CONSOLIDATED ANNUAL FINANCIAL STATEMENTS

for the year ended 31 December 2021

JSE

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Page reference for additional reading in this report.
Reference to online data at https://www.jse.co.za/investor-relations/results.

REPORTING SUITE

Guide to our report

The preparation of these annual financial statements for the year ended 31 December 2021 was supervised by A Takoordeen CA(SA), chief financial officer (CFO) of JSE Limited. These annual financial statements have been audited by Ernst & Young Inc. in compliance with section 30 of the Companies Act. These annual financial statements are published on 1 March 2022.
The reports and financial statements set out in this report comprise the Group and Company annual financial statements presented to shareholders of JSE Ltd (JSE).

Frameworks applicable to this report

This report is informed by a range of local and international requirements, standards and guidance, and we have utilised the following frameworks in the preparation of this report:

- International Integrated Reporting <IR> Framework
- Companies Act, No 71 of 2008 as amended (Companies Act)
- JSE Limited Listings Requirements (Listings Requirements)
- King IV Report on Corporate Governance™ for South Africa 2016 (King IV) (copyright and trademarks are owned by the Institute of Directors in South Africa NPC, and all its rights are reserved)
- International Financial Reporting Standards (IFRS)

Assurance over this report

The financial information presented in this report incorporates the annual financial statements for JSE Limited (the "Company") and all subsidiaries as well as the investor protection funds[1] associated with the financial markets operated by the JSE ("Group"). The report excludes details on our associate, Strate, in which the JSE holds 44.55%, as Strate has an independent board and management team. The JSE equity accounts for Strate. The Group structure is on page 4.

The Board, supported by its committees, is ultimately accountable for the JSE's systems of internal control, designed to identify, evaluate, manage and provide reasonable assurance against material misstatement. Executive management and internal audit provide the Board with formal confirmation of the effectiveness of the internal control environment.

The annual financial statements set out in this report are prepared in accordance with the relevant standards. These are audited by the Group's external auditors, Ernst & Young Inc., in accordance with international auditing standards. Non-financial information in this report is reviewed and approved by the relevant Board committee.

[1] *These funds consist of the JSE Guarantee Fund Trust, the JSE Derivatives Fidelity Fund Trust and the JSE Debt Guarantee Fund Trust.*

Our reporting suite

The JSE is committed to reporting in a transparent manner to our broad range of stakeholders. Our reporting suite is available on our website 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, directors' 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 details of our journey towards delivering on our sustainability mandate and our impact on society.

Remuneration report

Sets out the JSE's remuneration philosophy and policy, and how it was implemented in 2021.

Notice of AGM and proxy form

Sets out the notice of the JSE's annual general meeting of shareholders to be held on Tuesday, 3 May 2022, 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 annual financial statements has been supervised by the JSE's chief financial officer, Aarti Takoordeen, 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.

A Takoordeen
Chief Financial Officer

JSE directors' responsibility statement

for the year ended 31 December 2021

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 2021, 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 28 February 2022 and signed by:

N Nyembezi
Chairman

L Fourie
Group Chief Executive Officer

Declaration by Group chief executive officer (CEO) and chief financial officer (CFO)

for the year ended 31 December 2021

The Group CEO and the CFO, hereby confirm that:

(a) the consolidated and separate annual financial statements set out on pages 24 to 102, fairly present in all material respects the financial position, financial performance and cash flows of the JSE Limited in terms of IFRS;
(b) 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; and
(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 within the combined assurance model pursuant to principle 15 of the King Report on Corporate Governance™ for South Africa, 2016 (King IV)*. Where we are not satisfied, we have disclosed to the Group Audit Committee and the auditors the deficiencies in design and operational effectiveness of the internal financial controls and any fraud that involves directors and have taken the necessary remedial action.

L Fourie
Group chief executive officer

A Takoordeen
Chief financial officer

Declaration by Group company secretary

for the year ended 31 December 2021

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

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JSE GROUP STRUCTURE 2022

JSE Limited

- Controlled and consolidated subsidiaries — 100 %
  - JSE Clear Proprietary Limited
  - JSE Trustees Proprietary Limited
  - JSE Clear Derivatives Default Fund 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 Equity Trading
  - 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 provides certain administration services
    - JSE Benevolent Fund

Group structure correct as at 1 January 2022.

GROUP AUDIT COMMITTEE REPORT

Dr Suresh Kana
Chairman: Group Audit Committee

An integrated and responsive assurance discipline supports the Group's pursuit of success, with sustainability being the core goal.

The Group Audit Committee (GAC) is pleased to present its report for the financial year ended 31 December 2021, 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 (Pty) Ltd ("JSEC"), JSE Investor Services (Pty) Ltd ("JIS") and JSE Private Placements ("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 2021.

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

At all times during the financial year the committee comprised four independent non-executive directors of the Company, all of whom satisfied the requirements to serve as members of an audit committee, as provided in section 94 of the Companies Act and King IV Code of Corporate Governance.

Shareholders are required, on an annual basis at each AGM, to approve the appointment of audit committee members in accordance with the provisions of the Companies Act. Four independent non-executive directors of the JSE were approved by shareholders at the AGM held on 3 June 2021 to serve until the next AGM to be held on 3 May 2022. GAC is chaired by the JSE's lead independent director, and the Chairman of the Board is not a member of the committee.

GROUP AUDIT COMMITTEE REPORT continued

The composition of GAC and the attendance of meetings by its members during the 2021 financial year are set out below:

Members	Date appointed to committee	Attendance	Regular invitees
Dr SP Kana (GAC chairman) *CA(SA); CD(SA); MCom; PhD (Honorary)*	**First appointed** 1 July 2015 **Recent appointment** 3 June 2021	100% 4/4 meetings	• N Nyembezi – Chairman of the Board (independent non-executive director) • P Nhleko – Chairman designate (independent non-executive director) • L Fourie – Group CEO • A Takoordeen – CFO • G Brookes – Director: Governance and Assurance • Representative of the Financial Sector Conduct Authority (FSCA) • Group internal audit • External auditors
Ms ZBM Bassa *BAcc; DipAcc; CA(SA)*	**First appointed** 1 November 2018 **Recent appointment** 3 June 2021	100% 4/4 meetings	
Ms MS Cleary *BA LLB; MA; MBA; MSc; Fellowship: Yale World Programme*	**First appointed** 6 August 2020 **Recent appointment** 3 June 2021	100% 4/4 meetings	
Ms FN Khanyile *BA (Hons); MBA; HDip Tax; PhD (Honorary)*	**First appointed** 1 November 2018 **Recent appointment** 3 June 2021	75% 3/4 meetings	

Independence of GAC: 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 2021:

- 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, skills and financial expertise 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

GAC convened for three scheduled meetings in 2021 in line with the Group's financial reporting cycle. These scheduled meetings include separate sessions where GAC convenes as the audit committee for all group entities. The committee also held one ad hoc meeting in June 2021 to review and approve a trading statement (released on SENS on 25 June 2021) in advance of the publication of the interim results during August 2021.

The GAC chairman has regular contact with JSE executive management to discuss relevant financial and accounting matters directly. The chief internal audit executive and the designated external audit partner have direct access to GAC, including closed sessions held during the year without management present.

From March 2021 – July 2021 the CFO, Aarti Takoordeen, was on extended leave to attend the Advanced Management Program at Harvard Business School. Ms Carmini Kander, Head: Commercial Finance, was appointed Acting CFO in her place during this period.

Representatives of the Financial Services Conduct Authority (FSCA) attend meetings of the Committee. During 2021 one trilateral engagement was held with the Prudential Authority (involving the GAC chairman, 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.

