equity R'000
Group								
Balance at 31 December 2021		**(67 741)**	**682 723**	**72 839**	**1 926**	**757 488**	**3 529 234**	**4 218 981**
Profit for the year		–	–	–	–	–	748 556	748 556
Other comprehensive income		–	(17 717)	–	(3 578)	(21 295)	–	(21 295)
Total comprehensive income for the year		–	(17 717)	–	(3 578)	(21 295)	748 556	727 261
LTIS 2018 Allocation 1 – shares vested	20.5	4 995	–	(8 633)	–	(8 633)	–	(3 638)
LTIS 2018 Allocation 2 – shares vested	20.5	7 838	–	(7 838)	–	(7 838)	–	–
Distribution from the JSE Debt Guarantee Fund Trust[1]		–	(3 414)	–	–	(3 414)	3 414	–
Dividends paid to owners	19.4	–	18 187	–	–	18 187	(737 806)	(719 619)
Equity-settled share-based payment	20.5	–	–	13 951	–	13 951	–	13 951
Transfer of profit to investor protection funds		–	6 814	–	–	6 814	(6 814)	–
Transfer of listed companies – Fines – Issuer Regulation		–	2 880	–	–	2 880	(2 880)	–
Transfer of qualifying deductible expenses related to Fines – Issuer Regulation		–	(3 491)	–	–	(3 491)	3 491	–
Treasury shares – acquisitions and sales		(63 401)	–	–	–	–	–	(63 401)
Treasury shares – transaction costs		(388)	–	–	–	–	–	(388)
Total contributions by and distributions to owners of the Company recognised directly in equity		(50 956)	20 977	(2 520)	–	18 457	(740 595)	(773 094)
Balance at 31 December 2022		**(118 697)**	**685 983**	**70 319**	**(1 652)**	**754 650**	**3 537 194**	**4 173 147**
Note		19.2	19.3	19.3			19.3	

[1] The JSE Debt 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, R3.4 million (December 2021: R2.1 million) before intercompany adjustments was transferred to the JSE Limited to defray market regulatory expenditure.
[2] This reserve relates to the equity investment in Globacap Technology Limited net of deferred tax. Refer to note 29 for details on this transaction.
[3] Debit balance due to treasury shares held by the JSE Empowerment Fund Trust and shares held to facilitate the settlement of Long-Term Incentive Schemes. Refer to note 19 for further details.

	Notes	Stated capital and treasury shares[1] R'000	NDR R'000	Share-based payments reserve R'000	Fair value reserve[2] R'000	Total reserves R'000	Retained earnings R'000	Total equity R'000
Company								
Balance at 1 January 2021		(26 800)	21 282	75 387	–	96 669	3 254 275	3 324 144
Profit for the year		–	–	–	–	–	707 924	707 924
Other comprehensive income		–	–	–	1 926	1 926	–	1 926
Total comprehensive income for the year		–	–	–	1 926	1 926	707 924	709 850
LTIS 2010 Allocation 8 – shares vested	20.5	11 127	–	(11 127)	–	(11 127)	–	–
LTIS 2018 Allocation 1 – shares vested	20.5	13 953	–	(13 953)	–	(13 953)	–	–
Dividends paid to owners	19.4	–	–	–	–	–	(628 225)	(628 225)
Equity-settled share based payment	20.5	–	–	22 532	–	22 532	–	22 532
Transfer of qualifying deductible expenses related to Fines – Issuer Regulation		–	(1 788)	–	–	(1 788)	1 788	–
Treasury shares – acquisitions and sales		(59 951)	–	–	–	–	–	(59 951)
Treasury shares – transaction costs		(356)	–	–	–	–	–	(356)
Total contributions by and distributions to owners of the Company recognised directly in equity		(35 227)	(1 788)	(2 548)	1 926	(4 336)	(626 437)	(666 000)
Balance at 31 December 2021		**(62 027)**	**19 494**	**72 839**	**1 926**	**94 259**	**3 335 762**	**3 367 994**
Profit for the year		**–**	**–**	**–**		**–**	**729 204**	**729 204**
Other comprehensive income		**–**	**1 892**	**–**	**(3 578)**	**(1 686)**	**–**	**(1 686)**
Total comprehensive income for the year		**–**	**1 892**	**–**	**(3 578)**	**(1 686)**	**729 204**	**727 518**
LTIS 2018 Allocation 1 – shares vested	20.5	**4 995**	**–**	**(8 633)**		**(8 633)**	**–**	**(3 638)**
LTIS 2018 Allocation 2 – shares vested	20.5	**7 838**	**–**	**(7 838)**	**–**	**(7 838)**	**–**	**–**
Dividends paid to owners	19.4					**–**	**(737 806)**	**(737 806)**
Equity-settled share based payment	20.5	**–**	**–**	**13 951**	**–**	**13 951**	**–**	**13 951**
Transfer of listed companies – Fines – Issuer Regulation		**–**	**2 880**	**–**	**–**	**2 880**	**(2 880)**	**–**
Transfer of qualifying deductible expenses related to Fines – Issuer Regulation			**(3 491)**			**(3 491)**	**3 491**	**–**
Treasury shares – acquisitions and sales		**(63 401)**	**–**	**–**	**–**	**–**	**–**	**(63 401)**
Treasury shares – transaction costs		**(388)**	**–**	**–**	**–**	**–**	**–**	**(388)**
Total contributions by and distributions to owners of the Company recognised directly in equity		**(50 956)**	**(611)**	**(2 520)**	**–**	**(3 131)**	**(737 195)**	**(791 282)**
Balance at 31 December 2022		**(112 983)**	**20 775**	**70 319**	**(1 652)**	**89 442**	**3 327 771**	**3 304 230**
Note		19.2	19.3	19.3			19.3	

[1] Debit balance due to treasury shares held to facilitate the settlement of Long-Term Incentive Schemes. Refer to note 19 for further details.
[2] This reserve relates to the equity investment in Globacap Technology Limited net of deferred tax. Refer to note 29 for details on this transaction.

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2022

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Cash flows from operating activities					
Cash generated by operations	23.1	**1 029 621**	1 034 454	**1 079 872**	1 119 003
Finance income	23.3	**3 229 577**	1 945 435	**130 860**	94 110
Finance costs	23.4	**(3 017 945)**	(1 806 772)	**(49 177)**	(44 815)
Dividends received		**6 635**	5 402	**–**	–
Taxation paid	23.2	**(270 141)**	(261 267)	**(253 022)**	(255 341)
Net cash generated by operating activities		**977 747**	917 252	**908 533**	912 957
Cash flows from investing activities					
Proceeds on sale of other investments		**32 847**	20 400	**–**	–
Acquisition of other investments		**(175 457)**	(104 253)	**(140 322)**	(84 000)
Capital injection in subsidiaries		**–**	–	**(130 000)**	–
Receipts from loans to group companies		**–**	–	**–**	12 000
Dividends from associate		**40 271**	43 242	**40 271**	43 242
Acquisition of leasehold improvements		**(20 024)**	(63 811)	**(20 024)**	(63 811)
Acquisition of intangible assets		**(134 593)**	(65 638)	**(134 593)**	(62 400)
Acquisition of property and equipment		**(38 494)**	(35 834)	**(38 129)**	(32 446)
Proceeds from disposal of property and equipment		**35**	–	**–**	–
Debt instrument: Globacap Safenote		**(9 625)**	–	**(9 625)**	–
Acquisition of non-controlling interest		**–**	–	**–**	(75 450)
Net cash used in investing activities		**(305 040)**	(205 894)	**(432 422)**	(262 864)
Cash flows from financing activities					
Acquisition of treasury shares		**(73 055)**	(70 877)	**(73 055)**	(70 877)
Proceeds on sale of treasury shares		**9 267**	10 571	**9 267**	10 571
Acquisition of non-controlling interest		**–**	(75 450)	**–**	–
Lease liabilities repaid		**(62 435)**	(41 113)	**(59 617)**	(38 495)
Dividends paid		**(719 619)**	(612 785)	**(737 806)**	(628 225)
Net cash used in financing activities		**(845 842)**	(789 654)	**(861 211)**	(727 026)
Net decrease in cash and cash equivalents		**(173 135)**	(78 296)	**(385 100)**	(76 933)
Cash and cash equivalents at 1 January		**2 393 002**	2 459 212	**1 981 984**	2 046 831
Effect of exchange rate fluctuations on cash held		**3 294**	12 086	**3 294**	12 086
Cash and cash equivalents at 31 December 2022	17	**2 223 161**	2 393 002	**1 600 178**	1 981 984

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2022

1. Reporting entity

JSE Limited (the "JSE" or the "Company") is a company domiciled in South Africa. Its registration number is 2005/022939/06. The JSE is licensed as an exchange in terms of the Financial Markets Act 2012 ("FMA"). The JSE has the following main lines of business: Capital Markets, Post-Trade Services and Information 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 2022 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 consolidated and Company financial statements of the Company have been prepared in accordance with International Financial Reporting Standards (IFRS), interpretations issued by the IFRS Interpretations Committee (IFRS-IC), the South African Institute of Chartered Accountants (SAICA) financial reporting guides as issued by the Accounting Practice Committee, the SAICA Headline Earnings Circular 1/2021, the Financial Pronouncements as issued by the Financial Reporting Standards Council, the JSE Listings Requirements and the requirements of the Companies Act, 2008 ("Companies Act").

The Group financial statements were authorised for issue by the Board of Directors (Board) on 8 March 2023.

2.2 Basis of measurement

The Group and Company 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:

- Loan to the JSE Empowerment Fund Trust;
- Fair value financial assets through other comprehensive income;
- Shared-based payment transactions; and
- Fair value financial assets through profit and loss.

The methods used to measure fair values are set out 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 are in conformity with IFRSs and 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.

2. Basis of preparation (continued)

2.4 Use of estimates and judgements (continued)

For the period ended 31 December 2022 the following areas require the use of judgements and estimates:

Amortisation of intangible assets

Intangible assets are amortised over the estimated useful economic lives, which are based on management's best estimates of future performance and periods over which value from the intangible assets will be realised taking into account contractual terms and management intention regarding the future use of software. Details of intangible assets and their related amortisation are provided in note 11.

Useful lives of property and equipment

Property and equipment are depreciated over their estimated useful economic lives, which are based on management's best estimates of future performance and periods over which value from these assets are realised. Details of property and equipment and their related depreciation are provided in note 10.

Useful lives of customer contracts

Customer contracts are amortised over the estimated useful economic lives which are based on management's best estimates of future performance and periods over which value from the customer contracts are to be realised. Details of customer contracts are provided in note 11.

Goodwill impairment testing

Goodwill is tested for impairment annually or more frequently if there is an indicator of impairment. When identifying impairment indicators, management considers the impact of changes in market, legal, operating environments and other circumstances that could indicate that an impairment exists. This requires management to make significant judgements concerning the existence of impairment indicators, identification of cash-generating units and estimates of projected cash flows when estimating the value in use or fair value less cost to sell. Details of goodwill impairment testing are provided in note 11.7 and 11.8.

Structured entities

There is one unconsolidated structured entity, namely JSE Benevolent Fund which is not consolidated because the JSE does not control the Fund based on management's assessment in terms of IFRS 10. Refer to note 13.3.

The Group holds 44.55% in Strate (Pty) Limited and applies the equity method of accounting. Refer to note 3.1(iii) for details.

Fair value determination

Refer to note 5.

2. Basis of preparation (continued)

2.4 Use of estimates and judgements (continued)

Deferred tax assets

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. Company budgets and forecasts were used to substantiate the utilisation of the deferred tax asset. The inputs used in the projection of estimated future taxable profits requires management judgement. The main components relating to this tax asset consists of employee benefits and IFRS 16 Leases. Included in employee benefits are leave pay and discretionary bonus. Judgement is required when considering the amount allocated to the leave pay liability whereby, should an employee have an annual leave balance of more than 1.5 times their annual leave cycle, they will forfeit their annual leave unless it is in excess for business reasons in which it will then have to be approved by the Divisional Head in consultation with Human Resources based on the case merits. 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.

Revenue from contracts with customers

The Group concluded that the revenue for initial listing fees is to be recognised over an expected period which reflects average listing period of issuers. This is based on an average historical minimum life expectancy of a listed company which management estimated based on historic information. The company has the obligation to provide the platform to the issuer over the term for which it received the revenue.

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.

New standards and amendments that impact on the Group's accounting policies have been assessed during the period, and these have had no material impact on the Group's financial statements. Refer to note 4 for new standards and interpretations not yet adopted.

Annual Improvements to IFRS Standards 2018 – 2020 – Amendments to the following standards:

IFRS 1 – The amendment permits a subsidiary that applies paragraph D16(a) of IFRS 1 to measure cumulative translation differences using the amounts reported by its parent, based on the parent's date of transition to IFRSs.

IFRS 9 – The amendment clarifies which fees an entity includes when it applies the '10 per cent' test in paragraph B3.3.6 of IFRS 9 in assessing whether to derecognise a financial liability. An entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.

FRS 16 – The amendment to Illustrative Example 13 accompanying IFRS 16 removes from the example the illustration of the reimbursement of leasehold improvements by the lessor in order to resolve any potential confusion regarding the treatment of lease incentives that might arise because of how lease incentives are illustrated in that example.

IAS 41 – The amendment removes the requirement in paragraph 22 of IAS 41 for entities to exclude taxation cash flows when measuring the fair value of a biological asset using a present value technique.

2. Basis of preparation (continued)

2.5 Changes in accounting policies (continued)

Reference to the Conceptual Framework – Amendments to IFRS 3 – effective date: 1 January 2022

The amendments add an exception to the recognition principle of IFRS 3 to avoid the issue of potential "day 2" gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets or IFRIC 21 Levies, if incurred separately. The exception requires entities to apply the criteria in IAS 37 or IFRIC 21, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date. The amendment has no impact on the Group.

Property, Plant and Equipment: Proceeds before Intended Use – Amendments to IAS 16 – effective date: 1 January 2022

The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment (PP&E), any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment has no impact on the Group.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37 – effective date: 1 January 2022

The amendments apply a 'directly related cost approach'. The costs that relate directly to a contract to provide goods or services include both incremental costs (e.g. the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g. depreciation of equipment used to fulfil the contract as well as costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendment has no impact on the Group.

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, JSE Debt Guarantee Fund Trust, Nautilus MAP Holdings (Pty) Limited, Nautilus Map (Pty) Limited, JSE LTIS 2010 Trust, JSE LTIS 2018 Trust, JSE Empowerment Fund Trust and JSE Investor Services (Pty) Limited and JSE Private Placements (Pty) Ltd and its subsidiaries, as subsidiary companies.

JSE Investor Services (Pty) Limited, has two wholly owned subsidiaries named JSE Investor Services CSDP (Pty) Limited and Pacific Custodians (Nominees) (RF) (Pty) Limited.

3. Significant accounting policies (continued)

3.1 Basis of consolidation (continued)

(i) Subsidiaries (continued)

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, Bondclear Limited and Nautilus MAP Operations (Pty) Limited are dormant and are in the process of deregistration.

(ii) Structured entities

The JSE Guarantee Fund Trust, the JSE Derivatives Fidelity Fund Trust and the JSE Debt Guarantee Fund Trust are trusts established in terms of the Trust Property Control Act of 1988 ("Trust Property Control Act") 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 FMA 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

Associates are those entities in which the Group has significant influence, but not control, over financial and operating policies. The conclusion regarding control or significant influence relating to associates is reassessed on an annual basis.

In performing this assessment, the directors determine whether or not the Group has control over the respective investee based on whether the Group has the practical ability to direct the significant activities unilaterally.

In making this assessment, the following factors are considered:

- The inability of the Group to unilaterally appoint the majority of board members of the investee;
- Composition of the investee's board and board appointees of the Group;
- The lack of any contractual or legal rights conferred upon the Group by the investee or any other shareholder of the investee to direct its activities; and
- The Group's shareholding in the investee relative to other investors.

3. Significant accounting policies (continued)

3.1 Basis of consolidation (continued)

(iii) Investments in associates (continued)

Associates are accounted for using the equity method 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 associate 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 associate, 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 associate. In the separate financial statements of the Company, the associate is accounted for at cost less accumulated impairment losses.

In terms of the Group's investment in Globacap, the Group has assessed the factors above and has concluded that the investment does not meet the requirement for it to be classified as an investment in associates. Refer to note 29 for further details on the classification of GlobaCap.

(iv) Business combinations

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred;
- liabilities incurred to the former owners of the acquired business;
- equity interests issued by the Group;
- fair value of any asset or liability resulting from a contingent consideration arrangement; and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at fair values at the acquisition date. The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

3. Significant accounting policies (continued)

3.1 Basis of consolidation (continued)

(iv) Business combinations (continued)

The excess of the

- consideration transferred;
- amount of any non-controlling interest in the acquired entity; and
- acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognised directly in profit or loss as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognised in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognised in profit or loss.

The Group recognises non-controlling interests in an acquired entity either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets. This decision is made on an acquisition-by-acquisition basis. For the non-controlling interests in JSE Investor Services Proprietary Limited, the Group elected to recognise the non-controlling interests in at its proportionate share of the acquired net identifiable assets.

(v) Non-controlling interest

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. Those interests of non-controlling shareholders that are present ownership interests entitling their holders to a proportionate share of net assets upon liquidation may initially be measured at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement is made on an acquisition-by-acquisition basis.