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 GAC members for 2022

Ms MS Cleary will complete her term of service and will retire as a committee member at the AGM to be held on Tuesday, 3 May 2022. Following input from the Group Nominations Committee, the Board has nominated three independent non-executive directors to serve on GAC for the ensuing year. These appointments are to be considered by shareholders at the AGM to be held on Tuesday, 3 May 2022:

- Dr SP Kana (lead independent director, and chairman of GAC);
- Ms ZBM Bassa (independent non-executive director); and
- Ms FN Khanyile (independent non-executive director).

The Board is satisfied that the proposed appointment to the GAC of the 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, 3 May 2022 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 29 March 2022 at 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 areas during the year:

Control management framework	• Reviewing management's progress with the roll-out of the Company's internal control framework, and the specific attestation by the Group chief executive officer and the chief financial officer on the internal financial controls for financial reporting.
Fraud risk in relation to revenue recognition	• Obtaining regular feedback from the external auditors in connection with reliance on controls over the financial reporting system and key judgements applied in the recognition of revenue in the following areas: – Information services revenue – Trading revenue streams – JIS operations
Goodwill impairment testing	• Reviewing management's goodwill impairment tests, including management's key assumptions, the initiatives to increase JIS revenue over time as well as the amount of headroom to support the goodwill held on the balance sheet.
Fair value & accounting investment in GlobaCap	• Reviewing reports regarding the assessment of the reasonability of management's assumptions relating to fair value calculation of the investment in GlobaCap.
Capitalisation of software related intangibles	• Oversight over: – Capitalisation of development costs during the financial year – Management's judgement relating to the capitalisation of contract related costs – Contractual terms and related accounting treatment applied by management relating to the various contracts entered into or revised during the year
Treasury	• Receiving updates on the compliance with approved investment mandates, risk management thresholds and the controls for daily fund transfers.
Investment of funds	• Receiving updates from the independent investment manager and reviewing investment performance against pre-set benchmarks in respect of the investor protection funds.
JIS first time audit (statutory)	• Considering reports from external auditors on the progress of the initial statutory audit of JIS.

DISCHARGE OF DUTIES IN 2021

GAC allocated its time during 2021 on the following matters:

- **35%** **Financial reporting, accounting, tax and dividend matters**
- **12%** **Financial oversight, regulatory capital and budget matters**
- **7%** **Control management framework (internal financial controls)**
- **10%** **Subsidiary oversight**
- **14%** **External audit matters**
- **10%** **Internal audit matters**
- **7%** **Investment performance oversight**
- **5%** **Governance functional matters**

During 2021, in the execution of its statutory duties and in accordance with its terms of reference, the committee effectively discharged the following responsibilities:

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 CFO was assessed as part of the annual Board and Board committee effectiveness review for the year ended December 2021.

In accordance with the JSE Listings Requirements, the committee considered the results of the effectiveness review and satisfied itself that Ms A Takoordeen, CA(SA), being the CFO in FY2021, had the appropriate expertise and experience to meet the responsibilities of her appointed position. The Committee also reviewed the quality of work, adequacy of resources and level of effectiveness of the finance function.

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 released of the audited annual financial statements, the CFO tendered her notice of resignation to be effective 20 May 2022.
Ms Carmini Kander CA(SA) has been appointed as Acting CFO pending appointment of a permanent CFO.

Evaluated financial reporting and accounting practices

The committee reviewed the integrity of the interim results and annual financial statements for the year ended 31 December 2021, 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 a timely manner and 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;
- reviewed the going concern status of the Group for the year ended 31 December 2021 and concluded that the Group is a going concern and that the consolidated annual financial statements had been prepared in accordance with the going concern concept;
- reviewed the solvency and liquidity tests and recommended the dividend proposal for 2021 as prepared by management for approval by the Board; and
- considered and noted the general proactive monitoring report issued in respect of the JSE for the year ended December 2020, and noted that the proactive monitoring report did not reflect any matters of concern affecting the Group's financial statements.

External audit matters

GAC is responsible for recommending the appointment of external auditors for shareholder approval, for exercising oversight over the external auditors for all group entities and for determining the compensation payable to the external auditors.

In February 2021, and in accordance with paragraphs 3.84(g)(iii) and 22.15(h) of the Listings Requirements, the committee assessed the suitability of Ernst & Young Inc. for reappointment by shareholders as the Company's independent external auditors for the financial year, with Imraan Akoodie as the designated individual auditor. GAC recommended the reappointment of Ernst & Young Inc. and of Mr Akoodie, and shareholders approved the resolution with a majority of 99.9% at the AGM held on 3 June 2021.

External audit independence, objectivity and effectiveness during the 2021 financial year

Evaluation

The committee formally assessed the effectiveness of the 2021 external audit process and quality of the audit. The assessment covered all aspects of the audit service provided by Ernst & Young Inc. 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 of Ernst & Young Inc.; 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 R6.5 million (2020: R6.01 million) and the terms of engagement for FY2021;
- monitored adherence to the JSE's audit and non-audit services policy and the extent of non-audit services. Ernst & Young did not provide any non-audit services to the JSE during 2021;
- 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 Ernst & Young Inc. 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 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 Ernst & Young Inc. 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;
- Ernst & Young Inc. demonstrated a good understanding of the Group's business and identified and focused on the areas of material risk;
- Ernst & Young'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 in accordance with the International Standards on Auditing, and management was comfortable that key findings had been raised appropriately;
- there had been active engagement on misstatements and appropriate judgements on materiality; and
- it was confirmed that there had been an appropriate level of challenge and that Ernst & Young Inc. had functioned independently of the Group in accordance with their mandate for the 2021 financial year.

Internal audit matters

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 in order 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 2021, 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 the Group internal audit function in carrying out its duties and to ensure the required degree of independence.

Furthermore, the committee:

- reviewed the enterprise-level risks of the JSE to ensure the planned internal audit assignments are focused on extreme and high-risk areas;
- engaged the Group Risk Management Committee of the Board to ensure that all material risks have been reviewed and assessed, and to highlight areas where internal audit can provide independent assurance on the quality and effectiveness of key business processes and associated controls; and
- ensured 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.

Furthermore, the committee:

- reviewed quarterly investment reports prepared by management and monitored compliance with financial covenants and hedging policies (in relation to interest rates and foreign exchange rates);
- fulfilled an oversight function with regard to tax governance, and received regular feedback on both tax compliance and tax risk matters of the Group and is satisfied that no material non-compliance has occurred;
- reviewed the Group's mechanisms for protected disclosure and whistle-blowing;
- considered and, where appropriate, made recommendations on internal financial controls; and
- assessed the annual declaration (as published on page 3 in accordance with the Listings Requirements paragraph 3.84(k)) by the Group CEO and the CFO in respect of the quality and effectiveness of the internal financial controls in respect of financial reporting.

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 2021.

Dr SP Kana
Chairman: Group Audit Committee

DIRECTORS' REPORT

The JSE's business

A description of the JSE's business, its value chain and operations 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, 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 29 March 2022.

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.

Major operating subsidiaries

JSE Clear (Pty) Limited

JSE Clear (Pty) Limited (JSE Clear) is a wholly owned subsidiary of JSE Limited and is 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. Partly as a consequence of the global financial crisis, global financial regulators have issued directives (Basel III) for the capitalisation of bank exposures to central counterparties (CCPs). At the end of 2012, JSE Clear was deemed a qualifying CCP by the FSCA in terms of the Principles for Financial Market Infrastructures issued by these global regulators (CPSS-IOSCO) and 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 the FSCA. JIS primarily offers transfer secretarial and registry services, including registry maintenance, treasury services, and corporate actions. As of 2021, JIS expanded its service offering to include the administration of share plans.

JSE Private Placements (Pty) Limited

JSE Private Placements (Pty) Limited (JPP) is a wholly owned subsidiary established in 2021 to develop and operate a private placements platform so as to address the growing demand for non-traditional asset classes. This platform is intended to meet the needs of companies that need to raise capital but wish to remain private. JPP intends offering a streamlined capital raising process using distributed ledger technology developed by Globacap Technology, a UK-based fintech in which the JSE has a minority stake. In December 2021, JPP was granted a Financial Services Provider (FSP) licence by FSCA.

Clearing House for JSE Limited

JSE Clear (Pty) Limited is licensed as an associated clearing house and operates as a CCP 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 Fund (Pty) Limited, 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 Derivatives Default Fund (Pty) Limited is a legal entity separate and remote from JSE Clear and the JSE, 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.

Authorised users of the JSE (members of the JSE)

As at 31 December 2021, there were 242 authorised users (2020: 239), categorised as follows:

Category of members	2021	2020
Equity members	48	49
Equity Derivatives members	67	57
Commodities Derivatives members	48	52
Interest Rate and Currency Derivatives members	72	73
Clearing members	7	8
Total	**242**	239

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 18 on page 70.

Rights attaching to shares

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

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

DIRECTORS' REPORT continued

Directors' interests and shareholding

As at 31 December 2021

		Direct beneficial				
Director	Status of director	Share register (own name)	LTIS 2010 & 2018 Trust and other: Unvested[1]	2021 Total	% of issued share capital	2020 Total
L Fourie (CEO)[1]	Executive	12 000	218 914	**230 914**	0.265	147 934
A Takoordeen (CFO)[1]	Executive	27 410	82 516	**109 926**	0.126	87 693
MS Cleary	Independent non-executive	5 650		**5 650**	0.006	5 650
BJ Kruger	Non-executive	2 500		**2 500**	0.003	2 500
NMC Nyembezi	Independent non-executive	2 050		**2 050**	0.002	2 050
J Burke	Retired 1 February 2020					82 851
M Jordaan	Retired 25 June 2020					5 900
D Lawrence	Retired 25 June 2020					3 000
Total		49 610	301 430	**351 040**		245 827
GA Brookes (Group company secretary)[1]		14 160	43 490	**57 650**	0.066	53 594

There has been no change in directors' interests from the end of the financial year until the approval of the JSE annual results and release thereof on SENS on 1 March 2022. 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 2021 and are summarised in the table below. For the executive directors, the Group company secretary and the prescribed officers, the purchases are in relation to the grant of shares under allocation 4 of the LTIS.

Name	Status	Number of ordinary shares awarded	Value of transaction	Number of LTIS 2010 shares sold	Value of transaction	Number of LTIS 2018 shares sold	Value of transaction
L Fourie	CEO and executive director	82 980	10 017 230				
A Takoordeen	CFO and executive director	24 210	2 922 597	1 641	191 694	1 507	170 291
A Greenwood	Prescribed Officer	26 008	3 139 649	1 746	203 960	1 604	181 252
D Khumalo	Prescribed Officer	19 296	2 329 386	2 839	331 638		
H Kotze	Prescribed Officer	22 530	2 719 790				
V Lee[2]	Prescribed Officer	19 988	2 412 923				
I Monale[2]	Prescribed Officer	23 212	2 802 120				
M Randall	Prescribed Officer	21 538	2 600 037			2 984	337 192
V Reddy	Prescribed Officer	24 824	2 996 718	764	89 247	705	79 665
G Brookes	Group company secretary	11 630	1 403 957				

[1] *These directors and officers participate in the LTIS 2010 and LTIS 2018 schemes.*

[2] *V Lee and I Monale were appointed in 2021.*

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 2021 were disclosed or established from enquiries:

Names	% of total issued ordinary shares	Number of ordinary shares held
Ninety One SA Pty Limited	14.4	12 546 403
Public Investment Corporation (SOC) Limited	11.4	9 932 956
Allan Gray Proprietary Limited	9.2	8 013 338
PSG Asset Management (Pty) Limited	8.5	7 427 577
The Vanguard Group, Inc.	3.9	3 348 244

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

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 2021, the following fund managers were responsible for managing investments of 2.5% or more of the share capital of the JSE:

Names	% of total issued	Number of ordinary shares held
Ninety One Ninety One SA Pty Ltd.	14.4	12 546 403
Public Investment Corporation (SOC) Limited	11.4	9 932 956
Allan Gray Proprietary Limited	9.2	8 013 338
PSG Asset Management (Pty) Ltd	8.5	7 427 577
The Vanguard Group, Inc.	3.9	3 348 244
Goldman Sachs Asset Management International	3.4	2 960 721
Abax Investments (Pty) Limited	3.1	2 719 072
Goldman Sachs Asset Management, L.P.	2.8	2 394 506
Absa Asset Management (Pty) Limited SA Pty Limited	2.7	2 337 630

Dividend policy

The Group's dividend policy is to maintain a dividend cover ratio of 1.5x–1x earnings (a pay-out ratio of 67%–100% of current earnings). This pay-out range reflects the fact that cash generated exceeds NPAT, largely as a consequence of the amortisation of technology investments in previous years. This trend is expected to continue for the next few years, and will be influenced by changes in the depreciation and amortisation profile of the Group.

The Board is confident that the existing dividend policy is congruent with the Group's inorganic growth strategy over the near term.

Declaration of ordinary and special cash dividends

The Board has declared an ordinary cash dividend and a special cash dividend for the year ended 31 December 2021, as follows:

Dividend	Annual gross amount per share	Withholding tax %	Net amount
Ordinary	754 cents	20%	603.20 cents
Special	100 cents	20%	80 cents

The ordinary and special cash dividends have 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 the close of business on Friday, 25 March 2022. 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.

Dividend paid in respect of financial year ended	**31 December 2021**	31 December 2020
Ordinary dividend per share	**754 cents**	725 cents
Special dividend per share	**100 cents**	0 cents
Total rand value	**R741 million**	R630 million
Board declaration date	**Monday, 28 February 2022**	Thursday, 25 February 2021
Special cash dividend finalisation date	**Monday, 14 March 2022**	–
Last date to trade JSE shares *cum* dividend	**Tuesday, 22 March 2022**	Tuesday, 23 March 2021
JSE shares commence trading ex-dividend	**Wednesday, 23 March 2022**	Wednesday, 24 March 2021
Record date for purposes of determining the registered holders of JSE shares to participate in the dividends at close of business on	**Friday, 25 March 2022**	Friday, 26 March 2021
Dividends payment date	**Monday, 28 March 2022**	Monday, 29 March 2021

Share certificates may not be dematerialised or rematerialised from Wednesday, 23 March 2022 to Friday, 25 March 2022, both days inclusive. On Monday, 28 March 2022, 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, 28 March 2022.

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. South African Reserve Bank approval is required for the declaration of the special cash dividend and the finalisation date is Monday, 14 March 2022.

Service contracts with directors

The 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 June 2021

The following resolutions were adopted by shareholders in 2021:

Resolutions		% vote in favour
1.1	To elect Mr I Kirk as a director	98.58%
2.1	To re-elect Ms N Fakude as a director	99.91%
2.2	To re-elect Dr M Matooane as a director	99.21%
2.3	To re-elect Ms A Takoordeen as a director	99.98%
3	To re-elect Ms N Nyembezi as a director	97.52%
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	99.98%
5.1	To reappoint Dr S Kana to serve as a member and chairman of the Group Audit Committee	99.96%
5.2	To reappoint Ms Z Bassa to serve as a member of the Group Audit Committee	95.08%
5.3	To reappoint Ms S Cleary to serve as a member of the Group Audit Committee	99.97%
5.4	To reappoint Ms F Khanyile to serve as a member of the Group Audit Committee	99.56%
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 vote on the implementation report as set out in the remuneration report of the Company	89.21%
9.	Special Resolution 1: General authority to repurchase shares	96.88%
10.	Special Resolution 2: General authority to provide financial assistance to subsidiaries in terms of sections 44 and 45 of the Companies Act	98.30%
11.	Special Resolution 3: Non-executive directors' emoluments for 2021	98.56%

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:

- SP Kana (lead independent non-executive director)
- BJ Kruger (independent non-executive director)
- FN Khanyile (independent non-executive director)
- ZBM Bassa (independent non-executive director)

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

- Nonkululeko Nyembezi will retire as an independent non-executive director and as Chairman of the Board at the AGM to be held 3 May 2022.