Other non-controlling interests are initially measured at fair value. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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 associate are eliminated against the investment to the extent of the Group's interest in the associate. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

3. Significant accounting policies (continued)

3.3 Non-current assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use are classified as held for sale. The assets, or disposal group, are measured at the lower of their carrying amount and fair value less costs to sell. Impairment losses on initial classification as held for sale or distribution and subsequent gains and losses on remeasurement are recognised in profit or loss. Gains on subsequent increases in fair value less costs to sell are not recognised in excess of any cumulative impairment loss.

3.4 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 are translated to the functional currency at the exchange rate prevailing on reporting date. Translation differences on monetary items are recognised in profit and loss. Translation differences included in fair value adjustment of instruments measured at fair value through other comprehensive income are included in other comprehensive income.

3.5 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, other receivables, margin and collateral deposits, cash and cash equivalents, trade payables, interest payable, amounts due to and from Group companies 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. 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:

- Fair value through other comprehensive income (OCI) financial assets;
- Amortised cost; and
- Fair value through profit and loss.

3. Significant accounting policies (continued)

3.5 Financial instruments (continued)

(i) Non-derivative financial instruments (continued)

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

Financial assets at fair value through other comprehensive income (OCI) – debt instruments

The Group's investments in debt securities are classified as fair value through OCI financial assets and this relates to bonds from investor protection fund investments and South African Government Bonds held by the JSE Limited. The principal objective of holding these investments are to collect contractual cash flows and selling these investments in accordance with the relevant mandates. The contractual terms of these investments give rise to cash flows that are solely payments of principal and interest. Fair value gains and losses relating to debt instruments are subsequently classified to profit or loss upon realisation of the investment.

Impairment losses on monetary items such as debt securities and foreign exchange gains and losses are recognised in profit or loss. Translation differences included in fair value adjustment are recognised in other comprehensive income. When these investments are derecognised, the cumulative gain or loss previously recognised in OCI 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. Refer to note 14 (Other investments) for the financial assets classified as fair value through OCI.

Financial assets designated at fair value through other comprehensive income (OCI) – equity instruments

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under IAS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends on fair value through OCI equity instruments are recognised in profit or loss when the Group's right to receive payment is established (last day to register). Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Group elected to classify irrevocably its non-listed equity investment in Globacap under this category. Refer to note 29 for more detail.

Financial assets at amortised cost

For debt instruments, the business model test and cash flow characteristics of solely payments of principal and interest (SPPI) test is applied by the Group in determining the category which best applies to the financial instruments that it holds and or trades. Under the business model test the Group determines the objective for which it holds the financial instrument. Assets that are held for collection of contractual cash flows where those cash flows represent SPPI are measured at amortised cost.

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired. Other non-derivative financial instruments classified at amortised cost include trade and other receivables, contributions in JSE Clear Derivatives Default Fund (Pty) Limited, trade and other payables, cash and cash equivalents, amounts due to and from Group companies, and margin and collateral deposits.

3. Significant accounting policies (continued)

3.5 Financial instruments (continued)

(i) Non-derivative financial instruments (continued)

Fair value through profit and loss (FVTPL)

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of comprehensive income. This category includes the loan to the JSE Empowerment Fund Trust and Investment in the Globacap SAFE note.

A financial asset is primarily derecognised when:

- the rights to receive cash flows from the asset has expired; or
- the Group has transferred its rights to receive cash flows from the asset.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled, expire or are substantially modified. The difference between the carrying amount of the financial liability derecognised, and the consideration paid and payable is recognised in profit or loss.

(ii) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and term 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 and capital requirements.

(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 as part of the Long-Term Incentive Schemes, the amount of the consideration paid, which includes directly attributable costs, net of any tax effects, is recognised as a deduction from equity. Shares purchased by the JSE LTIS 2010 Trust and LTIS 2018 Trust as part of the Long-Term Incentive Scheme are classified as treasury shares and are presented against stated capital. When treasury shares are subsequently sold, the amount received is recognised as an increase in equity, and the resulting surplus or deficit on the transaction is presented in stated capital.

3.6 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 significant 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.

3. Significant accounting policies (continued)

3.6 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. 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
• Leasehold improvements	Aligned with the lease period

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

3.7 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 the associate, 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 associate.

(ii) Licences

Licences are recorded as intangible assets and held at cost less accumulated amortisation.

(iii) 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 internal and external labour charges. 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.

(iv) 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.

3. Significant accounting policies (continued)

3.7 Intangible assets (continued)

(v) 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.

(vi) 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:

• Trade names	5 to 10 years
• Computer software	3 to 5 years
• Licences*	3 to 8 years

Amortisation of the internally developed intangible assets will commence when development is complete and is available for use. These assets will be tested for impairment annually during the period of development.

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

* Change due to new licence obtained in the current period with a longer period. Licences are recognised over the contractual term therefore this will subsequently change based on the total contractual life of effective contracts.

(vii) Customer relationship

The customer relationship intangible assets were acquired as part of a business combination. They are recognised at their fair value at the date of acquisition and are subsequently amortised on a straight-line based on the timing of projected cash flows of the relationships over their estimated useful lives which management estimates as 15 years.

(viii) 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.

3.8 Leases

Leases and right-of-use asset

Group as a lessee

The Group assesses a contract at the inception date, to ascertain whether the contract is, or contains a lease. That is, if the contract transfers the right of use of an identifiable asset for a period of time in exchange for consideration.

Lease liabilities are measured at the present value of remaining lease payments discounted at the incremental borrowing rate at the date of initial application. The Group recognises right-of-use assets at the commencement of the lease. The right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before commencement date less any lease incentives received. The recognised right-of-use assets are depreciated on a straight-line basis over the shorter of their estimated useful life and the lease term. Right-of-use assets are subject to impairment considerations.

The Group applies the recognition exemptions for lease contracts that have a term of 12 months or less and do not contain a purchase option and contracts for which the underlying asset is of low value.

3. Significant accounting policies (continued)

3.8 Leases (continued)

Leases and right-of-use asset (continued)

Group as a lessee *(continued)*

At inception or upon reassessment of the arrangement, the Group separates payments and other considerations required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes that it is impracticable to separate payments reliably, an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently, the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(ii) 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 the right-of-use assets from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

• Properties	25 months to 80 months
• Computer hardware	five years

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

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature.

Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

3.9 Impairment

(i) Financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. Impairment provisions for trade receivables are recognised based on the simplified approach using the lifetime expected credit losses.

During this process the probability of the non-payment of the trade receivables is assessed. This probability is then multiplied by the amount of the expected loss arising from default to determine the lifetime expected credit loss for the trade receivables. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the trade receivables. The forward-looking information that is incorporated include macro-economic factors such as GDP growth and unemployment. For trade receivables, which are reported net, such provisions are recorded in a separate provision account, with the profit or loss being recognised within profit from operating activities in the consolidated statement of comprehensive income. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

3. **Significant accounting policies** (continued)

3.9 **Impairment** (continued)

(i) **Financial assets** (continued)

Impairment provisions for receivables from related parties and loans to related parties are recognised based on a forward-looking ECL model. The methodology used to determine the amount of the provision is based on whether there has been a significant increase in credit risk since initial recognition of the financial asset. For those where the credit risk has not increased significantly since initial recognition of the financial asset, 12-months ECL along with gross interest income are recognised. For those for which credit risk has increased significantly, lifetime ECL along with the gross interest income are recognised. For those that are determined to be credit impaired, lifetime ECL along with interest income on a net basis are recognised.

For debt instruments at fair value through OCI, the Group applies the low credit risk simplification. At every reporting date, the Group evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group assesses the internal credit rating of the debt instrument. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

The Group's debt instruments at fair value through OCI comprise of quoted bonds and investments held by the investor protection funds as per note 3.5. It is the Group's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. Impairment losses do not reduce the carrying amount of debt instruments at fair value through other comprehensive income in the statement of financial position, which remains at fair value.

(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.

(iii) **Write off**

The Group writes off financial assets when there is no reasonable expectations of recovering a financial asset in its entirety or a portion thereof by directly reducing the gross carrying amount of a financial asset. The write off is recognised in statement of comprehensive income.

3. Significant accounting policies (continued)

3.10 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.

3.11 Revenue

IFRS 15 provides a five step model for the determination and recognition of revenue to be applied to all contracts with customers. Revenue comprises primary market fees, trading fees, clearing and settlement fees, information services fees, funds under management and revenue from Investor Services fees as well as *Strate ad valorem* fees and recognised at a point in time except for initial listing fees included in primary market fees, which is recognised over an expected period of time. Refer to note 25.

Revenue from contracts with clients is recognised when control of the services are transferred to the client at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those services. The Group has generally concluded that this principal is reflected in its revenue arrangements, because it typically controls the services before transferring them to the customer.

3. Significant accounting policies (continued)

3.11 Revenue (continued)

The Group receives advance payments from clients relating to the initial listing fees. There is no significant financing component for deferred listing fees. This is recognised over an expected period based on an average listing period of issuers. This is also based on an average historical minimum life expectancy of a listed company. Any adjustments to the contract liability balance are charged against revenue. Refer to note 25.

A contract liability is recognised if a payment is received or a payment is due (whichever is earlier) from a client before the Group transfers the related goods or services.

The Group applies the practical expedient for short-term advances received from clients.

3.12 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, investor protection levy, fines to listed companies 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 where applicable shall be recognised in profit or loss.

Distributions from structured entities

Funds from the JSE Guarantee Fund Trust approved for distribution by the Financial Sector Conduct Authority ("FSCA"), 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.

Fines – listed companies

In the execution of its regulatory mandate, the Issuer Regulation Department may impose fines.

Paragraph section 1.25 of the Listings Requirements, as read with Section 11(4) of the Financial Markets Act, 19 of 2012, prescribe how these fines must be appropriated.

Therefore, although the fines are recorded in profit and loss in terms of IFRS, they are not available for distribution to shareholders. To reflect this position, an amount equal to the fines imposed and an amount equal to deductible expenses (both on a net after tax basis) is transferred within the statement of changes in equity from retained earnings to a non-distributable reserve (called the Issuer Regulation Fine Reserve) for the exclusive use as set out in the Listings Requirements.

3. Significant accounting policies (continued)

3.13 Finance income and costs

Finance income includes interest income from funds invested, margins and collateral deposits 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 costs includes interest expense related to margin and collateral deposits, interest due to South African Revenue Services and interest payable on borrowings. Interest expense is recognised in profit or loss using the effective interest method.

3.14 Income tax expense

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 OCI.

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. When there is uncertainty associated with income tax treatments within the Group, management will assess and disclose how judgements were made when determining taxable profit/(loss), tax bases, unused tax losses, unused tax credits and tax rates.

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.

In terms of paragraphs 46 and 47 of IAS 12, both current and deferred tax assets and liabilities are to be measured using the tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. In order to provide context to the requirements of IAS 12, Financial Reporting Pronouncement 1 (FRP 1) was issued to address, in a South African environment, when changes in tax rates and tax laws that are announced by the Minister of Finance during the annual Budget Statement should be regarded as substantively enacted. In terms of paragraph 6 of FRP 1, changes in tax rates should be regarded as substantively enacted from the time that they are announced in terms of the Minister of Finance's Budget Statement.

3. Significant accounting policies (continued)

3.14 Income tax expense (continued)

However, this only applies where the change in tax rates is not inextricably linked to other changes in the tax laws. To be regarded as substantively enacted, there should be the required degree of certainty that the announced changes would be promulgated in a substantially unchanged manner. In terms of paragraph 7 of FRP 1, when changes in the tax rates are inextricably linked to other changes in the tax laws, they should be regarded as being substantively enacted when they have been approved by Parliament and signed by the President.

As a result, the change in the corporate tax rate from 28% to 27% was substantively enacted during current year budget speech and will impact corporate entities with a year of assessment period ending on and after 31 March 2023. The rate reduction does not bear any impact on the current or prior period taxes as the group entities will continue measuring their current taxation at 28% for annual periods ended 31 December 2022. For years ending on or after 31 March 2023, the group entities will measure their current taxation at 27%.

The change in tax rate impacted deferred tax assets and liabilities which are measured at tax rates expected to apply in the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of this reporting period.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances change. The adjustment is either treated as a reduction in goodwill (as long as it does not exceed goodwill) if it was incurred during the measurement period or recognised in profit or loss.

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 20% 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.

3.15 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.

3.16 Operating segment

The Group determines and presents operating segments based on the information used to run the business by the Executive Committee (Exco).

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. Revenue results as disclosed in note 6 are reviewed regularly by the entity's chief operating decision makers (Exco) to make key decisions about resources to be allocated to the segment and assess its performance.

Costs are not allocated to the individual segments and are reviewed by the CODM as a single unit. The holistic cost centre segment does not meet the definition of an operating segment as it does not earn revenues thus excluded from the operating segment disclosure in note 6.

4. New standards and interpretations not yet adopted

A new standard has been issued by the International Accounting Standards Board (IASB) prior to the publication of these financial statements, but are effective in future accounting periods, as listed below:

Classification of Liabilities as Current or Non-current (Amendments to IAS 1) – effective date: 1 January 2023

The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of financial position, debt and other liabilities with an uncertain settlement date should be classified as current (due or potentially due to be settled within one year) or non-current. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and earlier application is permitted. The impact of the amendment on the Group is currently being assessed.

Disclosure of Accounting Policies – Amendments to IAS 1 and IFRS Practice Statement 2 – effective date: 1 January 2023

The amendments provide guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies. They also provide guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures. The impact of the amendment on the Group is being assessed.

Definition of Accounting Estimates – Amendments to IAS 8 – effective date: 1 January 2023

The amended standard clarifies that the effects on an accounting estimate of a change in an input or a change in a measurement technique are changes in accounting estimates if they do not result from the correction of prior period errors. The previous definition of a change in accounting estimate specified that changes in accounting estimates may result from new information or new developments. Therefore, such changes are not corrections of errors. This aspect of the definition was retained by the Board. The impact of the amendment on the Group is being assessed.

IFRS 17 Insurance contracts – effective date: 1 January 2023

IFRS 17 is the new standard that prescribes the accounting for insurance contracts and will replace the current insurance contracts standard, IFRS 4. IFRS 17 aims to provide more transparency and comparability between insurance companies and other industries by providing a prescriptive approach to determining policyholder liabilities, as well as the release of profits on these contracts to the income statement. No impact is expected by the Group as a result of the new standard.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12) – effective date: 1 January 2023

The amendments clarify that the initial recognition exemption does not apply to transactions in which equal amounts of deductible and taxable temporary differences arise on initial recognition. The impact of the amendment on the Group is currently being assessed.

4. New standards and interpretations not yet adopted (continued)

Lease Liability in a Sale and Leaseback (Amendments to IFRS 16) – effective date: 1 January 2024

The amendments clarify how a seller-lessee subsequently measures sale and leaseback transactions that satisfy the requirements in IFRS 15 to be accounted for as a sale. No impact is expected by the Group as a result of the new standard.

Non-current Liabilities with Covenants (Amendments to IAS 1) – effective date: 1 January 2024

The amendment is to clarify how conditions with which an entity must comply within twelve months after the reporting period affect the classification of a liability. The impact of the amendment on the Group is currently being assessed.

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 below mentioned 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 Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

5.2 Share based payment transactions

The fair values of the shares granted to employees in terms of the LTIS 2010 and LTIS 2018 incentive schemes 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.

5.3 GlobaCap SAFE note and equity investment

The investment is not publicly traded and categorised as level 3 fair value hierarchy. The fair value of these investments is determined using appropriate valuation methodologies which includes discounted cash flow analysis, and implied equity price where applicable. Refer to note 29 for further details on significant estimates and judgment for inputs used.

6. Operating segments, revenue and other income

6.1 Revenue from contracts with clients and operating segments comprise:

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
Capital markets				
Bond Electronic Trading Platform (ETP)	**9 627**	7 569	**9 627**	7 569
Colocation fees	**33 073**	28 251	**33 073**	28 251
Commodity derivatives fees	**102 917**	97 402	**102 917**	97 402
Issuer services fees	**7 281**	6 105	**7 281**	6 105
Currency derivatives fees	**41 294**	41 389	**41 294**	41 389
Equity derivatives fees	**163 344**	149 853	**163 344**	149 853
Equity market fees	**479 148**	488 924	**479 148**	488 924
Interest rate market fees	**72 864**	63 660	**75 833**	65 519
Primary market fees*	**157 515**	152 814	**157 515**	152 814
JSE Investor Services fees	**159 059**	124 622	**–**	–
JSE Private Placement fees	**277**	–	**–**	–
Post-trade services				
Clearing and settlement fees	**437 696**	423 060	**437 696**	423 060
Back-office services (BDA)	**351 366**	350 589	**351 366**	350 589
Funds under management	**95 234**	80 751	**135 223**	126 911
Information services				
Index fees	**68 499**	56 901	**68 499**	56 901
Market data fees	**319 508**	293 073	**319 508**	293 073
Total revenue excluding *Strate ad valorem* fees – cash equities and bonds**	**2 498 702**	2 364 964	**2 382 324**	2 288 360
Strate ad valorem fees – cash equities	**132 854**	134 572	**132 854**	134 572
Strate ad valorem fees – bonds	**18 422**	17 932	**18 422**	17 932
	2 649 979	2 517 467	**2 533 600**	2 440 864

* An amount of R1.9 million loss (2021: R1.4 million gain) was recognised in Primary market fees relating to initial listing fees for the current year.