Changes to the Board

During the period under review, Mr Phuthuma Nhleko joined the Board as an independent non-executive director effective 1 July 2021. Mr Nhleko will assume the chairmanship of the Board following the annual general meeting to be held on Tuesday, 3 May 2022.

Subsequent to the period under review, Ms Aarti Takoordeen, Chief Financial Officer (CFO) for JSE Limited resigned as CFO and executive director, effective 20 May 2022. Ms Takoordeen will assist with a smooth handover during her period of notice.

The Board has appointed Ms Carmini Kander as acting CFO.

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 2021 we determine the following material matters:

1. Attractiveness of the JSE as a capital raising destination
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
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 2021.

Events after the reporting date

There have been no changes to the directors' interests in the ordinary share capital of the Company and no material events that would require adjustment or disclosure in the annual financial statements have occurred between 31 December 2021 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 JSE Limited and its subsidiaries ("the group") set out on pages 24 to 102 which comprise the consolidated and separate statements of financial position as at 31 December 2021, 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 2021, 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, 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 applied to the audit of the Consolidated and Separate Financial Statements.

INDEPENDENT AUDITOR'S REPORT continued

Key Audit Matter

Fair value of Other Investments

The acquisition of a minority stake for R84 million (16% 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 fair value of the JSE's investment at the reporting date is subject to significant management judgement.

The areas of judgement include:

- The revenue and expense growth rates and the discount rate included in the forecast assumptions in the valuation model.
- The uncertainty associated with the assumptions supporting the fair value calculation, given that the JSE Limited has invested in the early life-stage of the underlying business and thus have limited historical data.

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 28 – fair value estimation for further details.

We performed the following procedures, amongst others, over the forecast assumptions provided by management:

- Compared the forecast financial revenue growth rate to the historical revenue growth achieved;
- Confirmed the reasonability of the forecasts through discussion with GlobaCap executive management and JSE executive management;
- Evaluated budget reasonability by comparing actual performance of GlobaCap achieved for the current financial year to the budgeted;
- Inspected minutes of meeting from GlobaCap board meetings where the financial year 2022 forecast revenue assumptions were approved;
- Inspected submissions to the GlobaCap board of directors relating to the current business position and future expectations which support the cashflow forecasts; and
- Obtained written representation from JSE executive management supporting the significant assumptions used in the cashflow forecasts; and we corroborated this management representation with the Executive management of GlobaCap.

With the support of our internal valuation specialists, we performed the following procedures:

- Evaluated the model prepared by management to calculate the fair value of the Other Investment acquired;
- Assessed the reasonability of key assumptions against industry peers;
- Benchmarked results against peer EV/Revenue market multiples;
- Performed sensitivity analysis on the revenue growth rates and discount rate used;
- Evaluated the reasonability of the valuation methodology when compared to industry benchmarks;
- Performed subsequent event procedures through to the date of the audit report; and
- Evaluated the competence, capabilities, and objectivity of our internal valuation experts.

We inspected the presentation and disclosures relating to the fair value estimation in the annual financial statements and assessed the appropriateness thereof in terms of requirements of 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 108 page document titled "JSE Limited Consolidated Annual Financial Statements for the year ended 31 December 2021", which includes the Responsibility of financial statements, Group Corporate Structure, the 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.

INDEPENDENT AUDITOR'S REPORT continued

- 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 five years.

Ernst & Young Inc.

Ernst & Young Inc.
Director – Imraan Akoodie CA (SA)
Registered Auditor
28 February 2022
102 Rivonia Road
Sandton
2146

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2021

		GROUP		COMPANY	
	Notes	**2021 R'000**	2020 R'000	**2021 R'000**	2020 R'000
Continuing operations					
Revenue	6.1	**2 517 467**	2 446 368	**2 440 864**	2 485 585
Other income	6.2	**58 755**	82 013	**99 219**	112 334
Personnel expenses	7.1	**(649 896)**	(600 838)	**(593 707)**	(593 865)
Other expenses	7.2	**(1 126 086)**	(1 112 558)	**(1 021 216)**	(1 071 146)
Expected credit loss (ECL) impairments		**(2 526)**	(4 347)	**(2 626)**	(4 280)
Profit from operating activities		**797 714**	810 638	**922 535**	928 628
Finance income	7.3	**1 996 538**	2 434 182	**94 294**	170 631
Finance costs	7.4	**(1 850 862)**	(2 234 354)	**(44 988)**	(71 463)
Net finance income		**145 676**	199 828	**49 306**	99 168
Share of profit from associate (net of income tax)	12.1	**51 597**	54 351	**–**	–
Profit before income tax		**994 987**	1 064 816	**971 841**	1 027 796
Income tax expense	8.1	**(271 812)**	(283 331)	**(263 917)**	(280 960)
Profit for the year from continuing operations		**723 175**	781 485	**707 924**	746 836
Discontinued operations					
Loss after tax for the year from discontinued operations		**–**	(2 842)	**–**	–
Profit for the year		**723 175**	778 643	**707 924**	746 836
Attributable to:					
Equity holders of the parent		**722 443**	778 389	**–**	–
Non-controlling interests		**732**	254	**–**	–
		723 175	778 643	**–**	–
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)		**68 748**	38 505	**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)		**(1 219)**	955	**–**	–
Other comprehensive income for the year, net of income tax		**67 529**	39 460	**1 926**	–
Total comprehensive income for the year for the period from continuing operations		**790 704**	818 103	**709 850**	746 836

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME continued
for the year ended 31 December 2021

		GROUP		COMPANY	
	Notes	**2021 R'000**	2020 R'000	**2021 R'000**	2020 R'000
Attributable to:					
Equity holders of the parent company		**789 972**	817 849	**–**	–
Non-controlling interests		**732**	254	**–**	–
		790 704	818 103	**–**	–
Earnings per share from continuing operations					
Basic earnings per share (cents)	9.1	**874.1**	940.1	**835.0**	876.3
Diluted earnings per share (cents)	9.2	**866.4**	934.3	**827.9**	870.9
Earnings per share from discontinued operations					
Basic earnings per share (cents)		**–**	(3.4)	**–**	–
Diluted earnings per share (cents)		**–**	(3.4)	**–**	–
Total earnings per share					
Basic earnings per share (cents)	9.1	**874.1**	936.7	**835.0**	876.3
Diluted earnings per share (cents)	9.2	**866.4**	930.9	**827.9**	870.9