** The CODM evaluates revenue excluding the Strate ad valorem because this stream of income is evaluated in conjunction with the directly attributable cost included in note 7.2.

6. Operating segments, revenue and other income (continued)

6.2 Other income comprises:

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Recognised in profit or loss					
Investor protection funds		**6 635**	5 402	**–**	–
– Dividend income recognised on investments derecognised during the reporting period		**–**	–	**–**	–
– Dividend income recognised on investments held at the reporting period		**6 635**	5 402	**–**	–
Dividends received from associate		**–**	–	**40 271**	43 242
Net foreign exchange profit		**5 470**	14 791	**5 404**	14 791
Income recognised from deferred income (data centre and disaster recovery)		**–**	–	**4**	5 095
Investor protection levy		**30 754**	29 622	**30 754**	29 622
Fines issued in terms of Issuer Regulations		**4 000**	–	**4 000**	–
Rental income		**2 871**	2 912	**2 871**	2 912
Sundry income		**3 828**	6 028	**3 759**	3 557
Fair value gain on SAFE note*		**609**	–	**609**	–
		54 167	58 755	**87 672**	99 219

* Refer to note 29 for further details.

7. Profit before taxation comprises:

7.1 Personnel expenses

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Remuneration paid to employees		**602 342**	562 789	**517 413**	508 571
Fixed-term contractors		**17 502**	5 766	**16 997**	5 766
Contribution to defined contribution plans		**22 130**	20 746	**19 969**	20 088
Directors' emoluments		**36 692**	33 572	**34 635**	32 259
– Executive directors	24.1	**22 334**	20 424	**22 334**	20 424
– Non-executive directors*	24.2	**14 358**	13 148	**12 301**	11 835
Long-term incentive schemes**		**25 585**	34 744	**25 585**	34 744
– JSE LTIS 2010		**–**	(410)	**–**	(410)
– JSE LTIS 2018***		**25 585**	35 154	**25 585**	35 154
Gross personnel expenses		**704 251**	657 617	**614 599**	601 428
Less: Capitalised to intangible assets		**(11 554)**	(7 721)	**(11 554)**	(7 721)
		692 697	649 896	**603 045**	593 707

* Group includes JSE Clear non-executive directors.
** Includes the accounting impact of accelerated LTIS for good leavers.
*** Includes critical skills cash scheme amounting to R10.5 million (2021: R11.3 million) for both Group and Company.

7. Profit before taxation comprises: (continued)

7.2 Other expenses

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Amortisation of intangible assets	**164 900**	154 228	**151 011**	140 483
Auditor's remuneration	**9 661**	9 223	**5 099**	6 372
– Audit fee	**7 677**	6 580	**3 890**	4 221
– Non-assurance and other assurance fees to external auditors***	**735**	–	**35**	–
– Prior year under accrual	**1 249**	1 768	**1 174**	1 276
– Fees for other services****	**–**	875	**–**	875
Consulting fees	**10 973**	12 534	**9 631**	12 421
Depreciation	**108 493**	103 458	**104 929**	99 642
– Computer hardware	**47 786**	51 127	**46 309**	49 612
– Furniture and equipment	**3 032**	4 920	**2 668**	4 416
– Right-of-use assets	**39 645**	39 736	**37 926**	38 017
– Leasehold improvements	**17 979**	7 615	**17 974**	7 537
– Vehicles	**52**	60	**52**	60
Enterprise development	**8 082**	8 887	**8 082**	8 887
Intangible asset impairment**	**5 396**	–	**5 396**	–
Investor protection levy	**39 608**	38 463	**39 608**	38 463
Impairment of trade and loan receivables	**–**	–	**1 885**	757
Other expenses*	**370 207**	312 345	**282 938**	240 322
Strate ad valorem fees	**150 968**	149 533	**150 968**	149 533
Technology costs	**344 748**	336 517	**322 586**	323 437
Transaction costs	**–**	898	**–**	898
	1 213 036	1 126 086	**1 082 134**	1 021 216

* Other expenses comprises mainly of administration fees, legal and professional fees, marketing and advertising, swift charges, travelling expenses, internal audit and reviews costs, electricity and building utilities, learning and development costs, data information charges and operational risk losses.

** Relates to an idle intangible asset which was reserved for an untraded commodities product. The amount is impaired in the current year as no future economic benefits are expected to be recovered through use or sale of the asset.

*** Other assurance fees amounted to R365 000 and the remaining R370 000 relates to non-assurance services performed by external auditors.

**** Prior year includes fees for compliance audits that were not performed by the external auditors.

7. Profit before taxation comprises: (continued)

7.3 Finance income

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Investor protection funds	**8 482**	6 477	**–**	–
– Finance income on cash	**6 393**	4 197	**–**	–
– Finance income from debt instruments at fair value through other comprehensive income	**2 089**	2 280	**–**	–
Finance income earned on margin and collateral deposits	**3 271 428**	1 911 645	**41 843**	25 086
– Derivatives	**3 202 965**	1 868 241	**–**	–
– JSE Clear Derivatives Default Fund	**26 620**	18 318	**–**	–
– Equities	**41 843**	25 086	**41 843**	25 086
Finance income earned on all funds excluding collateral and margin deposits	**111 651**	78 416	**91 672**	69 208
Total finance income*	**3 391 561**	1 996 538	**133 515**	94 294

7.4 Finance costs

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Finance costs on margin and collateral deposits*	**3 169 535**	1 825 166	**33 901**	19 591
– Derivatives	**3 109 059**	1 787 292	**–**	–
– JSE Clear Derivatives Default Fund	**26 575**	18 283	**–**	–
– Equities	**33 901**	19 591	**33 901**	19 591
Finance costs on all funds/leases excluding collateral and margin deposits	**18 662**	25 696	**18 415**	25 397
Total finance costs	**3 188 197**	1 850 862	**52 316**	44 988

* Calculated using effective interest rate method.

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
8. Income tax expenses					
8.1 Taxation					
Current tax expense					
– Current year		**275 382**	271 802	**262 498**	260 763
– Prior year adjustment		**–**	(541)	**–**	(478)
Deferred tax asset					
– Prior year adjustment		**–**	(27)	**–**	73
– Reversal of deductible temporary differences		**1 526**	436	**4 714**	1 076
– Change in tax rate		**2 551**	–	**2 709**	–
Deferred tax liability					
– Prior year adjustment		**229**	(1 390)		(1)
– Origination of taxable temporary differences		**10 680**	1 532	**12 998**	2 485
– Change in tax rate		**(2 086)**	–	**(929)**	–
		288 282	271 812	**281 990**	263 917
8.2 Reconciliation of effective tax rate		**%**	%	**%**	%
Current tax rate		**28**	28	**28**	28
Adjusted for:					
– Non-taxable income*		**(0.18)**	–	**(1.12)**	(1.25)
– Adjustment for prior periods**		**0.02**	(0.06)	**–**	(0.04)
– Non-deductible expenses:					
– Depreciation on leasehold improvements		**0.49**	0.21	**0.49**	0.22
– Impairment provision raised on intercompany loan		**–**	–	**0.05**	0.02
– Capital nature expenses****		**0.03**	0.08	**0.03**	0.08
– Other***		**0.48**	0.54	**0.33**	0.13
– Change in tax rate*****		**0.03**		**0.17**	
– Share of profit of equity-accounted investee		**(1.11)**	(1.45)	**–**	–
Net effective tax rate		**28**	27	**28**	27

* Non-taxable income includes dividends received (Company) and the Investor protection levy.

** Prior year adjustments related to corrections on loan provision (2021) and forfeited LTIS shares (2021).

*** Includes impairment loss on intangible assets (refer to note 11), non-trade expenses related to amounts not incurred in a production of income and non-deductible expenses relating to the JSE Empowerment Fund Trust of 0.21%.

**** Relates to cost incurred for consultation and legal fees in respect of the Group's inorganic projects.

***** On 23 February 2022, the Minister of Finance announced a reduction to the South African corporate income tax rate from 28% to 27% for companies with years of assessment ending on or after 31 March 2023. The rate reduction does not bear any impact on the current or prior period taxes as the group entities will continue measuring their current taxation at 28% for annual periods ended 31 December 2022. For years ending on or after 31 March 2023, the group entities will measure their current taxation at 27%.

The change in tax rate impacted deferred tax assets and liabilities which are measured at tax rates expected to apply in the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of this reporting period.

8. Income tax expenses (continued)

8.3 The Group's consolidated effective tax rate for the year ended 31 December 2022 is 28% (2021: 27%).

8.4 The following corporate tax rates are applicable to the entities in the Group:

	Current tax	Deferred tax
JSE Limited	28% (2021: 28%)	27% (2021: 28%)
JSE Clear (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
JSE Clear Derivatives Default Fund (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
Strate (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
Nautilus MAP Holdings (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
Nautilus Map RF (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
JSE Trustees (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
JSE Investor Services (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
JSE Investor Services CSDP (Pty) Ltd	28% (2021: 28%)	27% (2021: 28%)
JSE Private Placements (Pty) Limited	28% (2021: 28%)	27% (2021: 28%)
Pacific Custodians (Nominees) (RF) (Pty) Ltd.	28% (2021: 28%)	27% (2021: 28%)
JSE Derivatives Fidelity Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act of 1962	
JSE Guarantee Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act of 1962	
JSE Debt Guarantee Fund Trust	Exempt from income tax in terms of s10(1)(d)(iii) of the Income Tax Act of 1962	

	GROUP		COMPANY	
	2022	2021	**2022**	2021
9. Earnings and headline earnings per share				
9.1 Total basic earnings per share				
Profit for the year attributable to ordinary shareholders (R'000)	**748 556**	722 443	**729 204**	707 924
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 and JEF Trust))	**(4 720 454)**	(4 226 718)	**(2 590 815)**	(2 097 079)
Weighted average number of ordinary shares at 31 December	**82 157 146**	82 650 882	**84 286 785**	84 780 521
Total earnings per share (cents)	**911.1**	874.1	**865.1**	835.0

	GROUP		COMPANY	
	2022	2021	**2022**	2021
9. Earnings and headline earnings per share (continued)				
9.2 Total diluted earnings per share				
Profit for the year attributable and distributable to ordinary shareholders (R'000)	**748 556**	722 443	**729 204**	707 924
Weighted average number of ordinary shares (diluted):				
Weighted average number of ordinary shares at 31 December (basic)	**82 157 146**	82 650 882	**84 286 785**	84 780 521
Effect of LTIS Share Scheme	**916 922**	732 166	**916 922**	732 166
Weighted average number of ordinary shares (diluted)	**83 074 067**	83 383 047	**85 203 706**	85 512 686
Diluted earnings per share (cents)	**901.1**	866.4	**855.8**	827.9
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 (R'000):				
Profit for the year attributable to ordinary shareholders	**748 556**	722 443	**729 204**	707 924
Adjustments are made to the following:				
Gross Amount	**5 396**	4 002	**5 396**	4 002
Impairment of intangible asset	**5 396**	5 558	**5 396**	5 558
– Taxation effect	**–**	(1 556)	**–**	(1 556)
Gross Amount	**(10)**	(3)	**–**	–
Profit on disposal of property and equipment	**(14)**	(4)	**–**	–
– Taxation effect	**4**	1	**–**	–
Total headline earnings (R'000)	**753 941**	726 442	**734 600**	711 926
Total headline earnings per share (cents)	**917.7**	878.9	**871.5**	839.7
9.4 Diluted headline earnings per share				
Total diluted headline earnings per share (cents)	**907.6**	871.2	**862.2**	832.5

10. Property and equipment

10.1 Cost

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Group						
2022						
Balance at 1 January 2022		**577 033**	**67 994**	**196 799**	**338**	**842 164**
Additions		**35 647**	**2 847**	**20 024**	**–**	**58 518**
Disposals*		**(24)**	**–**	**–**	**–**	**(24)**
Derecognition**		**(1 997)**	**–**	**–**	**–**	**(1 997)**
Balance at 31 December 2022		**610 659**	**70 841**	**216 823**	**338**	**898 661**
Group						
2021						
Balance at 1 January 2021		541 217	67 980	132 988	338	742 523
Additions		35 820	14	63 811	–	99 645
Disposals		(4)	–	–	–	(4)
Balance at 31 December 2021		577 033	67 994	196 799	338	842 164

10.2 Accumulated depreciation

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Group						
2022						
Balance at 1 January 2022		**486 259**	**58 907**	**120 965**	**187**	**666 318**
Depreciation charge for the year	7.2	**47 786**	**3 032**	**17 979**	**52**	**68 848**
Disposals*		**(3)**	**–**	**–**	**–**	**(3)**
Derecognition**		**(1 997)**	**–**	**–**	**–**	**(1 997)**
Balance at 31 December 2022		**532 045**	**61 939**	**138 944**	**239**	**733 167**
Group						
2021						
Balance at 1 January 2021		435 132	53 987	113 350	127	602 597
Depreciation charge for the year	7.2	51 127	4 920	7 615	60	63 722
Balance at 31 December 2021		486 259	58 907	120 965	187	666 319

* Computer hardware items recognised in JIS were disposed of for proceeds amounting to circa R35 000 in the current year.
** Assets with zero carrying values were derecognised for non-cash proceeds.

10. Property and equipment (continued)

10.3 Carrying amounts

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Group						
2022						
At 31 December 2021		**90 774**	**9 087**	**75 834**	**151**	**175 845**
At 31 December 2022		**78 614**	**8 902**	**77 879**	**99**	**165 494**
Group						
2021						
At 31 December 2020		106 085	13 993	19 638	211	139 927
At 31 December 2021		90 774	9 087	75 834	151	175 845

10.4 Cost

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Company						
2022						
Balance at 1 January 2022		**572 832**	**67 034**	**196 555**	**338**	**836 759**
Additions		**35 284**	**2 847**	**20 024**	**–**	**58 155**
Derecognition*		**(1 997)**	**–**	**–**	**–**	**(1 997)**
Balance at 31 December 2022		**606 119**	**69 881**	**216 579**	**338**	**892 917**
Company						
2021						
Balance at 1 January 2021		540 386	67 034	132 744	338	740 502
Additions		32 446	–	63 811	–	96 257
Balance at 31 December 2021		572 832	67 034	196 555	338	836 759

* Assets with zero carrying values were derecognised for non-cash proceeds.

10. Property and equipment (continued)

10.5 Accumulated depreciation

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Company						
2022						
Balance at 1 January 2022		**484 691**	**58 361**	**120 864**	**187**	**664 103**
Depreciation charge for the year	7.2	**46 309**	**2 668**	**17 974**	**52**	**67 003**
Derecognition*		**(1 997)**	**–**	**–**	**–**	**(1 997)**
Balance at 31 December 2022		**529 003**	**61 029**	**138 838**	**239**	**729 109**
Company						
2021						
Balance at 1 January 2021		435 079	53 945	113 327	127	602 478
Depreciation charge for the year	7.2	49 612	4 416	7 537	60	61 624
Balance at 31 December 2021		484 691	58 361	120 864	187	664 102

10.6 Carrying amounts

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total assets R'000
Company						
2022						
At 31 December 2021		**88 141**	**8 673**	**75 691**	**151**	**172 657**
At 31 December 2022		**77 116**	**8 852**	**77 741**	**99**	**163 807**
Company						
2021						
At 31 December 2020		105 307	13 089	19 417	211	138 024
At 31 December 2021		88 141	8 673	75 691	151	172 657

* Assets with zero carrying values were derecognised for non-cash proceeds.

11. Intangible assets

11.1 Cost

	Notes	Goodwill R'000	Trade names R'000	Customer relationship R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Group							
2022							
Balance at 1 January 2022		**215 504**	**2 217**	**133 828**	**1 195 808**	**31 393**	**1 578 750**
Additions		**–**	**–**	**–**	**72 328**	**67 661**	**139 989**
Derecognition*		**–**	**–**	**–**	**(9 631)**		**(9 631)**
Transfer from software development		**–**	**–**	**–**	**48 236**	**(48 236)**	**–**
Balance at 31 December 2022		**215 504**	**2 217**	**133 828**	**1 306 741**	**50 818**	**1 709 108**
Group							
2021							
Balance at 1 January 2021		215 504	2 217	133 828	1 138 910	28 212	1 518 671
Additions		–	–	–	27 973	37 664	65 637
Write-off		–	–	–	–	(5 558)	(5 558)
Transfer from software development		–	–	–	28 925	(28 925)	–
Balance at 31 December 2021		215 504	2 217	133 828	1 195 808	31 393	1 578 750

11.2 Accumulated amortisation and impairment losses

	Notes	Goodwill R'000	Trade names R'000	Customer relationship R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Group							
2022							
Balance at 1 January 2022		**–**	**1 753**	**10 409**	**840 081**	**–**	**852 243**
Amortisation for the year	7.2	**–**	**–**	**8 922**	**155 978**	**–**	**164 900**
Impairment loss**		**–**	**–**	**–**	**5 396**	**–**	**5 396**
Derecognition*					**(9 631)**		**(9 631)**
Balance at 31 December 2022		**–**	**1 753**	**19 331**	**991 824**	**–**	**1 012 908**
Group							
2021							
Balance at 1 January 2021		–	1 753	1 487	694 775	–	698 015
Amortisation for the year		–	–	8 922	145 306	–	154 228
Balance at 31 December 2021		–	1 753	10 409	840 081	–	852 243

* Assets with zero carrying values derecognised for non-cash proceeds.

** Relates to an idle intangible asset which was reserved for an untraded commodities product. The amount is fully impaired in the current year as no future economic benefits are expected to be recovered through use or sale of the asset. The value in use (recoverable amount) is determined at nil in the current year as there is no information supporting the continued usage for the asset as at reporting date.

11. Intangible assets (continued)

11.3 Carrying amounts

	Notes	Goodwill R'000	Trade names R'000	Customer relationship R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Group							
2022							
At 31 December 2021		**215 504**	**464**	**123 419**	**355 727**	**31 393**	**726 507**
At 31 December 2022		**215 504**	**464**	**114 497**	**314 916**	**50 818**	**696 200**
Group							
2021							
At 31 December 2020		215 504	464	132 341	444 134	28 212	820 656
At 31 December 2021		215 504	464	123 419	355 727	31 393	726 507

11.4 Cost

	Notes	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Company						
2022						
Balance at 1 January 2022		**82 987**	**1 829**	**1 160 303**	**28 756**	**1 273 874**
Additions		**–**	**–**	**72 328**	**67 661**	**139 989**
Derecognition*		**–**	**–**	**(9 631)**	**–**	**(9 631)**
Transfer from software under development		**–**	**–**	**48 236**	**(48 236)**	**–**
Transfer to non-current assets held for sale		**–**	**–**	**(200 901)**		**(200 901)**
Balance at 31 December 2022		**82 987**	**1 829**	**1 070 335**	**48 181**	**1 203 331**
Company						
2021						
Balance at 1 January 2021		82 987	1 829	1 106 642	25 575	1 217 032
Additions		–	–	24 736	37 664	62 400
Write-off		–	–	–	(5 558)	(5 558)
Transfer from software under development		–	–	28 925	(28 925)	–
Balance at 31 December 2021		82 987	1 829	1 160 303	28 756	1 273 874

* Assets with zero carrying values derecognised for non-cash proceeds.

11. Intangible assets (continued)
11.5 Accumulated amortisation

	Notes	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Company						
2022						
Balance at 1 January 2022		**–**	**1 829**	**811 923**	**–**	**813 752**
Amortisation for the year	7.2	**–**	**–**	**151 011**	**–**	**151 011**
Transfer to non-current assets held for sale				**(124 011)**	**–**	**(124 011)**
Impairment loss**	7.2			**5 396**		**5 396**
Derecognition*				**(9 631)**		**(9 631)**
Balance at 31 December 2022		**–**	**1 829**	**834 688**	**–**	**836 517**
Company						
2021						
Balance at 1 January 2021		–	1 829	671 440	–	673 269
Amortisation for the year		–	–	140 483	–	140 483
Balance at 31 December 2021		–	1 829	811 923	–	813 752

11.6 Carrying amounts

	Notes	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
Company						
2022						
At 31 December 2021		**82 987**	**–**	**348 380**	**28 756**	**460 122**
At 31 December 2022		**82 987**	**–**	**235 646**	**48 181**	**366 813**
Company						
2021						
At 31 December 2020		82 987	–	435 201	25 575	543 763
At 31 December 2021		82 987	–	348 380	28 756	460 122

* Assets derecognised for non-cash proceeds.

** Relates to an idle intangible asset which was reserved for an untraded commodities product. The amount is fully impaired in the current year as no future economic benefits are expected to be recovered through use or sale of the asset. The value in use (recoverable amount) is determined at nil in the current year as there is no information supporting the continued usage for the asset as at reporting date.

11. Intangible assets (continued)

11.7 Impairment testing for cash-generating units containing goodwill – Company

For the purpose of impairment testing, goodwill is allocated to the cash-generating unit (CGU), which represent the lowest level at which goodwill is monitored for internal management purposes, which is not higher than the operating segments as reported in note 6.

A 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. The only CGU allocated goodwill is the interest rate market related to the goodwill that arose with the acquisition of the Bond Exchange of South Africa. The carrying value of the goodwill as at 31 December 2022 was R83 million and the carrying value of CGU it was assigned to was R93 million.

In order to assess impairment of this goodwill, management calculated the value in use by performing estimated future cash flows. This has been included in the Capital Markets reportable segment. A pre-tax weighted average cost of capital (WACC) of 22.3% (2021: 20.9%) was used to discount the future earnings, taking into account any specific risk premiums that may be applicable. The growth rate used was 2% (2021: 3%) and the terminal rate was 2% (2021: 2%).

These cash flows have been based on the financial forecasts for the 2023 financial year and strategic plans over a 6-year-period (2021: 7 years), which is consistent with past experience. The period of 6-years is aligned to the remaining useful life of assets supporting the entity. These are in line with inflation.

The assumptions used include profit before interest and tax, depreciation, working capital movements, capital maintenance expenditure and an appropriate discount rate.

The recoverable amount of the CGU totalling R133 million (2021: R180 million) was determined based on the value in use within the Company. The Goodwill assessment related to the CGU did not require impairment during the 2022 financial year.

Sensitivity analysis

Changes in the following key assumptions on which management has based its determination of the recoverable amount would impact the recoverable amount as follows with no required impairment:

- A 100 basis point increase in the discount rate would decrease the recoverable amount of the CGU by R6.9 million (2021: R10.6 million) at 31 December.
- A 100 basis point decrease in the growth rate would decrease the recoverable amount by R20.2 million (2021: R4.7 million) at 31 December.

11. Intangible assets (continued)

11.8 Impairment testing for goodwill acquired in a business combination – Group

The JSE acquired 74.85% of the voting shares of Link Market Services South Africa (Pty) Limited, subsequently renamed 'JSE Investor Services (Pty) Limited' during 2020. On 17 June 2021, the Group acquired the remaining 25.15% interest in the equity of JIS increasing its ownership interest to 100%. The Group is required to test, on an annual basis, whether goodwill has suffered any impairment. The recoverable amount is determined based on value in use calculations. The use of this method requires the estimation of future cash flows and the determination of a discount rate in order to calculate the present value of the cash flows.

The JSE Investor Services Group **('JIS')** is regarded as a single integrated CGU due to the fact that the services are integrated and the Group is managed on an integrated basis. The carrying amount of goodwill pertaining to JIS was R133 million as at 31 December 2022 (2021: R133 million).

The free cash flow model was used to calculate the recoverable amount of R365 million (2021: R360 million) based on the cash flow projections from formally approved budgets covering a five year period and is based on certain assumptions. Management made the following key assumptions in its determination of the recoverable amount:

- JSE Investor Services is a going concern and would be able to continue operating for the foreseeable future.
- The calculations use cash flow projections based on financial budgets approved by JSE Investor Services (Pty) Limited management and the Group Board. The projections incorporated past experience and growth expectations.
- A pre-tax discount rate of 20.1% (2021: 20.2%) was used to calculate the present value of future cash flows.
- Funding will be sourced under market related conditions as required.
- An average revenue growth rate of 5% (2021: 8%) was used with a terminal rate of 4% (2021: 4%).
- Five year projection was applied.

For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

The recoverable amount of the CGU was determined based on value in use.

The Goodwill related to JSE Investor (Pty) Limited did not require impairment during the 2022 financial year.

Sensitivity analysis

Changes in the following key assumptions on which management has based its determination of the recoverable amount would impact the recoverable amount as follows with no required impairment:

- A 100 basis point increase in the discount rate would decrease the recoverable amount of the CGU by R26 million (2021: R26 million) at 31 December.
- A 100 basis point decrease in the growth rate would decrease the recoverable amount of the CGU by R16 million (2021: R16 million) at 31 December.

12. Investment in associate

12.1 Carrying amount

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Strate (Pty) Limited				
Carrying amount at beginning of year	**328 262**	319 907	**21 416**	21 416
– Dividends received	**(40 271)**	(43 242)	**–**	–
– Share of profit	**40 997**	51 597	**–**	–
Total investment in associate*	**328 989**	328 262	**21 416**	21 416

* JSE's portion of the net assets of Strate (Pty) Limited amounts to R329 million (44.55% of net assets - R738 million (2021: R328 million - 44.55% of net assets - R737 million).

12.2 Summarised financial statements at 31 December

	STRATE (PTY) LIMITED 2022 R'000	STRATE (PTY) LIMITED 2021 R'000
Non-current assets	**240 002**	234 781
Current assets	**638 005**	649 765
Total assets	**878 007**	884 546
Equity	**737 950**	736 833
Non-current liabilities	**10 718**	21 059
Current liabilities	**129 338**	126 654
Total equity and liabilities	**878 007**	884 546
Revenue	**491 726**	483 754
Other income including finance income	**30 001**	25 378
Expenses	**(388 450)**	(347 173)
Taxation	**(41 252)**	(43 963)
Profit for the year	**92 026**	117 996

12. Investment in associate (continued)

12.3 Unlisted associated company

	Effective holding 2022 %	Effective holding 2021 %	Number of shares held 2022 R'000	Number of shares held 2021 R'000
Group and Company				
Strate (Pty) Limited	**44.55**	44.55	**4 346**	4 346

Strate (Pty) Limited is an authorised Central Securities Depositary (CSD) for the electronic settlement of cash equity, bond and money market instruments and a company incorporated in South Africa. The Group does not exercise control over this entity.

13. Subsidiaries – Company

13.1 Investments in subsidiaries

	Issued share capital/trust capital	Percentage holding 2022 %	Percentage holding 2021 %	Carrying value of shares held 2022 R'000	Carrying value of shares held 2021 R'000
13.1.1 JSE Clear (Pty) Limited[1]					
– Ordinary shares at par value	8 301	**100**	100	**218 201**	103 201
13.1.2 JSE Clear Derivatives Default Fund (Pty) Limited[2]					
– Ordinary shares of R1 each	1	**100**	100	*****	*
– Reclassified to non-current assets held for sale[2]				**(*)**	(*)
13.1.3 JSE Trustees (Pty) Limited					
– Ordinary shares of R1 each	7	**100**	100	*****	*
The Group elected directors to hold shares in their capacity as nominees for the Exchange. The Exchange has control over the operating and decision-making activities of JSE Trustees (Pty) Limited.					
13.1.4 Nautilus MAP Holdings (Pty) Limited					
– 1 ordinary share of R1 each	1	**100**	100	*****	*
Nautilus MAP Holdings (Pty) Limited holds 100% of the ordinary shares in Nautilus MAP RF (Pty) Limited and Nautilus MAP Operations (Pty) Limited. The entities are in the process of being deregistered.					
13.1.5 JSE LTIS 2010 Trust					
– Trust capital	1 000	**100**	100	**1**	1

13. Subsidiaries – Company (continued)

13.1 Investments in subsidiaries (continued)

	Issued share capital/trust capital	PERCENTAGE HOLDING 2022 %	PERCENTAGE HOLDING 2021 %	CARRYING VALUE OF SHARES HELD 2022 R'000	CARRYING VALUE OF SHARES HELD 2021 R'000
13.1.6 JSE LTIS 2018 Trust					
– Trust capital	1 000	**100**	100		
13.1.7 BESA Limited					
– Ordinary shares of 12.5 cents each	1 925	**100**	100	**101 150**	101 150
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.					
13.1.8 JSE Investor Services					
– 100% of the ordinary shares at par value each	1 381	**100**	74.85	**307 073**	307 073
JSE Investor Services (Pty) Ltd holds 100% of the ordinary shares in JSE Investor Services CSDP (Pty) Ltd and Pacific Custodians (Nominees) (RF) (Pty) Ltd.					
13.1.9 JSE Private Placements (Pty) Ltd[3]	1 000	**100**	–	**1**	1
Additional investment		**100**	–	**15 000**	–
Investments in subsidiaries				**641 426**	511 426

13.1.10 Investor protection funds

In terms of section 9.1(e) of the FMA, 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 JSE Debt 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) Ltd is the appointed clearing house and CCP for the JSE's derivative markets, as defined in the Financial Markets Act No.19 of 2012 ("FMA"). The principal activities of the company during the year were the continued development and provision of clearing facilities for these markets and the enhancement of the risk management practices of the clearing house. Additionally, in 2022 JSE Clear was successfully able to secure an Independent Clearing House licence ("ICH"), making it the only licensed Central Counterparty Clearing House ("CCP") operating in South Africa. Consequently an amount of R115 million was contributed by the JSE limited to recapitalise JSE Clear (Pty) Ltd and the entity will operate as a CCP in the 2023 financial period. Refer to note 18 for further details.

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. The investment in subsidiary is reclassified to non-current held for sale. Refer to note 18 for further details.

3 JSE Private Placements (Pty) Limited is a private markets solution using the Globacap platform, a block chain based information technology system and platform that aims to simplify and automate private capital markets for growth on the African continent. Capital amounting to R15 million was injected to the company in the current year).

13. Subsidiaries – Company (continued)

13.2 Acquisition of additional interest in JIS

13.2.1 Summary of acquisition

On 17 June 2021, the Group acquired an additional 25.15% interest in the equity of JIS increasing its ownership interest to 100%.

Cash consideration of R75 450 000 was paid to the non-controlling shareholders.

The following is a schedule of additional interest acquired in JIS:

	GROUP 2022 R'000	GROUP 2021 R'000
Cash consideration paid to non-controlling shareholders	–	75 450
Carrying value of interest in JIS	–	38 318
Difference recognised in retained earnings	–	37 132

JIS is wholly owned by the Group and as such no non-controlling interest exists post 17 June 2021. The Group remains confident that the recoverable amount for the JIS CGU exceeds the carrying value of goodwill and other net assets related to JIS (net carrying amount). A goodwill assessment for impairment in line with IAS 36 Impairment of assets was performed. Refer to note 11.7.

The following is a schedule of additional interest acquired in JIS:

Financial information of subsidiaries that had non-controlling interests provided below:

	GROUP Year ended 31 December 2022 R'000	GROUP Year ended 31 December 2021 R'000
Accumulated balances of material non-controlling interest:	–	37 586
Profit allocated to material non-controlling interest:	–	254

There were no indicators as at 31 December 2022 that goodwill related to this transaction was impaired.

13. Subsidiaries – Company (continued)

13.3 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 the 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.	The committee shall at all times be comprised of at least three people who are not connected persons in relation to each other and shall have exclusive administration and control of the Fund and of the income arising therefrom. The Committee may delegate its powers and duties to such sub-Committee as it deems fit. This is a structured fund to which administrative services are outsourced to a third party. The JSE does not provide financial or administrative support to this unconsolidated fund.

13.4 Due from Group entities

	COMPANY	
	2022 R'000	2021 R'000
Nautilus MAP RF (Pty) Limited	**31 576**	31 576
Allowance for impairment loss	**(30 961)**	(29 076)
Owed by/(Owing to) Nautilus MAP RF (Pty) Limited	**629**	(2 467)
JSE Clear (Pty) Limited	**42 456**	40 214
JSE Clear Derivatives Default Fund (Pty) Limited	**–**	–
JSE Trustees (Pty) Limited	**10 561**	8 255
JSE Guarantee Fund Trust	**5 897**	(108)
JSE Debt Guarantee Fund Trust	**457**	448
JSE Empowerment Fund Trust	**25 045**	25 784
JSE Investor Services (Pty) Limited	**1 229**	–
JSE Private Placements (Pty) Limited	**8 611**	–
Total due from Group entities – current assets	**95 500**	74 626

Amounts due from Nautilus MAP RF (Pty) Limited are unsecured and interest free.

An additional R1.8 million allowance for impairment loss was accounted for in 2022 (2021: R0.8 million).

13. Subsidiaries – Company (continued)

13.4 Due from Group entities (continued)

Company

All entities are incorporated in the Republic of South Africa.

Amounts due from Group entities are interest free and 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.

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.

14. Other investments

14.1 Investor protection funds fair value through OCI financial assets

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
14.1.1 JSE Derivatives Fidelity Fund Trust				
Bonds*	**15 056**	15 639	**–**	–
Listed equities	**96 256**	87 430	**–**	–
Protective cell funds	**129 647**	142 597	**–**	–
	240 959	245 666	**–**	–
14.1.2 JSE Guarantee Fund Trust			**–**	–
Bonds*	**11 240**	11 676	**–**	–
Listed equities	**68 884**	64 061	**–**	–
Protective cell funds	**97 126**	114 607	**–**	–
Collective investment scheme	**7 225**	6 747	**–**	–
	184 475	197 091	**–**	–
	425 433	442 756	**–**	–
14.2 Other investments				
Stock Exchange Nominees (Pty) Ltd – at fair value through OCI	**1**	1	**1**	1
Bonds – Reserve Portfolio – measured at fair value through OCI	**142 527**	–	**142 527**	–
Non-listed equity instruments designated at fair value through OCI (Globacap)	**81 869**	86 480	**81 869**	86 480
	649 831	529 237	**224 397**	86 481

* The current year bonds value includes an investment in South African Government Bonds executed by the Group in the current year as part of the highly liquid investment held for regulatory capital purposes. The Group believes that no impairment allowance is necessary in respect all bond financial assets. Historic default rates in the assessment of the probability of credit losses, while incorporating forward-looking macro-economic factors were used when testing for impairment allowances.