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

as at 31 December 2021

	Notes	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
Assets					
Non-current assets		**1 966 659**	1 870 773	**1 454 725**	1 384 006
Property and equipment	10.3	**175 845**	139 927	**172 657**	138 024
Intangible assets	11.3/6	**726 507**	820 656	**460 122**	543 763
Investment in associate	12.1	**328 262**	319 907	**21 416**	21 416
Investments in subsidiaries	13.1	**–**	–	**511 426**	435 975
Other investments	14	**529 238**	377 302	**86 481**	1
Right-of-use-assets	26	**137 723**	177 458	**135 574**	173 590
Deferred taxation	20.1/3	**69 084**	35 524	**67 049**	71 237
Current assets		**59 070 941**	49 754 227	**3 010 918**	2 855 572
Trade and other receivables	15	**593 423**	474 706	**344 382**	313 525
Income tax receivable		**1 880**	6 269	**–**	–
Due from Group entities	13.4	**–**	–	**74 626**	85 872
JSE Clear Derivatives Default Fund collateral deposits	16.3	**500 000**	500 000	**100 000**	100 000
Margin deposits	16.1	**55 412 674**	46 308 480	**339 964**	308 464
Collateral deposits	16.2	**169 962**	880	**169 962**	880
Indemnification asset		**–**	4 680	**–**	–
Cash and cash equivalents	17	**2 393 002**	2 459 212	**1 981 984**	2 046 831
Total assets		**61 037 600**	51 625 000	**4 465 643**	4 239 578

CONSOLIDATED STATEMENT OF FINANCIAL POSITION continued
as at 31 December 2021

		GROUP		COMPANY	
	Notes	**2021 R'000**	2020 R'000	**2021 R'000**	2020 R'000
Equity and liabilities					
Total equity	18.3	**4 218 981**	4 154 288	**3 367 994**	3 324 144
Stated capital		**(67 741)**	(32 514)	**(62 027)**	(26 800)
Reserves		**757 488**	676 578	**94 259**	96 669
Retained earnings		**3 529 234**	3 472 638	**3 335 762**	3 254 275
Equity attributable to equity holders of the parent		**4 218 981**	4 116 702	**3 367 994**	3 324 144
Non-controlling interests	18.3	**–**	37 586	**–**	–
Non-current liabilities		**258 004**	273 842	**222 635**	275 369
Employee benefits	19.1	**4 035**	5 952	**4 035**	5 952
Lease liability	26	**196 657**	252 938	**195 951**	249 366
Deferred tax liability	20	**34 666**	–	**–**	–
Deferred income	24	**22 646**	13 401	**22 649**	18 500
Long-term liabilities		**–**	1 551	**–**	1 551
Current liabilities		**56 560 615**	47 196 870	**875 014**	640 065
Trade and other payables	21	**380 296**	305 457	**172 957**	156 850
Other liability		**–**	4 680	**–**	–
Income tax payable		**9 089**	3 485	**8 426**	3 485
Deferred income	24	**1 844**	970	**1 844**	970
Employee benefits	19.1	**130 699**	132 036	**128 446**	130 922
Lease liability	26	**56 051**	40 882	**53 415**	38 494
JSE Clear Derivatives Default Fund collateral contribution	16.3	**400 000**	400 000	**–**	–
Margin deposits	16.1	**55 412 674**	46 308 480	**339 964**	308 464
Collateral deposits	16.2	**169 962**	880	**169 962**	880
Total equity and liabilities		**61 037 600**	51 625 000	**4 465 643**	4 239 578

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2021

	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 2020		(17 726)	466 109	82 158	–	548 267	3 439 090	3 969 631	–	3 969 631
Profit for the year from continuing operations		–	–	–	–	–	781 231	781 231	254	781 485
Other comprehensive income		–	39 460	–	–	39 460	–	39 460	–	39 460
Total comprehensive income for the year		–	39 460	–	–	39 460	781 231	820 691	254	820 945
Loss for the year from discontinued operations		–	–	–	–	–	(2 842)	(2 842)	–	(2 842)
Take-on of JEF Trust as a subsidiary		(5 714)	54 360	–	–	54 360	7 152	55 798	–	55 798
LTIS 2010 Allocation 7 – shares vested	19.5	14 317	–	(14 317)	–	(14 317)	–	–	–	–
LTIS 2010 Allocation 8 – shares vested	19.5	9 343	–	(9 343)	–	(9 343)	–	–	–	–
Bonus shares vested		11 243	–	(5 411)	–	(5 411)	–	5 832	–	5 832
Distribution from the JSE Debt Guarantee Fund Trust[1]		–	(2 851)	–	–	(2 851)	2 851	–	–	–
Dividends paid to owners	18.4	–	17 889	–	–	17 889	(728 521)	(710 732)	–	(710 732)
Equity-settled share-based payment	19.5	–	–	22 300	–	22 300	–	22 300	–	22 300
Transfer of profit to investor protection funds		–	4 942	–	–	4 942	(4 942)	–	–	–
Listed companies – Fines – Issuer Regulation		–	21 744	–	–	21 744	(21 744)	–	–	–
Qualifying deductible expenses related to Fines – Issuer Regulation		–	(462)	–	–	(462)	462	–	–	–
Non-controlling interests arising on a business combination		–	–	–	–	–	–	–	37 332	37 332
Treasury shares		(43 660)	–	–	–	–	–	(43 660)	–	(43 660)
Treasury shares – share issue costs		(317)	–	–	–	–	–	(317)	–	(317)
Total contributions by and distributions to owners of the Company recognised directly in equity		(14 788)	95 622	(6 771)	–	88 851	(747 684)	(673 621)	37 332	(636 289)

[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, R2.1 million (December 2020: R2.8 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 (refer to note 29). The current movement in the reserve relates to unrealised foreign exchange gains and losses on the foreign denominated investment, as required by IAS 21. Refer to note 28 for details on this transaction.*

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY continued
for the year ended 31 December 2021

	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 31 December 2020		(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	19.5	11 127	–	(11 127)	–	(11 127)	–	–	–	–
LTIS 2010 Allocation 1 – shares vested	19.5	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	18.4	–	15 440	–	–	15 440	(628 225)	(612 785)	–	(612 785)
Equity-settled share-based payment	19.5	–	–	22 532	–	22 532	–	22 532	–	22 532
Transfer of profit to investor protection funds		–	4 415	–	–	4 415	(4 415)	–	–	–
Qualifying deductible expenses related to Fines – Issuer Regulation		–	(1 788)	–	–	(1 788)	1 788	–	–	–
Treasury shares		(59 951)	–	–	–	–	–	(59 951)	–	(59 951)
Treasury shares – share issue costs		(356)	–	–	–	–	–	(356)	–	(356)
Transactions with owners recognised directly in equity		–	–	–	–	–	(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)
Balance at 31 December 2021		(67 741)	682 723	72 839	1 926	757 488	3 529 234	4 218 981	–	4 218 981
Note		18.3	18.3	18.3			18.3		18.3	

[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, R2.1 million (December 2020: R2.8 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 (refer to note 29). The current movement in the reserve relates to unrealised foreign exchange gains and losses on the foreign denominated investment, as required by IAS 21. Refer to note 28 for details on this transaction.*

* *Debit balance due to own shares held as part of the Long-Term Incentive Schemes.*

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY continued
for the year ended 31 December 2021