The following equity instruments have been disposed of during the current year i.e. Anheuser-Busch Inbev SA, Anglo American PLC, Standard Bank Group Limited, The Foschini Group, Bidvest Limited and Thungela Resources. These disposals were actioned as part of the investment mandate. The proceeds of these equity instruments amounted to R25.6 million (2021: R8.5 million) and the cumulative gain on disposal was R2.7 million (2021 R1.7 million). The amount of the proceeds is equal to fair value. Additional proceeds from the sale of unit trust investments amounting to R7.2 million (2021: R11.9 million) were recognised in the current period. There were no transfers in equity during the year.

All bonds are debt instruments amounting to R169 million and the remaining balance of R481 million relates to equity instruments.

15. Trade and other receivables

15.1 Trade and other receivables

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Interest receivable	**351 976**	190 959	**7 107**	5 419
Other receivables*	**38 570**	46 475	**15 783**	24 580
Prepaid expenses	**95 268**	69 103	**90 136**	65 611
Trade receivables	**307 218**	286 885	**282 720**	248 772
	793 033	593 423	**395 746**	344 382

* Includes JSE share of FTSE revenue, management fee in respect of JSE Trustees.

The age analysis of trade receivables is as follows:

	GROUP Gross R'000	GROUP Allowance for impairment losses R'000	COMPANY Gross R'000	COMPANY Allowance for impairment losses R'000
At 31 December 2022:				
Fully performing: 0 – 30 days	**287 980**	**–**	**273 089**	**–**
Past due: 31 – 90 days	**22 038**	**–**	**15 416**	**–**
Past due: More than 90 days	**12 615**	**15 415**	**8 937**	**14 721**
Total	**322 633**	**15 415**	**297 441**	**14 721**
At 31 December 2021:				
Fully performing: 0 – 30 days	267 612	–	236 005	–
Past due: 31 – 90 days	12 912	–	6 944	–
Past due: More than 90 days	15 840	9 479	14 446	8 623
Total	296 364	9 479	257 395	8 623

15. Trade and other receivables (continued)

15.1 Trade and other receivables (continued)

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

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
At 1 January	**9 479**	8 093	**8 623**	7 894
Increase in allowance for impairment	**5 936**	1 386	**6 098**	729
At 31 December	**15 415**	9 479	**14 721**	8 623

The expected credit loss per category is as follows:

Ageing	Default Rate
Current	0.22%
31 to 60 days	0.38%
61 to 90 days	0.86%
91 to 120 days	1.00%
Over 120 days	1.02%

Under IFRS 9, the Group uses historic default rates in the assessment of the probability of credit losses, while incorporating forward-looking macro economic factors. The Group believes that no further impairment allowance is necessary in respect of trade receivables. The expected credit loss per category is as follows:

The Group uses the simplified approach in calculating ECL for trade receivables and other receivables.

The credit terms are 30 days.

The Group uses the general approach in calculating ECL for interest receivables. The ECL is immaterial.

16. 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.

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
16.1 Margin deposits				
Derivatives funds held by JSE Clear (Pty) Limited	**55 284 459**	55 072 710	**–**	–
Equities	**508 088**	339 964	**508 088**	339 964
	55 792 547	55 412 674	**508 088**	339 964
16.2 Collateral deposits	**20 267**	169 962	**20 267**	169 962
The JSE acts as an agent in equity securities lending transactions necessary to facilitate electronic settlement of equity trades in the Strate environment. At 31 December 2022, interest-bearing collateral deposits of R20.3 million (2021: R169 million) have been lodged as security against securities lending transactions with a market value of R5.7 million (2021: R105 million).				
16.3 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.				
Transferred to non-current asset held for sale			**(100 000)**	–
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 R100 million (2021: R100 million).				
JSE Clear Derivatives Default Fund (Pty) Limited members' contributions	**400 000**	400 000	**–**	–
17. Cash and cash equivalents				
Cash and cash equivalents comprises:				
Bank balances	**1 034 190**	1 319 750	**677 789**	1 030 717
Term deposits	**1 188 971**	1 073 252	**922 389**	951 267
Total cash and cash equivalents	**2 223 161**	2 393 002	**1 600 178**	1 981 984

18. Assets of disposal group classified as held for sale note

JSE Clear Proprietary limited ('JSEC'), a wholly owned subsidiary of JSE Limited, was granted an independent clearing house ("ICH") licence by the Financial Services Conduct Authority ("FSCA") on 1 September 2022. Commencement of operations as an ICH are anticipated from the beginning of the 2023 financial period.

The prerequisite for the ICH licence is the ability for JSEC to function as an independent entity i.e. the main operational assets and transactions must be controlled and executed by the entity directly. JSE limited will transfer the real time clearing system intangible asset, investment in subsidiary (JSE Clear Derivatives Default Fund Proprietary Limited – JSEC DDF) and the collateral deposit relating to JSEC DDF to JSEC in 2023.

Consequently, the assets relating to clearing operations are presented as a non-current asset classified as held for sale.

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021* R'000
18.1 Assets of disposal groups classified as held for sale				
Intangible assets	**–**	–	**76 891**	–
Investment in subsidiaries*	**–**	–	**–**	–
JSE Clear Derivatives Default Fund collateral deposits			**100 000**	
Total assets	**–**	–	**176 891**	–

* Less than R1 000.

	GROUP		COMPANY	
	2022 '000	2021 '000	**2022 '000**	2021 '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				
Actual number of shares in issue				
Number of actual issued shares	**86 878**	86 878	**86 878**	86 878
LTIS treasury shares actual	**(2 693)**	(2 149)	**(2 693)**	(2 149)
Empowerment Fund Trust treasury shares	**(2 130)**	(2 130)	**–**	–
Actual number shares in issue* (net of treasury shares)	**82 055**	82 599	**84 184**	84 728
Stated capital (net of treasury shares) in rands				
Stated capital	**8 688**	8 688	**8 688**	8 688
Share premium	**184 354**	184 354	**184 354**	184 354
LTIS treasury shares actual**	**(306 023)**	(255 067)	**(306 023)**	(255 067)
JSE empowerment fund shares	**(5 715)**	(5 715)	**–**	–
Balance at 31 December	**(118 697)**	(67 741)	**(112 982)**	(62 026)

* Differs from note 9.1 weighted average number of shares compared to actuals disclosed in this note.

** The objective of JSE LTIS Trust is to facilitate the purchase and allocation of JSE limited shares awarded to beneficiaries in terms of the JSE Long Term Incentive Scheme. The trust acts as an agent of the company, consequently these shares are directly held by JSE limited company in a principal capacity as treasury shares. The LTIS trust does not hold any shares at separate entity level.

19. Stated capital and reserves (continued)

19.3 Stated capital and reserves

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Stated capital (net of treasury shares)	**(118 697)**	(67 741)	**(112 983)**	(62 027)
Non-distributable reserves made up as follows:	**684 331**	684 648	**19 123**	21 420
Dividends paid to JEF	**51 517**	33 329	**–**	–
Fines – listed companies	**18 883**	19 494	**18 883**	19 494
Fair value reserve[1]	**(1 652)**	1 926	**(1 652)**	1 926
JEF Trust reserves[4]	**54 360**	54 360	**–**	–
Investor protection funds	**561 222**	575 539	**–**	–
Fair value reserve (Non-distributable reserves)[1]	**215 695**	233 413	**1 892**	–
– JSE Derivatives Fidelity Fund Trust	**108 266**	119 900	**–**	–
– JSE Guarantee Fund Trust	**105 538**	113 513		
– South African Government bonds reserve	**1 892**	-	**1 892**	–
Capital and accumulated funds[2]	**345 527**	342 126	**–**	–
– JSE Debt Guarantee Fund Trust	**120 273**	118 679	**–**	–
– JSE Derivatives Fidelity Fund Trust	**135 983**	131 535	**–**	–
– JSE Guarantee Fund Trust	**89 271**	91 912	**–**	–
Share based payment reserve[3]	**70 319**	72 839	**70 319**	72 839
Retained earnings	**3 537 194**	3 529 234	**3 327 771**	3 335 762
Total	**4 173 147**	4 218 982	**3 304 230**	3 367 994

[1] This reserve comprises fair value adjustments in respect of fair value through OCI 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 and 2018 Long-Term Incentive Schemes that have been expensed to date.
[4] The total number of treasury shares held by the Group as at 31 December 2022 was 4 823 009 (2021: 3 662 367).

19. Stated capital and reserves (continued)

19.4 Dividends declared and paid

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Ordinary dividend of 754 cents (2021: 725 cents) per share*	**639 000**	614 423	**655 057**	629 863
Special dividend of 100 cents (2021: NIL) per share*	**84 748**	–	**86 878**	–
Total dividend of 854 cents (2021: 725 cents) on unallocated treasury shares	**(4 129)**	(1 637)	**(4 129)**	(1 637)
	719 619	612 785	**737 806**	628 225

* The dividend paid to the JSE Empowerment Fund Trust amounting to R18.2 million (2021: R15.4 million) are eliminated at Group level.

20. Employee benefits

20.1 Group and Exchange

	Notes	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Non-current liabilities		**7 257**	4 035	**7 257**	4 035
Critical skills cash scheme liability	20.4	**7 257**	4 035	**7 257**	4 035
Current liabilities		**136 198**	130 699	**130 355**	128 446
Leave pay accrual		**42 809**	41 360	**39 966**	39 107
Critical skills cash scheme liability	20.4	**8 556**	13 551	**8 556**	13 551
Discretionary bonus and bursary scheme		**84 833**	75 788	**81 833**	75 788

20. Employee benefits (continued)

20.2 Discretionary bonus

The Group Human Resources Committee (GHRC) determines the discretionary bonus pool, based on its assessment of annual corporate performance against a pre-set corporate scorecard for the year as approved by the Board. Individual awards are linked to seniority, individual performance and contribution to corporate performance. Awards under this scheme are not subject to deferral.

The CEO shall, in respect of each financial year of employment with the Company (at the discretion of the GHRC) be entitled to receive a discretionary bonus, the gross amount of which annual bonus shall not exceed 200% of cost to company remuneration for that financial year. The quantum of the bonus, shall be based on the Company's financial performance for that year and meeting the annual corporate and Group CEO scorecard objectives.

The discretionary bonus scheme is an annual incentive for qualifying employees. All permanent staff members are eligible to participate in this scheme.

The total discretionary bonus pool for 2022 amounted to R82 million (2021: R72.3 million), of which R27.6 million (2021: R23.2 million) was paid to executive management.

20.3 Retirement benefits

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

20.4 Critical skills cash scheme

This is a cash-only retention scheme, applicable to selected senior employees of the JSE with scarce or critical skills. Employees that participate in this scheme are not eligible to participate in the JSE's long-term equity scheme. The scheme is not a cash settled share based payment transaction.

During the current financial year, the award granted in 2019 has vested and a new award was granted which will vest in March 2024. The unvested portion attracts interest at the commercial rate earned on funds under management in JSE Trustees. Corporate and individual performance hurdles apply to awards granted under this scheme. The net present value and interest movement in both schemes resulted in a charge to profit and loss of R11.7 million (2021: R12.2 million). The value vested in the current year during March is R12.95 million (2021: R12.6 million).

	Critical Skills Cash Scheme 2022 R'000	Critical Skills Cash Scheme 2021 R'000
Total cash value of award approved by Board	**19 136**	10 752

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018)

The LTIS 2018 scheme was approved by shareholders at the annual general meeting held in May 2018.

Scheme objective and design

The main objective of LTIS 2018 is to retain and incentivise selected senior employees of the JSE to deliver sustained corporate performance, aligned with shareholder interests, over rolling three and four year time horizons.

These LTIS schemes are full-value, performance share schemes. Scheme participants receive equity awards on an annual basis and vesting is linked to continued employment and the JSE achieving pre-set Group performance conditions over the vesting period. To fulfil these share awards, JSE ordinary shares are acquired on an annual basis in the open market by a trust established by the JSE, with scheme participants having immediate beneficial ownership from the date of the award, but subject to restrictions. Share awards are forfeited if either the employment requirement or the corporate performance conditions are not met.

Allocation #1 under LTIS 2018

The first award ("Allocation 1") under LTIS 2018 was granted in September 2018 with the following vesting profile:

	Corporate performance shares
Senior management award	
Share price at grant date (rands per share)	156.37
Total number of shares granted	203 650
Dividend yield (%)	3
Grant date	18 September 2018
Vesting profile:	
50% of the shares awarded vest on 31 August 2021 (Tranche 1)	101 825
50% of the shares awarded vest on 31 August 2022 (Tranche 2)	101 825
Executive Committee award	
Share price at grant date (rands per share)	153.75
Total number of shares granted	175 820
Dividend yield (%)	3
Grant date	18 September 2018
Vesting profile:	
50% of the shares awarded vest on 31 August 2021 (Tranche 1)	87 910
50% of the shares awarded vest on 31 August 2022 (Tranche 2)	87 910

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018) (continued)

Tranche 2 – fully vested

Tranche 2: 50% of the total award, vested on 31 August 2022. All participants still in the employ of the Company as at 31 August 2022 were eligible to participate in the vesting of this tranche in accordance with the terms and conditions of the Scheme rules.

In respect of Tranche 2, the Board assessed the performance over the three-year vesting term against the pre-set financial and strategic targets and determined that 45.3% of these Tranche 2 shares vested for those participants still in the employ of the JSE on 31 August 2022.

	Corporate performance shares
Senior management award	
As at 31 December 2022, details of Tranche 2 were as follows:	
Original number of Tranche 2 shares awarded in September 2018	101 825
Forfeited by leavers to date	(14 700)
Tranche 2 shares forfeited for missing performance targets	(47 659)
Accelerated for good leavers to date	(8 632)
Tranche 2 shares vested on 31 August 2022	(30 834)
Tranche 2 shares outstanding	–
Executive committee award	
Original number of Tranche 2 shares awarded in September 2018	87 910
Forfeited by leavers to date	(14 925)
Tranche 2 shares forfeited for missing performance targets	(25 691)
Accelerated for good leavers to date	(38 375)
Tranche 2 shares vested on 31 August 2022	(8 919)
Tranche 2 shares outstanding	–

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018) (continued)

Allocation #2 under LTIS 2018

	Corporate performance shares
Share price at grant date (rands per share)	159.80
Total number of shares granted	359 595
Dividend yield (%)	3
Grant date	7 March 2019
Vesting profile:	
50% of the shares awarded vest on 1 March 2022 (Tranche 1)	179 798
50% of the shares awarded vest on 1 March 2023 (Tranche 2)	179 798

The shares forfeited by leavers to date are 73 092 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 133 383.

Tranche 1 – fully vested

Tranche 1: 50% of the total award, vested on 1 March 2022. All participants still in the employ of the Company as at 1 March 2022 were eligible to participate in the vesting of this tranche in accordance with the terms and conditions of the Scheme rules.

In respect of Tranche 1, the Board assessed the performance over the three-year vesting term against the pre-set financial and strategic targets and determined that 47.5% of these Tranche 1 shares vested for those participants still in the employ of the JSE on 1 March 2022.

	Corporate performance shares
As at 31 December 2022, details of Tranche 1 were as follows:	
Original number of Tranche 2 shares awarded in September 2018	179 798
Forfeited by leavers to date	(35 475)
Tranche 1 shares forfeited for missing performance targets	(73 247)
Accelerated for good leavers to date	(26 812)
Tranche 1 shares vested on 1 March 2022	(44 264)
Tranche 1 shares outstanding	–

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018) (continued)

Allocation #3 under LTIS 2018

	Corporate performance shares
Share price at grant date (rands per share)	102.73
Total number of shares granted	494 170
Dividend yield (%)	3
Grant date	13 March 2020
Vesting profile:	
50% of the shares awarded vest on 1 March 2023 (Tranche 1)	247 085
50% of the shares awarded vest on 1 March 2024 (Tranche 2)	247 085

The shares forfeited by leavers to date are 136 750 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 379 916.

Allocation #4 under LTIS 2018

	Corporate performance shares
Share price at grant date (rands per share)	120.72
Total number of shares granted	542 982
Dividend yield (%)	3
Grant date	12 March 2021
Vesting profile:	
50% of the shares awarded vest on 1 March 2024 (Tranche 1)	271 491
50% of the shares awarded vest on 1 March 2025 (Tranche 2)	271 491

The shares forfeited by leavers to date are 100 772 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 442 210.

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018) (continued)

Allocation #5 under LTIS 2018

	Corporate performance shares
Executive Committee award	
Share price at grant date (rands per share)	114.39
Total number of shares granted	391 880
Dividend yield (%)	3
Grant date	1 March 2022
Vesting profile:	
50% of the shares awarded vest on 1 March 2025 (Tranche 1)	195 940
50% of the shares awarded vest on 1 March 2026 (Tranche 2)	195 940

The shares forfeited by leavers to date are NIL (Tranche 1 and Tranche 2). The total shares outstanding at year end are 391 880.

	Corporate performance shares
Senior management award	
Share price at grant date (rands per share)	117.31
Total number of shares granted	274 220
Dividend yield (%)	3
Grant date	1 March 2022
Vesting profile:	
50% of the shares awarded vest on 1 March 2025 (Tranche 1)	137 100
50% of the shares awarded vest on 1 March 2026 (Tranche 2)	137 100

The shares forfeited by leavers to date are 26 650 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 247 660.