	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 equity R'000
Company								
Balance at 1 January 2020		(17 726)	–	82 158	–	82 158	3 257 342	3 321 774
Profit for the year		–	–	–	–	–	746 836	746 836
Total comprehensive income for the year		–	–	–	–	–	746 836	746 836
LTIS 2010 Allocation 7 – shares vested	19.5	14 317	–	(14 317)	–	(14 317)	–	–
LTIS 2010 Allocation 8 – shares vested	19.5	9 343	–	(9 343)	–	(9 343)	–	–
Bonus shares vested		11 243	–	(5 411)	–	(5 411)	–	5 832
Dividends paid to owners	18.4	–	–	–	–	–	(728 621)	(728 621)
Equity-settled share based payment	19.5	–	–	22 300	–	22 300	–	22 300
Listed companies – Fines – Issuer Regulation		–	21 744	–	–	21 744	(21 744)	–
Qualifying deductible expenses related to Fines – Issuer Regulation		–	(462)	–	–	(462)	462	–
Treasury shares		(43 660)	–	–	–	–	–	(43 660)
Treasury shares – share issue costs		(317)	–	–	–	–	–	(317)
Total contributions by and distributions to owners of the Company recognised directly in equity		(9 074)	21 282	(6 771)	–	14 511	(749 903)	(744 466)
Balance at 31 December 2020		**(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	19.5	**11 127**	**–**	**(11 127)**	**–**	**(11 127)**	**–**	**–**
LTIS 2010 Allocation 1 – shares vested	19.5	**13 953**	**–**	**(13 953)**	**–**	**(13 953)**	**–**	**–**
Dividends paid to owners	18.4	**–**	**–**	**–**	**–**	**–**	**(628 225)**	**(628 225)**
Equity-settled share based payment	19.5	**–**	**–**	**22 532**	**–**	**22 532**	**–**	**22 532**
Qualifying deductible expenses related to Fines – Issuer Regulation		**–**	**(1 788)**	**–**	**–**	**(1 788)**	**1 788**	**–**
Treasury shares		**(59 951)**	**–**	**–**	**–**	**–**	**–**	**(59 951)**
Treasury shares – share issue costs		**(356)**	**–**	**–**	**–**	**–**	**–**	**(356)**
Total contributions by and distributions to owners of the Company recognised directly in equity		**(35 227)**	**(1 788)**	**(2 548)**	**–**	**(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**
Note		18.3	18.3	18.3			18.3	

* *Debit balance due to own shares held as part of the Long-Term Incentive Schemes.*

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2021

	Notes	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
Cash flows from operating activities					
Cash generated by operations	22.1	**1 034 454**	1 112 575	**1 119 003**	1 184 831
Finance income	22.3	**1 945 435**	2 495 975	**94 110**	165 396
Finance costs		**(1 806 772)**	(2 325 154)	**(44 815)**	(75 727)
Dividends received		**5 402**	2 119	**–**	–
Taxation paid	22.2	**(261 267)**	(282 755)	**(255 341)**	(278 667)
Net cash generated by operating activities		**917 252**	1 002 760	**912 957**	995 833
Cash flows from investing activities					
Proceeds on sale of other investments		**20 400**	16 903	**–**	–
Acquisition of other investments		**(104 253)**	(15 984)	**(84 000)**	–
Loans repaid/(given) to group companies		**–**	–	**12 000**	(12 000)
Dividends from associate		**43 242**	27 230	**43 242**	27 230
Proceeds from disposal of property and equipment		**–**	50	**–**	50
Acquisition of leasehold improvements		**(63 811)**	(1 653)	**(63 811)**	(1 653)
Acquisition of intangible assets		**(65 638)**	(185 133)	**(62 400)**	(185 133)
Acquisition of property and equipment		**(35 834)**	(20 121)	**(32 446)**	(20 121)
Take on of JEF Trust as subsidiary		**–**	75 004	**–**	–
Acquisition of a subsidiary/non-controlling interest, net of cash acquired		**–**	(216 111)	**(75 450)**	(231 623)
Net cash used in investing activities		**(205 894)**	(319 815)	**(262 864)**	(423 250)
Cash flows from financing activities					
Acquisition of treasury shares		**(70 877)**	(51 012)	**(70 877)**	(51 012)
Proceeds on sale of treasury shares		**10 571**	7 037	**10 571**	7 037
Transactions with owners		**(75 450)**	–	**–**	–
Lease liabilities repaid		**(41 113)**	(40 407)	**(38 495)**	(39 664)
Dividends paid		**(612 785)**	(710 732)	**(628 225)**	(728 621)
Net cash used in financing activities		**(789 654)**	(795 114)	**(727 026)**	(812 260)
Net (decrease)/increase in cash and cash equivalents		**(78 296)**	(112 169)	**(76 933)**	(239 677)
Cash and cash equivalents at 1 January		**2 459 212**	2 577 334	**2 046 831**	2 292 461
Effect of exchange rate fluctuations on cash held		**12 086**	(5 953)	**12 086**	(5 953)
Cash and cash equivalents at 31 December 2021	17	**2 393 002**	2 459 212	**1 981 984**	2 046 831

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2021

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 2021 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 and Company financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs), the SAICA financial reporting guides as issued by the Accounting Practice Committee, the Financial Pronouncements as issued by the Financial Reporting Standards Council, the JSE Listings Requirements and the requirements of the Companies Act 2008 ("Companies Act").

The Group financial statements were authorised for issue by the Board of Directors (Board) on 28 February 2022.

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; and
- Shared-based payment transactions.

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.

For the period ended 31 December 2021 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.

2. Basis of preparation (continued)

2.4 Use of estimates and judgements (continued)

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 market and legal changes, 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 managements 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.

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. 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. 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.

The new standards and amendments and its impact on the Group has been assessed during 2021 as per note 4.

2. Basis of preparation (continued)

2.6 Ongoing response to the COVID-19 pandemic

The JSE has remained open, and has provided a robust trading, clearing and settlement environment for all asset classes listed on the exchange. The enterprise risk management team has remained responsible for steering our response to the crisis and provided exemplary leadership during the past two years.

The advent of the virtual workspace forced us to reimagine our work environment, and some of these changes are likely to remain. The workplace will become less about which technology we use, and more about how we use it to enable collaborative engagements, knowledge sharing and a culture of creative thinking. Our employee engagement illustrated that employees are eager to explore a more flexible workplace regime, and this is being echoed at many of our peer organisations. With this in mind our building upgrades are complete, with significant improvements made to client-facing facilities and to support our new ways of work. We are developing a comprehensive strategy for the return to work, which ensures existing policies and employee contracts are aligned with a hybrid working model.

Significant levels of market activity were observed in financial markets across the world in 2020, amid the spread of the COVID-19 pandemic which created a short-term surge in the Group's revenues. The hypervolatility brought about by COVID-19 in 2020 resulted in abnormal trading activity which positively impacted operating revenue. Similar volatility has not been experienced in the 2021 financial year. The Group also realised forex gains on the back of the weakened rand in 2020 against the dollar which saw material gains in 2020. The interest rate environment remains at record lows which negatively impacted the net finance income of the Group. There has been no material impact on the collectability and recoverability of trade and other receivables. During the period, the fair value of the Group's investments increased by R65 million (excluding the Globacap investment – refer to note 28) compared with an increase of R39 million for the period ended 31 December 2020.

The Group's business model is entrenched in the financial ecosystem and as such the Group's performance will also be affected in the medium term. The Group has remained profitable with positive cash flows from operations and continues to operate as a going concern. In respect of the solvency and liquidity test set out in section 4 of the Companies Act, the Group has sufficient resources to maintain its operational existence for the foreseeable future. The JSE and JSE Clear remain sufficiently capitalised.

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 (refer to note 2.4) 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.

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.

Following a review of their strategic fit to the Group in 2018, the Board decided to wind up Nautilus MAP RF (Pty) Limited and Nautilus Operations (Pty) Limited. The reported loss in 2021 includes wind-up expenses, such as legal and audit fees. The creditors wind-up process started in 2022.

3. Significant accounting policies (continued)

3.1 Basis of consolidation (continued)

(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.

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.

(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.

3.3 Discontinued operations

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss. The Board decided in 2018 to discontinue the Nautilus business within the Group. The results of this business are classified as a discontinued operation. The entities are not operational but there are expenses accounted for relating to administrative costs.

All income and expense items are excluded from the individual statement of comprehensive income line items and a single amount representing the post-tax profit or loss of discontinued operations is disclosed.

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. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortised cost in foreign currency translated at the exchange rate at the end of the year. Translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively.

3. Significant accounting policies (continued)

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.

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

Fair value through OCI financial assets (debt instruments)

The Group's investments in debt securities are classified as fair value through OCI financial assets and this relates to the investor protection fund investments. 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 gives rise to cash flows that are solely payments of principal and interest. All fair value gains and losses relating to equity instruments are recognised in other comprehensive income and not reclassified to profit or loss on disposal. 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. 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. 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). Refer to note 14 (Other investments) for the financial assets classified as fair value through OCI.

Financial assets designated at fair value through 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 are recognised as other income in the statement of profit or loss when the right of payment has been established. 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 28 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.

3. Significant accounting policies (continued)

3.5 Financial instruments (continued)

(i) Non-derivative financial instruments (continued)

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.

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.

Fair value through profit and loss

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.

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.

(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 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.

(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.

3. Significant accounting policies (continued)

3.6 Property and equipment (continued)

(iii) Depreciation (continued)

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	15 years

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.

(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 7 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.

(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. Significant accounting policies (continued)

3.8 Leases

Leases and right-of-use asset

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. As part of the modified retrospective transition approach, the Group has elected to use a single discount rate, applied to a portfolio with similar characteristics. 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.

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, for a finance lease, 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.

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.

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, unemployment and the impact of COVID-19 restrictions. 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 month 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 ever 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 solely of quoted bonds. 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. Financial assets at amortised cost (debt instruments) 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.

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.

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.

3. Significant accounting policies (continued)

3.10 Employee benefits

(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 24.

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.

The Group receives advance payments from clients relating to the initial listing fees. There is a significant financing component due to the expected period of time between the client payment, providing the service and recognising the revenue, as well as considering the prevailing interest rate in the market. 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 2.4.

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 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

(i) Income tax

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

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. 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.

A significant degree of uncertainty exists as to whether the announcement of the change in the corporate tax rate from 28% to 27% can be considered substantively enacted. The change to the tax rate could be interpreted as being inextricably linked to intended changes in tax laws, that are not entirely known at the date of the budget speech. These changes have not been approved in accordance with paragraph 7 of FRP 1 (as discussed above) and therefore it is not enacted and as such, the current tax rate of 28% is used for measurement of current and deferred tax assets and liabilities.

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.

3. Significant accounting policies (continued)

3.14 Income tax expense (continued)

(ii) Withholding taxes

Dividend withholding tax is a tax on shareholders receiving dividends and is applicable to all dividends declared on or after 1 April 2012. The Company withholds dividend tax on behalf of its shareholders at a rate of 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.

IFRIC 23 – Uncertainty over Income Tax Treatments

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. The interpretation does not have an impact on the consolidated annual financial statements of the Group.

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 Segment reporting

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. Refer to note 6.

4. New standards and interpretations not yet adopted

A new standard has been issued by the 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 impact of the amendment on the Group is currently being assessed.

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 impact of the amendment on the Group is currently being assessed.

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.

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

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.

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.

6. Operating segments, revenue and other income

6.1 Revenue from contracts with clients and operating segments comprise:

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Capital markets				
Bond Electronic Trading Platform (ETP)	**7 569**	8 048	**7 569**	8 048
Colocation fees	**28 251**	21 004	**28 251**	21 004
Commodity derivatives fees	**97 402**	87 332	**97 402**	87 332
Company services fees	**6 105**	6 412	**6 105**	6 412
Currency derivatives fees	**41 389**	45 619	**41 389**	45 619
Equity derivatives fees	**149 853**	144 832	**149 853**	144 832
Equity trading fees	**488 924**	493 284	**488 924**	493 284
Interest rate market fees	**63 660**	62 482	**65 519**	64 964
Primary market fees*	**152 814**	151 906	**152 814**	151 906
JSE Investor Services fees**	**124 622**	17 071	**–**	–
Post-trade services				
Clearing and settlement fees	**423 060**	445 715	**423 060**	445 715
Back-office services (BDA)	**350 589**	376 044	**350 589**	376 044
Funds under management	**80 751**	81 517	**126 911**	135 323
Information services				
Index fees	**56 901**	52 608	**56 901**	52 608
Market data fees	**293 073**	303 031	**293 073**	303 031
Total revenue excluding *Strate ad valorem* fees – cash equities and bonds	**2 364 963**	2 296 905	**2 288 360**	2 336 122
Strate ad valorem fees – cash equities	**134 572**	133 195	**134 572**	133 195
Strate ad valorem fees – bonds	**17 932**	16 268	**17 932**	16 268
	2 517 467	2 446 368	**2 440 864**	2 485 585

* *An amount of R1.4 million (2020: R0.6 million) was recognised in Primary market fees relating to initial listing fees for the current year.*

** *JSE Investor Services was a separate reportable segment in the prior year. It has been incorporated as an operating unit in the Capital markets segment during 2021. This is how it is reported to the chief decision maker.*

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	Notes	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
6. Operating segments, revenue and other income (continued)					
6.2 Other income comprises:					
Recognised in profit or loss					
Investor protection funds		**5 402**	2 119	**–**	–
– Dividend income recognised on investments derecognised during the reporting period		**–**	99	**–**	–
– Dividend income recognised on investments held at the reporting period		**5 402**	2 020	**–**	–
Dividends received from associate		**–**	–	**43 242**	27 230
Net foreign exchange profit		**14 791**	15 222	**14 791**	15 222
Income recognised from deferred income (data centre and disaster recovery)		**–**	–	**5 095**	5 541
Investor protection levy		**29 622**	28 351	**29 622**	28 351
Fines issued in terms of Issuer Regulations		**–**	30 200	**–**	30 200
Rental income		**2 912**	3 992	**2 912**	3 992
Sundry income		**6 028**	2 129	**3 557**	1 798
		58 755	82 013	**99 219**	112 334
7. Profit before taxation comprises:					
7.1 Personnel expenses					
Remuneration paid to employees		**562 789**	515 029	**508 571**	509 678
Fixed-term contractors		**5 766**	4 431	**5 766**	4 245
Contribution to defined contribution plans		**20 746**	19 805	**20 088**	19 376
Directors' emoluments		**33 572**	34 907	**32 259**	33 900
– Executive directors	23.1	**20 424**	23 364	**20 424**	23 364
– Non-executive directors*	23.3	**13 148**	11 543	**11 835**	10 535
Long-term incentive schemes**		**34 744**	39 217	**34 744**	39 217
– JSE LTIS 2010		**(410)**	(1 776)	**(410)**	(1 776)
– JSE LTIS 2018***		**35 154**	40 993	**35 154**	40 993
Gross personnel expenses		**657 617**	613 389	**601 428**	606 416
Less: Capitalised to intangible assets		**(7 721)**	(12 551)	**(7 721)**	(12 551)
		649 896	600 838	**593 707**	593 865

* *Group includes JSE Clear non-executive directors.*
** *Includes the accounting impact of accelerated LTIS for good leavers.*
*** *Includes critical skills cash scheme and bonus shares.*

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
7. Profit before taxation comprises: (continued)				
7.2 Other expenses				
Amortisation of intangible assets	**154 228**	140 181	**140 483**	137 991
Auditor's remuneration	**9 223**	6 462	**6 372**	4 120
– Audit fee	**6 580**	6 013	**4 221**	3 725
– Fees for other services**	**875**	205	**875**	205
– Prior year under accrual	**1 768**	244	**1 276**	190
Consulting fees	**12 534**	13 456	**12 421**	13 638
Depreciation	**103 458**	108 986	**99 642**	108 653
– Computer hardware	**51 127**	57 349	**49 612**	57 296
– Furniture and equipment	**4 920**	4 958	**4 416**	4 916
– Right-of-use assets	**39 736**	39 243	**38 017**	39 028
– Leasehold improvements	**7 615**	7 376	**7 537**	7 353
– Vehicles	**60**	60	**60**	60
Enterprise development	**8 887**	9 578	**8 887**	9 578
Investor protection levy	**38 463**	38 719	**38 463**	38 719
Impairment of trade and loan receivables	**–**	–	**757**	2 318
Other expenses*	**312 345**	299 389	**240 322**	260 342
Strate ad valorem fees	**149 533**	147 611	**149 533**	147 611
Technology costs	**336 517**	319 601	**323 437**	319 601
Deal acquisition costs	**898**	28 575	**898**	28 575
	1 126 086	1 112 558	**1 021 216**	1 071 146