20. Employee benefits (continued)

20.5 Long-Term Incentive Schemes (LTIS 2010 and LTIS 2018) (continued)

The profit or loss charge for the period, calculated using the Black-Scholes valuation methodology, in respect of allocations granted under LTIS 2018 is as follows:

	2022	2021
Allocation #1 (granted in September 2018)	**(R2.7m)**	R1.1m
Allocation #2 (granted in March 2019)	**(R4.8m)**	R5.1m
Allocation #3 (granted in March 2020)	**R0.5m**	R7.4m
Allocation #4 (granted in March 2021)	**R8.3m**	R9.3m
Allocation #5 (granted in March 2022)	**R12.6m**	–
	R13.9m	R22.9m

21. Deferred tax assets and liabilities

Deferred tax is calculated in full on temporary differences under the liability method using a tax rate of 27% (2021: 28%). Refer to note 3.14.

	ASSETS		**LIABILITIES**		**NET**	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000	**2022 R'000**	2021 R'000
21.1 Deferred tax assets and liabilities are attributable to the following:						
Group						
Intangible assets	**–**	–	**(31 019)**	(34 666)	**(31 019)**	(34 666)
Fixed assets	**966**	227	**–**	–	**966**	227
Operating lease asset	**–**	–	**(6)**	(6)	**(6)**	(6)
IFRS 16 *Leases*	**24 893**	32 196	**–**	–	**24 893**	32 196
Employee benefits	**22 874**	30 900	**–**	–	**22 874**	30 900
Allowance for impairment losses	**2 496**	1 592	**–**	–	**2 496**	1 592
Prepayments	**–**	–	**(8 911)**	(5 366)	**(8 911)**	(5 366)
Cash restraint payments	**817**	2 064	**–**	–	**817**	2 064
Fair value adjustment through OCI – Government bonds	**–**		**(476)**		**(476)**	
Fair value adjustment – Globacap investment	**460**	–	**–**	(556)	**460**	(556)
Loan to the JSE Empowerment Fund Trust	**474**	284	**–**	–	**474**	284
Interest accrued	**–**	–	**–**	(53)	**–**	(53)
Assessed loss	**2 214**	–	**–**	–	**2 214**	–
Income received in advance	**7 436**	7 803	**–**	–	**7 436**	7 803
Total	**62 630**	75 066	**(40 412)**	(40 648)	**22 218**	34 418

21. Deferred tax assets and liabilities (continued)

21.2 Movement in temporary differences during the year:

	Balance 1 January 2021 R'000	Recognised in profit or loss R'000	Balance 31 December 2021 R'000	**Recognised in profit or loss R'000**	**Recognised in OCI R'000**	**Balance 31 December 2022 R'000**
Group						
Intangible assets	(35 708)	1 042	(34 666)	**3 647**		**(31 019)**
Fixed assets	–	227	227	**739**		**966**
Operating lease asset	(6)	–	(6)	**0**		**(6)**
IFRS 16 *Leases*	33 477	(1 281)	32 196	**(7 303)**		**24 893**
Employee benefits	35 312	(4 412)	30 900	**(8 027)**		**22 874**
Allowance for impairment losses	1 658	(66)	1 592	**904**		**2 496**
Prepayments	(7 448)	2 082	(5 366)	**(3 545)**		**(8 911)**
Cash restraint payments	2 809	(745)	2 064	**(1 247)**		**817**
Fair value adjustment through OCI – Government bonds	–	–	–	**–**	**(476)**	**(476)**
Fair value adjustment through OCI – Globacap investment	–	–	–	**–**	**460**	**460**
Assessed loss	–	–	–	**2 214**		**2 214**
Loan to the JSE Empowerment Fund Trust	243	41	284	**190**		**474**
Interest accrued	(5)	(48)	(53)	**53**		**–**
Income received in advance	5 192	2 611	7 803	**(367)**		**7 436**
Total	35 524	(551)	34 973	**(12 742)**	**(16)**	**22 218**

Deferred tax recognised in other comprehensive income relates to South African Bonds and GlobalCap investment. There are no current and deferred tax implications relating to investor protection funds recognised at OCI, which are exempt from tax. Deferred tax assets and deferred tax liabilities are netted off at an entity level. The only deferred tax liability that exists at year end is related to the customer contracts, referred to as intangible assets in the table above.

The net group deferred tax balance consists of R53 million deferred tax asset and R31 million liability as presented in the face of the Consolidated statement of financial position.

21. Deferred tax assets and liabilities (continued)

21.3 Deferred tax assets and liabilities are attributable to the following:

	ASSETS 2022 R'000	ASSETS 2021 R'000	LIABILITIES 2022 R'000	LIABILITIES 2021 R'000	NET 2022 R'000	NET 2021 R'000
Company						
Operating lease asset	**–**	–	**(6)**	(6)	**(6)**	(6)
IFRS 16 *Leases*	**24 867**	31 862	**–**	–	**24 867**	31 862
Employee benefits	**21 297**	29 418	**–**	–	**21 297**	29 418
Allowance for impairment losses	**1 978**	1 449	**–**	–	**1 978**	1 449
Prepayments	**–**	–	**(8 778)**	(5 269)	**(8 778)**	(5 269)
Cash restraint payments	**817**	2 064	**–**	–	**817**	2 064
Loan to the JSE Empowerment Fund Trust	**474**	284	**–**	–	**474**	284
Income received in advance	**7 436**	7 803	**–**	–	**7 436**	7 803
Fair value adjustment through OCI – Government bonds	**–**	–	**(476)**		**(476)**	
Fair Value adjustment through OCI – Globacap	**460**	–	**–**	(556)	**460**	(556)
Total	**57 329**	72 879	**(9 260)**	(5 831)	**48 069**	67 050

21.4 Movement in temporary differences during the year

	Balance 1 January 2021 R'000	Recognised in profit or loss R'000	Balance 31 December 2021 R'000	**Recognised in profit or loss R'000**	**Recognised in OCI R'000**	**Balance 31 December 2022 R'000**
Company						
Operating lease asset	(6)	–	(6)	**–**		**(6)**
IFRS 16 *Leases*	33 477	(1 615)	31 862	**(6 995)**		**24 867**
Employee benefits	35 313	(5 895)	29 418	**(8 121)**		**21 297**
Allowance for impairment losses	1 658	(209)	1 449	**529**		**1 978**
Prepayments	(7 449)	2 180	(5 269)	**(3 509)**		**(8 778)**
Cash restraint payments	2 809	(745)	2 064	**(1 247)**		**817**
Loan to the JSE Empowerment Fund Trust	243	41	284	**190**		**474**
Income received in advance	5 192	2 611	7 803	**(367)**		**7 436**
Fair value adjustment through OCI – Government bonds	–	–	–	**–**	**(476)**	**(476)**
Fair Value adjustment through OCI – Globacap	–	–	–	**–**	**460**	**460**
Total	71 237	(3 632)	67 605	**(19 520)**	**(16)**	**48 069**

No deferred tax assets have been raised in respect of the allowance for impairment loss on the loan due from Nautilus MAP RF (Pty) Ltd. Please refer to note 13.4.

The intangible asset impairment did not give rise to a temporary difference which is expected to the deductible for tax purposes in the future. As such no deferred tax asset was recognised for that amount.

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
22. Trade and other payables				
Trade payables*	**188 972**	195 961	**162 023**	169 656
Interest payable	**353 320**	183 068	**5 173**	2 034
Receipts in advance	**2 221**	1 267	**2 221**	1 267
	544 513	380 296	**169 417**	172 957

* Includes accruals, VAT output, and customer deposits.

23. Notes to the statement of cash flows

23.1 Cash generated by operations

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
Profit before tax	**1 036 838**	994 987	**1 011 194**	971 841
Adjustments for:				
– depreciation of property and equipment	**68 849**	63 722	**67 003**	61 625
– amortisation of intangible assets	**164 900**	154 228	**151 011**	140 483
– depreciation of right of use assets	**39 645**	39 736	**37 926**	38 017
– impairment of intangible asset	**5 396**	5 558	**5 396**	5 558
– JSE LTIS 2010	**–**	(410)	**–**	(410)
– JSE LTIS 2018	**13 951**	22 943	**13 951**	22 943
– share of profit from associate	**(40 997)**	(51 597)	**–**	–
– finance costs	**3 188 197**	1 850 862	**52 316**	44 988
– finance income	**(3 390 594)**	(1 996 538)	**(132 548)**	(94 294)
– dividend received	**(6 635)**	(5 402)	**(40 271)**	(43 242)
– non-cash items in respect of employee benefits*	**93 321**	91 317	**93 321**	91 317
– unrealised gain on forex	**(5 053)**	(8 305)	**(5 053)**	(8 305)
– amortised interest on bonds	**(138)**	–	**(138)**	–
– profit on disposal of property and equipment	**(14)**	4	**–**	–
Surplus from operations	**1 167 666**	1 161 105	**1 254 109**	1 230 521
Changes in:				
– decrease in trade and other receivables	**(42 496)**	(69 705)	**(74 453)**	(33 518)
– increase in trade and other payables	**(95 549)**	(56 945)	**(99 784)**	(78 000)
Cash generated by operations	**1 029 621**	1 034 454	**1 079 872**	1 119 003

* This relates to the critical cash scheme vesting in March 2023 and March 2024, Discretionary bonus provision to be paid in February 2023 and Bursary Fund remaining balance not yet utilised.

23. Notes to the statement of cash flows (continued)

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
23.2 Taxation paid				
Taxation (payable)/receivable at beginning of year	**(7 210)**	2 784	**(8 426)**	(3 485)
Deferred tax effects	**12 717**	551	**19 491**	3 633
Taxation expense	**(288 282)**	(271 812)	**(281 990)**	(263 917)
Taxation payable at year end	**12 635**	7 210	**17 903**	8 426
	(270 141)	(261 267)	**(253 022)**	(255 343)
23.3 Finance income				
Finance income receivable at beginning of year	**190 959**	139 857	**5 419**	5 235
Finance income during the year	**3 390 594**	1 996 538	**132 548**	94 294
Finance income receivable at year end	**(351 976)**	(190 959)	**(7 107)**	(5 419)
Total finance income received	**3 229 577**	1 945 435	**130 860**	94 110
23.4 Finance costs				
Finance costs payable at beginning of year	**(183 068)**	(138 979)	**(2 034)**	(1 861)
Finance costs during the year	**(3 188 197)**	(1 850 862)	**(52 316)**	(44 988)
Finance costs payable at year end	**353 320**	183 068	**5 173**	2 034
Total finance cost paid	**(3 017 945)**	(1 806 772)	**(49 177)**	(44 815)

24. Directors' and executives' remuneration[3]

24.1 Executive directors – Current year remuneration

		Basic[1] salary R'000	Defined[1] contribution pension plan R'000	Medical aid[1], UIF and other R'000	Total guaranteed pay R'000	Contractual bonus[1] (includes deferral) R'000	Discre-tionary bonus[1, 2, 4] R'000	Total annual incentives R'000	Total current year remune-ration R'000	Total long-term and other benefits[5] R'000	Total number of shares granted in the LTIS schemes[6]
2022											
L Fourie	CEO	**7 124**	**291**	**45**	**7 460**	**–**	**11 330**	**11 330**	**18 790**	**–**	**114 590**
A Takoordeen[10]	CFO (resigned 20 May 2022)	**1 323**	**66**	**80**	**1 469**	**2 075**	**–**	**2 075**	**3 544**	**443**	**–**
		8 447	**357**	**125**	**8 929**	**2 075**	**11 330**	**13 405**	**22 334**	**443**	**114 590**
2021											
L Fourie	CEO	6 555	268	43	6 866	–	9 800	9 800	16 666	–	82 980
A Takoordeen	CFO	3 412	158	188	3 758	–	–	–	3 758	806	24 210
		9 967	426	231	10 624	–	9 800	9 800	20 424	806	107 190

24.2 Other key executives – Current year remuneration

		Basic[1] salary R'000	Defined[1] contribution pension plan R'000	Medical aid[1], UIF and other R'000	Total guaranteed pay R'000	Contractual bonus[1] (includes deferral) R'000	Discre-tionary bonus[1, 2, 4] R'000	Total annual incentives R'000	Total current year remune-ration R'000	Total long-term and other benefits[5] R'000	Total number of shares granted in the LTIS schemes[6]
2022											
A Greenwood	Director of Post-Trade Services	**4 010**	**236**	**130**	**4 376**	**–**	**3 000**	**3 000**	**7 376**	**471**	**54 720**
P Ntoagae[11]	Director of Human Resources	**2 151**	**94**	**70**	**2 315**	**1 500**	**1 440**	**2 940**	**5 255**	**–**	**16 750**
H Kotze[12]	Chief Information Officer	**538**	**23**	**22**	**583**	**3 768**	**–**	**3 768**	**4 351**	**–**	**–**
VSM Lee	Director of Marketing and Corporate Affairs	**3 004**	**170**	**52**	**3 226**	**–**	**1 900**	**1 900**	**5 126**	**–**	**22 500**
I Monale	Chief Operating Officer	**3 450**	**146**	**150**	**3 746**	**–**	**2 250**	**2 250**	**5 996**	**–**	**26 130**
MH Randall	Director of Information Services	**3 389**	**142**	**113**	**3 644**	**–**	**2 800**	**2 800**	**6 444**	**369**	**25 420**
VJ Reddy	Director Capital Markets	**3 934**	**269**	**274**	**4 477**	**–**	**4 000**	**4 000**	**8 477**	**211**	**56 200**
E I Haniff	Managing Director: JSE Investor Services	**1 214**	**56**	**1**	**1 271**	**–**	**–**	**–**	**1 271**	**–**	**–**
Q Mthembu[11]	Group Chief Risk Officer	**1 144**	**47**	**34**	**1 225**	**–**	**850**	**850**	**2 075**	**–**	**–**
T Tsoaeli[11]	Chief Information Officer	**270**	**11**	**9**	**290**	**2 200**	**–**	**2 200**	**2 490**	**–**	**–**
		23 104	**1 194**	**855**	**25 153**	**7 468**	**16 240**	**23 708**	**48 861**	**1 051**	**201 720**

24. Directors' and executives' remuneration[3] (continued)

24.2 Other key executives – Current year remuneration (continued)

		Basic[1] salary R'000	Defined[1] contribution pension plan R'000	Medical aid[1], UIF and other R'000	Total guaranteed pay R'000	Contractual bonus[1] (includes deferral) R'000	Discretionary bonus[1, 2, 4] R'000	Total annual incentives R'000	Total current year remuneration R'000	Total long-term and other benefits[5] R'000	Total number of shares granted in the LTIS schemes[6]
2021											
A Greenwood	Director of Post-Trade Services	3 861	225	72	4 158	–	3 000	3 000	7 158	857	26 008
D Khumalo[7]	Director of Human Resources	2 122	88	36	2 246	–	–	–	2 246	636	–
H Kotze	Chief Information Officer	3 229	136	130	3 495	–	–	–	3 495	–	22 530
VSM Lee[8]	Director of Marketing and Corporate Affairs	2 411	132	42	2 585	–	2 000	2 000	4 585	–	19 988
I Monale[9]	Chief Operating Officer	3 129	140	143	3 412	3 600	2 300	5 900	9 312	–	23 212
MH Randall	Director of Information Services	3 105	130	107	3 342	–	2 500	2 500	5 842	433	21 538
VJ Reddy	Director Capital Markets	3 360	231	261	3 852	1 750	3 600	5 350	9 202	376	24 824
E I Haniff	Managing Director: JSE Investor Services	2 084	175	322	2 581	–	180	180	2 761	–	–
		23 301	1 257	1 113	25 671	5 350	13 580	18 930	44 601	2 302	138 100

Footnotes 1 – 12 below are applicable to notes 24.1 – 24.2.

1 Represents short-term employee benefits.

2 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 potion of the discretionary bonus may be paid in equity, at the discretion of the Group Remuneration Committee.

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

4 CEO's discretionary bonus – cash only.

5 Represents the net value (after forfeiture for corporate performance) of share awards granted under provisions of the LTIS 2010 LTIS in 2017 that vested during the current financial year.

6 Represents unvested or unsettled shares as at 31 December 2022 (prior year as at 31 December 2021), granted under the provisions of the LTIS 2018 Long Term Incentive Schemes in the current year.

7 Resigned effective 30 September 2021.

8 Appointed Director of Marketing and Corporate Affairs effective 1 March 2021.

9 Appointed Chief Operating Officer effective 20 January 2021.

10 Resigned 20 May 2022.

11 Appointed in the current year.

12 Resigned.

24. Directors' and executives' remuneration (continued)

24.3 Non-executive director emoluments

		Total R'000	Board member fees R'000	Committee member fees R'000
2022[1]				
Z Bassa	Chairman: Group SRO Oversight Committee	**1 195**	**450**	**745**
MS Cleary		**882**	**450**	**432**
N Fakude	Chairman: Group Remuneration Committee	**899**	**450**	**449**
SP Kana	Lead Independent Director | Chairman: Group Audit Committee | Chairman: Group Sustainability Committee	**1 790**	**450**	**1 340**
F Khanyile		**1 129**	**450**	**679**
I Kirk		**1 112**	**450**	**662**
BJ Kruger	Chairman: Group Risk Management Committee	**1 265**	**450**	**815**
MA Matooane	Chairman: Group Investment Committee	**853**	**450**	**403**
P Nhleko	Board Chairman (effective 4 May 2022)	**2 274**	**450**	**1 824**
NMC Nyembezi	Board Chairman (retired 3 May 2022)	**903**	**152**	**751**
		12 302	**4 202**	**8 100**
2021				
Z Bassa	Chairman: Group SRO Oversight Committee	1 130	425	705
MS Cleary		915	425	490
N Fakude	Chairman: Group Remuneration Committee	995	425	570
SP Kana	Lead Independent Director; Chairman of the Group Audit Committee; Chairman of the Group Sustainability Committee	1 683	425	1 258
F Khanyile		940	425	515
I Kirk		860	425	435
BJ Kruger	Chairman: Group Deal Committee	1 155	425	730
MA Matooane	Chairman of Group Risk Management Committee	925	425	500
P Nhleko[2]		733	213	520
NMC Nyembezi	Board Chairman, Chairman of Group Nominations Committee	2 500	425	2 075
		11 835	4 038	7 798

[1] All directors are independent non-executive directors

[2] Appointed 1 July 2021.

25. Deferred income

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
Distribution from the JSE Guarantee Fund Trust	**–**	–	**–**	3
Initial listing fees	**23 214**	24 490	**23 214**	24 490
	23 214	24 490	**23 214**	24 493

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: R50 million) and data centre (2011: R51 million). This is a transaction between related parties as disclosed in note 26 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.

Initial listing fees

This amount represents monies for initial listing fees, which is recognised over an expected period based on an average listing period of issuers. This is also based on an average historical minimum life expectancy of a listed company within the Group. Any adjustments to the contract liability balance are charged against revenue.

The following amounts relating to the performance obligation from existing contracts that are unsatisfied or partially unsatisfied as at 31 December 2022:

	GROUP AND COMPANY	
	2023 R'000	2022 R'000
Revenue expected to be recognised	**1 745**	1 844

	2022 R'000	2021 R'000
Deferred income at 1 January	**24 490**	14 371
Deferred during the year	**696**	11 565
Recognised as revenue during the year	**(1 971)**	(1 446)
Balance at 31 December	**23 214**	24 490

26. Related parties

26.1 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 R1.6 billion (2021: R1.6 billion) for the year.

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 24.

26.2 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 13.4
Directors' emoluments	see note 24
Other key executives' remuneration	see note 24
Income recognised from deferred income (data centre and disaster recovery)	see note 6.2

During the previous financial years, surplus assets amounting to R101 million 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 Sector Conduct Authority "FSCA". 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 25.

Management fees from related entities	R137 million (2021: R127 million)

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

There are no other related party transactions other than those noted above.

27. Leases

	GROUP 2022 R'000	GROUP 2021 R'000	COMPANY 2022 R'000	COMPANY 2021 R'000
Impact on the statements of financial position as at 31 December 2022				
Assets				
Right-of-use assets at 1 January	**256 298**	256 298	**251 624**	251 624
Accumulated depreciation	**(158 220)**	(118 575)	**(153 976)**	(116 050)
Total assets*	**98 078**	137 723	**97 648**	135 574
Lease Liabilities				
Current portion	**59 079**	56 051	**58 553**	53 415
Non-current portion	**131 195**	196 657	**131 195**	195 951
Total liabilities	**190 274**	252 708	**189 748**	249 366
The following amounts are recognised in the statement of comprehensive income for the year ending 31 December 2022				
Depreciation	**(39 645)**	(39 736)	**(37 926)**	(38 017)
Profit/(Loss) from operating activities	**(39 645)**	(39 736)	**(37 926)**	(38 017)
Finance cost	**(19 949)**	(23 971)	**(19 764)**	(24 126)
Impact on profit before tax	**(59 595)**	(63 706)	**(57 690)**	(62 142)
Changes in liabilities arising from financing activities				
Opening balance 1 January 2022	**252 708**	293 820	**249 366**	287 860
Loan repayments for the year	**(82 384)**	(65 083)	**(79 381)**	(62 620)
Interest charges for the year	**19 949**	23 971	**19 764**	24 126
Balance 31 December 2022	**190 274**	252 708	**189 748**	249 366

* The majority of the right-of-use-assets relate to property and a small insignificant portion to hardware.

27. **Leases** (continued)

The table below refers to the payments of future lease agreements.

	GROUP		COMPANY	
	2022 R'000	2021 R'000	**2022 R'000**	2021 R'000
Discounted payments				
Not later than one year	**59 078**	56 051	**58 553**	53 415
Between one and five years	**131 195**	196 656	**131 195**	195 950
	190 273	252 707	**189 748**	249 365
Undiscounted payments				
Not later than one year	**73 542**	75 781	**73 017**	73 179
Between one and five years	**140 915**	223 659	**140 915**	220 134
Balance 31 December 2022	**214 458**	299 440	**213 933**	293 314

28. Financial risk management

The Group has exposure to the following risks:

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

Risk management framework

The Group recognises that effective risk and opportunity management is fundamental to the achievement of its strategic objectives and its ability to respond to a fast-changing operating environment. The Board of directors have overall responsibility for the establishment and oversight of the Group's risk management framework, including determining the Group's risk appetite. The Board has established the Group Risk Management Committee, which is responsible for developing the Group's risk and resilience management policies and monitoring risk exposures and identifying opportunities. The committee reports regularly to the Board of directors on its activities.

28. Financial risk management (continued)

The Group's risk and resilience management policies are established to anticipate, withstand, respond to and recover from the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. The aim of risk and opportunity management is to facilitate and coordinate the management of risks and the identification of opportunities. This is achieved by ensuring that:

- risks and opportunities are identified, assessed, managed and reported on a reliable and regular basis;
- resources are effectively allocated to manage risks and opportunities; and
- the JSE Group is compliant with regulatory requirements.

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 and resilience management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The success of risk and opportunity management is dependent on ensuring that risks and opportunities are contained within acceptable levels.

Management are responsible for effectively managing risks and opportunities within their area of responsibility and identifying and informing the Board of potential risks. The Group Risk Management Committee is assisted in its role by the Group enterprise risk management function and Internal Audit. Internal Audit undertakes both regular and *ad hoc* reviews of the risk and resilience management controls and procedures, the results of which are reported to the Group Risk Management Committee and Group Audit Committee.

28.1 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. Specifically included in operational risk management are risks arising from legal and regulatory requirements, risks associated with project implementation, exposures emanating from Information Technology (IT) and data maintenance and security, business continuity and generally accepted standards of corporate behaviour. Operational risk arises from all of the Group's operations.

28. Financial risk management (continued)

28.1 Operational risk (continued)

The Board accepts overall responsibility for operational risk, with the responsibility for day-to-day management of operational risk delegated to management. Each business unit is accountable for mitigating operational risk in their area of business. 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 Operational Resilience, which includes the identification of our points of failures, in order to put sufficient controls to prevent these from materialising;
- Requirements for the reporting of operational losses and proposed remedial action;
- Development of contingency plans;
- Development of crisis plans (including communication plans);
- Development of IT and data security controls;
- Development of cyber controls (including detection controls);
- Training and professional development;
- Ethical and business standards; and
- Risk mitigation, including insurance where this is effective.

28.2 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.

28.2.1 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 Information Services division is maintained in a US Dollar denominated bank account. Foreign currency 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.

28. Financial risk management (continued)

28.2 Market risk (continued)

28.2.1 Currency risk (continued)

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
2022						
Financial assets	**127 489**	**92 103**	**–**	**127 489**	**92 103**	**–**
Trade receivables	**51 999**	**–**	**–**	**51 999**	**–**	**–**
Cash and cash equivalents	**75 490**	**–**	**–**	**75 490**	**–**	**–**
Other investments – Globacap equity securities at FVOCI		**81 869**	**–**	**–**	**81 869**	**–**
Other investments – Safe note debt securities measured at FVTPL	**–**	**10 234**	**–**	**–**	**10 234**	**–**
Financial liabilities	**(2 751)**	**(85)**	**(81)**	**(2 751)**	**(85)**	**(81)**
Trade payables	**–**	**(85)**	**(81)**	**–**	**(85)**	**(81)**
Lease liability	**(2 751)**	**–**	**–**	**(2 751)**	**–**	**–**
Net exposure	**124 738**	**92 018**	**(81)**	**124 738**	**92 018**	**(81)**
2021						
Financial assets	135 910	86 480	–	135 910	86 480	–
Trade receivables	27 295	–	–	27 295	–	–
Cash and cash equivalents	108 615	–	–	108 615	–	–
Other investments – Globacap equity securities at FVOCI	–	86 480	–	–	86 480	–
Financial liabilities	–	(51)	(75)	–	(51)	(75)
Trade payables	–	(51)	(75)	–	(51)	(75)
Long-term payables	–	–	–	–	–	–
Net exposure	135 910	86 429	(75)	135 910	86 429	(75)

* Other investments which include foreign exposure are considered as part of the fair value sensitivity analysis in note 29.

28. Financial risk management (continued)

28.2 Market risk (continued)

28.2.1 Currency risk (continued)

As at 31 December 2022:

Bank buying rates

USD – 16.6765 (2021: 15.949)

EUR – 17.7386 (2021: 18.0832)

GBP – 20.0467 (2021: 21.5517)

Bank selling rates

USD – 17.3648 (2021: 15.9236)

EUR – 18.6907 (2021: 18.0505)

GBP – 21.1304 (2021: 21.5054)

Sensitivity analysis

A 10% (2021: 10%) weakening of the rand against the USD and a 5% (2021: 5%) weakening of the rand against the EUR and a 5% (2021:5%) strengthening of the rand against the GBP, at 31 December, would have increased profit by R17.1 million (2021: R13.6 million). This analysis assumes that all other variables remain constant. The analysis is performed on the same basis as 2021.

	GROUP		COMPANY	
	Profit or loss R'000	OCI R'000	Profit or loss R'000	OCI R'000
2022				
USD	**12 474**	**–**	**12 474**	**–**
GBP	**4 601**	**231**	**4 601**	**231**
EUR	**(4)**	**–**	**(4)**	**–**
Net impact	**17 071**	**231**	**17 071**	**231**
2021				
USD	13 591	–	13 591	–
GBP	(3)	–	(3)	–
EUR	(4)	–	(4)	–
Net impact	13 585	–	13 585	–

28. Financial risk management (continued)

28.2 Market risk (continued)

28.2.2 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 financial instruments. 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.

	GROUP		COMPANY	
The following table analyses the interest rate risk profile for assets and liabilities at year-end:	Fixed rate R'000	Floating rate R'000	Fixed rate R'000	Floating rate R'000
2022				
Assets	**36 432 172**	**22 272 625**	**902 349**	**1 326 183**
Investments	**168 823**	**–**	**–**	**–**
JSE Clear Derivatives Default Fund collateral deposit*	**289 000**	**211 000**	**–**	**100 000**
Margin and collateral deposits	**34 845 000**	**20 967 813**	**–**	**528 355**
Cash and cash equivalents	**1 129 349**	**1 093 812**	**902 349**	**697 828**
Liabilities	**(35 076 200)**	**(21 136 613)**	**–**	**(528 355)**
JSE Clear Derivatives Default Fund contributions	**(231 200)**	**(168 800)**	**–**	**–**
Margin and collateral deposits	**(34 845 000)**	**(20 967 813)**	**–**	**(528 355)**
Net exposure	**1 355 972**	**1 136 012**	**902 349**	**797 828**
2021				
Assets	36 266 362	22 236 590	1 461 154	1 130 756
Investments	27 316	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	319 000	181 000	–	100 000
Margin and collateral deposits	34 475 000	21 107 636	–	509 926
Cash and cash equivalents	1 445 048	947 954	1 461 154	520 830
Liabilities	(34 730 200)	(21 252 436)	–	(509 926)
JSE Clear Derivatives Default Fund contributions	(255 200)	(144 800)	–	–
Margin and collateral deposits	(34 475 000)	(21 107 636)	–	(509 926)
Net exposure	1 536 162	984 154	1 461 154	620 830

* Includes the financial asset reclassified to non-current asset held for sale at company level. Refer to note 18 for further details.

Floating rate assets yield interest at call rates.

28. Financial risk management (continued)

28.2 Market risk (continued)

28.2.2 Interest rate risk (continued)

Sensitivity analysis

A change of 100 (2021: 100) basis points on the fixed rate bonds and 100 (2021: 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 2021.

	GROUP		COMPANY	
	Profit or loss R'000	**OCI R'000**	**Profit or loss R'000**	**OCI R'000**
2022				
Fixed-rate bond: +100 bps	**–**	**(8 190)**	**–**	**(7 221)**
Fixed-rate bond: -100 bps	**–**	**8 807**	**–**	**7 779**
Floating-rate instruments: +100 bps	**11 360**	**–**	**6 978**	**–**
Floating-rate instruments: -100 bps	**(11 360)**	**–**	**(6 978)**	**–**
2021				
Fixed-rate bond: +100 bps	–	(1 269)	–	–
Fixed-rate bond: -100 bps	–	1 170	–	–
Floating-rate instruments: +100 bps	9 842	–	6 208	–
Floating-rate instruments: -100 bps	(9 842)	–	(6 208)	–

28. Financial risk management (continued)

28.2 Market risk (continued)

28.2.3 Other market price risk

The Group is exposed to the risk of fluctuations in the fair value of financial instruments through other comprehensive income (FVOCI) and fair value through profit and loss (FVTPL) 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 fair value financial instruments, the investments are managed by a reputable asset manager according to approved guidelines. The JSE Group's Committee monitors the investments in unit trusts, financial instruments through other comprehensive income, financial instruments through profit and loss.

Sensitivity analysis – other market price risk

The financial instruments measured at fair value through other comprehensive income and fair value through profit and loss are 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 28.2.2.

The fair value of certain financial instruments through other comprehensive income are listed on JSE Limited, with the majority of the investments included in the JSE All Share Index.

A 4% (2021: 4%) increase/decrease in the JSE All Share Index at the reporting date, with all other variables held constant, would have increased/decreased equity by R6.6 million (2021: R6.1 million) and profit by Rnil (2021: Rnil). This analysis is performed on the same basis as 2021.

The collective investment schemes and protective cell funds are predominately benchmarked against the MSCI World Index. A 5% (2021: 5%) increase/decrease in the MSCI World Index at the reporting date, with all other variables held constant, would have increased/decreased equity by R11.7 million (2021: R11.3 million). The analysis is performed on the same basis as in 2021.

The fair value of the investment in unlisted equity and debt instruments relating to the Globacap investment is influenced by the inputs to the discounted cashflow models and funding round transaction price. Price risk is caused by the deterioration in the underlying operating asset performance, net expected cash flow projections and availability of funds to finance operations. Refer to Note 29 for further details.

28. Financial risk management (continued)

28.3 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.

JSE Clear ensures, in accordance with the JSE Clear Investment mandate, that sufficient funds are available on a daily basis to return margin on trades settled and/or cover losses in the case of a default, by adhering to the following placement limits; at least 30% of the total fund size must be invested on call at all times, not more than 30% of the amount on call may be invested with one institution, maximum tenor for investment of funds is 180 days and weighted average maturity of the fund may not exceed 50 days. Although there is no fixed maturity, based on the above, the maturity of the margin deposit liability is directly linked to how the asset is invested and is reflected as such. The following table analyses the terms of receipt of financial assets and repayment of financial liabilities existing at year-end.

	GROUP					COMPANY			
	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000	More than 5 years R'000	No stated contractual maturity R'000	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000	More than 5 years R'000
2022									
Financial assets	**35 133 084**	**24 050 655**	**88 419**	**130 405**	**481 006**	**1 881 941**	**597 700**	**176 544**	**115 983**
Other investments	–	–	38 419	130 405	481 006	–	–	26 544	115 983
Trade and other receivables (excluding payments in advance)	345 788	–	–	–	–	298 503	–	–	–
Interest receivable	351 976	–	–	–	–	7 107	–	–	–
Due from Group entities	–	–	–	–	–	70 455	25 045	–	–
Margin and collateral deposits	32 717 813	23 095 000	–	–	–	528 355	–	–	–
JSE Clear Derivatives Default Fund collateral deposit*	319 000	181 000	–	–	–	–	–	100 000	–
Cash and cash equivalents**	1 398 506	774 655	50 000	–	–	977 523	572 655	50 000	–
Financial liabilities	**(33 535 912)**	**(23 294 957)**	**(140 915)**	**–**	**–**	**(716 026)**	**(54 763)**	**(140 915)**	**–**
Trade payables	(191 192)	–	–	–	–	(164 243)	–	–	–
Lease liabilities	(18 386)	(55 157)	(140 915)	–	–	(18 254)	(54 763)	(140 915)	–
Interest payable	(353 320)	–	–	–	–	(5 173)	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	(255 200)	(144 800)	–	–	–	–	–		–
Margin and collateral deposits	(32 717 813)	(23 095 000)	–	–	–	(528 355)	–	–	–
Net impact	**1 597 172**	**755 698**	**(52 496)**	**130 405**	**481 006**	**1 165 916**	**542 937**	**35 628**	**115 983**

* Includes the financial asset reclassified to non-current asset held for sale at company level. Refer to note 18 for further details.
** Although the contractual maturity is 1–5 years, this is managed as part of the regulatory capital of the business. Not withstanding the contractual maturity, management's intention is to utilise the cash within the normal operating cycle.

28. Financial risk management (continued)

28.3 Liquidity risk (continued)

	GROUP				COMPANY		
	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000	No stated contractual maturity R'000	Up to 3 months R'000	3 to 12 months R'000	1 to 5 years R'000
2021							
Financial assets	44 042 803	14 957 154	1	529 237	1 833 336	1 011 971	100 000
Other investments	–	–	1	529 237	–	–	–
Trade and other receivables (excluding payments in advance)	333 360	–	–	–	273 353	–	–
Interest receivable	190 959	–	–	–	5 419	–	–
Due from Group entities	–	–	–	–	48 809	25 817	–
Margin and collateral deposits	41 732 636	13 850 000	–	–	509 926	–	–
JSE Clear Derivatives Default Fund collateral deposit	379 000	121 000	–	–	–	–	100 000
Cash and cash equivalents	1 406 848	986 154	–	–	995 830	986 154	–
Financial liabilities	(42 434 565)	(14 004 145)	(223 659)	–	(700 703)	(55 357)	(220 134)
Trade payables	(197 225)	–	–	–	(170 920)	–	–
Lease liabilities	(18 436)	(57 345)	(223 659)		(17 822)	(55 357)	(220 134)
Interest payable	(183 068)	–	–	–	(2 034)	–	–
JSE Clear Derivatives Default Fund collateral deposit	(303 200)	(96 800)	–	–	–	–	–
Margin and collateral deposits	(41 732 636)	(13 850 000)	–	–	(509 926)	–	–
Net impact	1 608 238	953 009	(223 658)	529 237	1 132 634	956 613	(120 134)

28. Financial risk management (continued)

28.4 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.

Minimum counterparty credit rating for investing in SA government bonds is 'BB-' by Standard & Poor's or its Moody's or Fitch rating equivalents.

The Group considers a financial asset in default when payments are 120 days past due and all collection processes have been followed. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held be the Group. A financial asset is written off when there is no reasonable expectation of recovering the cash flows. The movement in trade receivables is not directly correlated to the ECL movement due to the different credit risk profile of the trade receivables in 2022.

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 and the size and nature of the member's portfolio at the time of default. 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, clients 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. The JSE has established a robust system of mitigates to reduce the probability and impact of this risk, which includes ensuring that members are appropriately capitalised. Furthermore the JSE monitors whether clients and members have sufficient securities or cash to honour their transactions on a daily basis. The JSE is investigating further ways in which risk of settlement failure can be reduced through alternative methods of clearing.

The JSE operates a separate legal entity to house a formal default fund for JSE Clear 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 event of any clearing member default. The initial margin of the defaulting party is insufficient to cover losses, 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.

The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments. Outstanding client receivables and contract assets are regularly monitored. The calculation of the expected credit loss reflects the possibility of default, loss given default as well as the time value of money available at reporting date. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets.

28. Financial risk management (continued)

28.5 Capital

The Group defines "capital" as stated capital and retained earnings, per the statement of financial position, within the respective entities.

The relevant risks for which capital is held, within JSE Limited and JSE Clear are:

- Operational risk, including legal risk;
- Investment risk; and
- Wind up/recovery risk.

In addition, JSE Limited holds capital for business risk.

JSE Limited holds additional levels of capital to finance future growth opportunities.

In compliance with the Financial Markets Act 2012, the JSE and JSE Clear are required to hold regulatory capital.

The Group Board monitors the level of capital and may issue new shares, adjust the amount of dividends paid to shareholders or return surplus capital to shareholders in JSE Limited and may issue new shares in JSE Clear.

The Group Board also monitors the return on equity as a measure of financial performance.

The Board believes JSE Limited and JSE Clear is sufficiently capitalised.

29. Fair value estimation

29.1 Fair value measurement hierarchy

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).

29. Fair value estimation (continued)

29.1 Fair value measurement hierarchy (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
2022					
Assets					
Other investments					
– Equity securities (financial instruments)	14.1/2	**165 140**	**233 999**	**–**	**399 138**
– Debt securities (financial instruments measured at fair value through OCI)	14.1/2	**168 823**	**–**	**–**	**168 823**
– Non-listed equity instruments designated at fair value through OCI		**–**	**–**	**81 869**	**81 869**
SAFE note debt securities FVTPL		**–**	**–**	**10 234**	**10 234**
Total assets		**333 963**	**233 999**	**92 103**	**660 065**
2021					
Assets					
Other investments					
– Equity securities (financial instruments)	14.1/2	151 489	263 953	–	415 442
– Debt securities (financial instruments measured at fair value through OCI)	14.1/2	–	27 317	–	27 317
– Non-listed equity instruments designated at fair value through OCI		–	–	86 480	86 480
Total assets		151 489	291 268	86 480	529 238

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 and South African Government Bonds classified as fair value through OCI.

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. Level 2 is made up of protective cell funds and collective investment schemes, which is measured at the clean price and the foreign currency respectively and are publicly traded.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. Level 3 comprise of unlisted equity investment and debt securities SAFE note in Globacap.

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

29. Fair value estimation (continued)

29.2 Reconciliation: Level 3 recurring fair value measurements

29.2.1 GlobaCap Investment

29.2.1.1 GlobaCap equity investment reconciliation

In the prior year, JSE limited acquired a minority stake for R84 million in GlobaCap Technology Ltd (GlobaCap), an unlisted entity based in the United Kingdom. Management has elected to designate the investment at fair value through OCI, as the investment is a strategic long-term investment not held for returns in the short term.

	GROUP AND COMPANY	
	31 December 2022 R'000	31 December 2021 R'000
Opening balance	**86 480**	–
Globacap acquisition	**–**	84 000
Fair value (loss)/gain recognised in OCI during the period (pre-tax)	**(4 611)**	2 480
Closing balance	**81 869**	86 480

29.2.1.2 Simple Agreement Future Equity (SAFE) note reconciliation

In the current year (9 March 2022) the JSE participated in a bridge funding round to the value of £500 000 (R9.6 million). The bridge funding round was raised using a Simple Agreement Future Equity note (SAFE note), a debt instrument convertible to equity. The investment is classified as measured mandatorily at fair value through profit and loss.

	GROUP AND COMPANY	
	31 December 2022 R'000	31 December 2021 R'000
Opening balance – 1 January 2022	**–**	**–**
SAFE note acquisition	**9 625**	**–**
Fair value gain recognised in profit and loss	**609**	**–**
Closing balance – 31 December 2022	**10 234**	**–**

29. Fair value estimation (continued)

29.2 Reconciliation: Level 3 recurring fair value measurements (continued)

29.2.1 GlobaCap Investment (continued)

The fair value of both the SAFE note and equity investments were determined using the methodology below. The equity instrument valuation is used as the base in determining the SAFE note value due to the embedded equity option on the SAFE Note. No dividends were received in the current and prior reporting periods.

External, independent valuators were used in performance of the valuation at acquisition.

At 31 December 2022, fair value was measured using 2 valuation techniques:

- A discounted cashflow valuation technique (income approach) using a detailed bottom-up approach for key commercial drivers is used, e.g. per product basis broken down into volume (number of customers/deals), average revenue per product etc.
- A market price valuation approach which encompasses a scenario of high success by GlobaCap, considering the growth plans encompassed in its imminent Series B funding round. The different rights and preferences between the Series A (wherein the JSE acquired its minority stake) and B shares have not been taken into account as they are considered negligible in a highly successful scenario.

Probabilities were applied, using management judgment, to the two valuation methods as follows:

- An 80% weighting has been applied to the discounted cashflow model.
- A 20% weighting has been applied to the market price valuation.

Sensitivities to changes in the weightings are shown below.

The valuation results in a fair value adjustment (largely driven through foreign exchange gains and losses) in other comprehensive income of R4.6 million loss for the equity instrument financial asset and R0.6 million gain recognised in profit and loss for the Safe note financial asset measured at fair value through profit and loss as reflected above.

Description of significant unobservable inputs to valuation

The significant unobservable inputs used in the fair value measurements categorised within level 3 of the fair value hierarchy, together with a quantitative sensitivity analysis as at 31 December 2022 are shown below:

Discounted cashflow valuation (weighted at 80% probability)

- 10-year free cash flow to equity forecast;
- 20% WACC;
- 48% revenue growth for years 2023 – 2032; and
- 15% operating expense growth rate.

Implied equity value – Based on a highly successful scenario for the series B funding round (weighted at 20% probability)

- Estimated funding round price £1.6448 per share

The fair value was calculated as at 31 December 2022.

29. Fair value estimation (continued)

29.2 Reconciliation: Level 3 recurring fair value measurements (continued)

29.2.1 GlobaCap Investment (continued)

29.2.1.3 Sensitivity analysis

Company and Group

Valuation technique		Significant unobservable inputs	Range	Sensitivity of the input to fair value
Non-listed equity instruments designated at fair value through OCI	Discounted cash flow valuation (DCF)	Weighted average cost of capital (WACC)	20% (2021: 20%)	5% (2021: 5%) increase/(decrease) in the WACC would result in a fair value increase/(decrease) of R12.1 million (2021: R27.1 million)
		Revenue growth rate	48% (2021: 48%)	3% (2021: 3%) increase/(decrease) in revenue growth rate from 2023 onwards results in a fair value increase/(decrease) of R10.6 million (2021: R21 million)
	Transaction price (market approach)	Estimated transaction price (Implied equity value price)	£1.6448 per share* (2021: nil)	20% (2021: nil) increase/(decrease) in the implied equity price results in a R6 million (2021: Rnil) increase/(decrease) in fair value
	Probability weighting	Weighting of 80% on the DCF value and 20% on the implied equity value	20%/80% (2021: nil)	10% (2021: nil) increase/(decrease) to the implied equity valuation weighting will result in a R11 million (2021: Rnil) increase/(decrease) in fair value
Financial asset measured at Fair value through profit and loss (SAFE note)	Discounted cash flow valuation (DCF)	Weighted average cost of capital (WACC)	20%	5% increase/(decrease) in the WACC would result in a Rnil million change in fair value due to the SAFE note floor price on conversion
		Revenue growth rate	48%	3% increase/(decrease) in revenue growth rate from 2023 onwards results in a Rnil million increase/(decrease) in fair value due to the SAFE note floor price on conversion
	Transaction price (market approach)	Estimated transaction price (Implied equity value price)	£1.6448 per share*	20% increase/(decrease) in the implied equity price results in a R0.8 million increase/(decrease) in fair value
	Probability weighting	Weighting of 80% on the DCF value and 20% on the implied equity value	20%/80%	10% increase/(decrease) to the implied equity valuation weighting will result in a R1.1 million increase/(decrease) in fair value

* Estimated funding round price £1.6448 per share.

For the sensitivity analysis, it is assumed that any change in the individual inputs will not impact other assumptions as the inputs are not considered to have significant interrelations.

The fair value of the investment in GlobaCap is based on the premise of the investee continuing to operate on its current trajectory. Given the nature of the investment and the life stage of the investee, the value of the investment will be impacted significantly by the investee's ability/inability to generate funding.

30. Funds under management

30.1 JSE Trustees (Pty) Limited, JIS (Pty) Ltd and JIS CSDP (Pty) Ltd

	Year ended 31 December 2022 R'000	Year ended 31 December 2021 R'000
Assets under administration		
Interest receivable	**302 131**	146 305
Fixed deposits	**32 625 000**	26 800 000
Current and call accounts	**19 769 720**	15 249 322
Total assets under administration	**52 696 851**	42 195 627

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 and that there is not a concentration of exposure to one counterparty.

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 100 (2021: 50) days. At least 30% of the fund size must be invested on call at all times.

Funds under management in JIS (Pty) Ltd and JIS CSDP (Pty) Ltd are invested on current and call accounts.

31. Guarantees, contingent liabilities and sub-lease income

31.1 Guarantees

A guarantee of an amount of R12 million (2021: R10 million) was issued by Rand Merchant Bank of South Africa Limited in favour of Strate Limited on behalf of JSE Limited in terms of an agreement to cover any failure by JSE Investor Services CSDP (Pty) Limited to comply with Strate rules and regulations.

JSE Limited issued a letter of undertaking and indemnity to Strate Limited in respect of JSE Investor Services CSDP (Pty) Limited for R12 million for the purpose of ensuring that the subsidiary is in compliance with the Rules of Strate which applies to Central Securities Depository Participants in South Africa.

31.2 Contingent liabilities

No material contingent liabilities existed as at 31 December 2022.

31.3 Sub-lease income

The table below refers to future minimum lease agreements receipts.

	GROUP AND COMPANY	
	2022 R'000	2021 R'000
31.3.1 The JSE sub-leases areas of the building 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*	**1 530**	295
Between one and five years	**–**	25
	1 530	320

* Refers to rental income from short term leases with a 6-month lease term.

No commitments exist as at 31 December 2022.

32. Events after reporting date

Strate Proprietary Limited, an associate of the JSE Group acquired 100% stake in Trustlink Proprietary Limited, a swift bureau business, effective 1 January 2023. The transaction did not impact JSE's effective holding of 44.5% and the classification of the investment as an associate. The estimate of the financial effect for this transaction cannot be made as yet.

There have been no other material events that would require adjustment or disclosure in the annual financial statements between 31 December 2022 and the date of Board approval of the annual financial statements.

SHARE INFORMATION

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

Share code: JSE
ISIN: ZAE000079711
LEI: 231800MZ1VUQEBWRF039
Sector: Financial Services
Sub-sector: Investment Services

	Authorised share capital (Shares)	Nominal value (Rand)	Number of shares in issue (Shares)	Nominal value (Rand)	Closing price (Rand per share)	Market capitalisation (Rand billion)
31 December 2021	400 000 000	40 000	86 877 600	8 620	112.50	9.8
30 June 2022	400 000 000	40 000	86 877 600	8 620	99.54	8.6
31 December 2022[1]	400 000 000	40 000	86 877 600	8 620	108.47	9.4

[1] The JSE has one class of shares: ordinary shares with a par value of 10 cents per share. The total number of treasury shares held by the Group at as 31 December 2022 was 4 823 009 shares (2021: 3 662 367 shares). Further details of the stated capital for the period under review are disclosed in note 19 of the Company's audited consolidated annual financial statements, available at https://www.jse.co.za/investor-relations/results.

Shareholder spread as at 31 December 2022

	Number of shareholders	Shares held	%
Public			
Institutional shareholders	1 214	77 595 187	89.32%
Non-institutional shareholders	5 960	4 564 584	5.25%
Total	7 174	82 159 771	94.57%
Non-public			
JEF Trust	1[1]	2 129 639	2.45%
JSE LTIS Trust	61	2 511 191	2.89%
Directors and company secretary	6	76 999	0.09%
Total		4 717 829	5.43%
Total share capital		86 877 600	100%
Geographic ownership			
South Africa		53 878 808	62.02%
United States		9 384 999	10.80%
United Kingdom		12 927 368	14.88%
Rest of world		10 686 425	12.30%
Total		86 877 600	100%

[1] Historically we have reported on the number of beneficiaries of the JEF Trust, however for FY2022 we are reporting the Trust as the shareholder.

CORPORATE INFORMATION AND DIRECTORATE

JSE Limited

(Incorporated in the Republic
of South Africa)
Registration number: 2005/022939/06
Share code: JSE
ISIN: ZAE000079711
LEI: 213800MZ1VUQEBWRF039

Registered office

One Exchange Square
2 Gwen Lane
Sandown, 2196

Postal address

Private Bag X991174
Sandton, 2146

Contacts

Telephone: +27 (0) 11 520 7000
Web: www.jse.co.za
Investor relations: ir@jse.co.za
Group company secretary:
GroupCompanySecretary@jse.co.za

Directors as at 31 December 2022

P Nhleko[1] (Chairman)
Z Bassa[1]
MS Cleary[1]
VN Fakude[1]
SP Kana[1] (Lead Independent Director)
FN Khanyile[1]
IM Kirk[1]
BJ Kruger[1]
MA Matooane[1]
L Fourie (Group CEO)[2]

[1] Independent non-executive directors.
[2] Executive director.

Changes to the Board in 2022

N Nyembezi (independent non-executive director) resigned from the Board, effective 3 May 2022.

A Takoordeen (executive director) resigned from the Board, effective 20 May 2022.

Group company secretary

GA Brookes

Transfer secretary

JSE Investor Services Proprietary Limited
19 Ameshoff Street
Johannesburg, 2001

Sponsor

Rand Merchant Bank (a division
of FirstRand Bank Limited)
1 Merchant Place
Corner Fredman and Rivonia Road
Sandton, 2196

AGM scrutineers

The Meeting Specialist Proprietary
Limited
One Exchange Square
2 Gwen Lane
Sandown, 2196

Auditors

Ernst & Young Inc.
102 Rivonia Road
Sandton, 2196

Bankers

First National Bank of SA Limited
Corporate Account Services
4 First Place
Bank City
Simmonds Street
Johannesburg, 2001

Investor queries should be directed to ir@jse.co.za and will be redirected, where necessary, to the appropriate Board member or executive for a response.

Governance and secretarial queries should be directed to GroupCompanySecretary@jse.co.za

www.jse.co.za