* *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.*

** *Includes fees for compliance audits that were not performed by the external auditors.*

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
7. Profit before taxation comprises: (continued)				
7.3 Finance income				
Investor protection funds	**6 477**	7 761	**–**	–
– Finance income on cash	**4 197**	5 118	**–**	–
– Finance income from debt instruments at fair value through other comprehensive income	**2 280**	2 643	**–**	–
Finance income earned on margin and collateral deposits	**1 911 645**	2 301 212	**25 086**	55 816
– Derivatives	**1 868 241**	2 221 050	**–**	–
– JSE Clear Derivatives Default Fund	**18 318**	24 346	**–**	–
– Equities	**25 086**	55 816	**25 086**	55 816
Finance income earned on all funds excluding collateral and margin deposits	**78 416**	125 208	**69 208**	114 815
Total finance income*	**1 996 538**	2 434 182	**94 294**	170 631

* *Calculated using effective interest rate method.*

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
7.4 Finance costs				
Finance costs on margin and collateral deposits*	**1 825 166**	2 213 248	**19 591**	41 947
– Derivatives	**1 787 292**	2 146 991	**–**	–
– JSE Clear Derivatives Default Fund	**18 283**	24 310	**–**	–
– Equities	**19 591**	41 947	**19 591**	41 947
Finance costs on all funds/leases excluding collateral and margin deposits	**25 696**	21 106	**25 397**	29 516
Total finance costs	**1 850 862**	2 234 354	**44 988**	71 463

**Calculated using effective interest rate method.*

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
8. Income tax expenses				
8.1 Taxation				
Current tax expense				
– Current year	**271 802**	293 817	**260 763**	291 036
– Prior year adjustment	**(541)**	(4 536)	**(478)**	(4 536)
Deferred tax asset				
– Prior year adjustment	**(27)**	–	**73**	–
– (Origination)/Reversal of deductible temporary differences	**436**	(10 548)	**1 076**	(10 138)
Deferred tax liability				
– Prior year adjustment	**(1 390)**	(2 101)	**(1)**	(2 101)
– Origination of taxable temporary differences	**1 532**	6 699	**2 485**	6 699
	271 812	283 331	**263 917**	280 960
8.2 Reconciliation of effective tax rate	**%**	%	**%**	%
Current tax rate	**28**	28	**28**	28
Adjusted for:				
– Non-taxable income*	**–**	–	**(1.25)**	(0.74)
– Adjustment for prior periods**	**(0.06)**	(0.62)	**(0.04)**	(0.64)
– Non-deductible expenses:				
– Depreciation on leasehold improvements	**0.21**	0.19	**0.22**	0.20
– Provisions/Impairments raised/(reversed)	**–**	(0.49)	**0.02**	(0.13)
– Capital nature expenses****	**0.08**	0.71	**0.08**	0.71
– Other***	**0.54**	0.32	**0.13**	(0.08)
– Share of profit of equity-accounted investee	**(1.45)**	(1.43)	**–**	–
Net effective tax rate	**27**	27	**27**	27

* *Non-taxable income includes dividends received (Company) and the Investor protection levy.*
** *Prior year adjustments related to corrections on loan provision and forfeited LTIS shares.*
*** *Mainly includes losses of exempt entities (0.25%), non-deductible expenses (0.17%) and the impact of discontinued operation in the prior year (Group).*
**** *Relates to cost incurred in respect of acquisitions and the Group's inorganic structure.*

8.3 The Group's consolidated effective tax rate for the year ended 31 December 2021 was 27% (2020: 27%).

8. Income tax expenses (continued)

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

JSE Limited	28% (2020: 28%)
JSE Clear (Pty) Limited	28% (2020: 28%)
JSE Clear Derivatives Default Fund (Pty) Limited	28% (2020: 28%)
Strate (Pty) Limited	28% (2020: 28%)
Nautilus MAP Holdings (Pty) Limited	28% (2020: 28%)
Nautilus Map RF (Pty) Limited	28% (2020: 28%)
JSE Trustees (Pty) Limited	28% (2020: 28%)
JSE Investor Services (Pty) Limited	28% (2020: 28%)
JSE Investor Services CSDP (Pty) Ltd	28% (2020: 28%)
JSE Private Placements (Pty) Limited	28%
Pacific Custodians (Nominees) (RF) (Pty) Ltd.	28% (2020: 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

9. Earnings and headline earnings per share

9.1 Basic earnings per share for continuing operations

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Profit for the year attributable to ordinary shareholders	**722 443**	781 231	**707 924**	746 836
Weighted average number of ordinary shares:				
Issued ordinary shares at 1 January	**86 877 600**	86 877 600	**86 877 600**	86 877 600
Effect of own shares held (JSE LTIS 2010 and JEF Trust)	**(4 226 718)**	(3 778 968)	**(2 097 079)**	(1 649 329)
Weighted average number of ordinary shares at 31 December	**82 650 882**	83 098 632	**84 780 521**	85 228 271
Basic earnings per share (cents) from continuing operations	**874.1**	940.1	**835.0**	876.3
Total earnings per share (cents)	**874.1**	936.7	**835.0**	876.3

		GROUP		COMPANY	
		2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
9.2	**Diluted earnings per share for continuing operations**				
	Profit for the year attributable and distributable to ordinary shareholders	**722 443**	781 231	**707 924**	746 836
	Weighted average number of ordinary shares (diluted):				
	Weighted average number of ordinary shares at 31 December (basic)	**82 650 882**	83 098 632	**84 780 521**	85 228 271
	Effect of LTIS Share Scheme	**732 166**	529 563	**732 166**	529 563
	Weighted average number of ordinary shares (diluted)	**83 383 047**	83 628 195	**85 512 686**	85 757 834
	Diluted earnings per share (cents)	**866.4**	934.3	**827.9**	870.9
	The average market value of the Company's shares for purposes of calculating the dilutive effect of share options was based on quoted market prices using a volume-weighted average price for the year.				
9.3	**Headline earnings per share**				
	Reconciliation of headline earnings:				
	Profit for the year attributable to ordinary shareholders	**722 443**	781 231	**707 924**	746 836
	Adjustments are made to the following:				
	Write off of intangible asset	**4 002**	–	**4 002**	–
	Gross Amount	**5 558**	–	**5 558**	–
	– Taxation effect	**(1 556)**	–	**(1 556)**	–
	Profit on disposal of property and equipment	**(3)**	(26)	**–**	(26)
	Gross Amount	**(4)**	(37)	**–**	(37)
	– Taxation effect	**1**	10	**–**	10
	Headline earnings	**726 442**	781 205	**711 926**	746 809
	Headline earnings/(loss) from discontinued operations	**–**	(2 842)	**–**	–
	Total headline earnings	**726 442**	778 363	**711 926**	746 809
	Headline earnings per share (cents) from continuing operations	**878.9**	940.1	**839.7**	876.2
	Headline earnings/(loss) per share (cents) from discontinued operations	**–**	(3.4)	**–**	–
	Total headline earnings per share (cents)	**878.9**	936.7	**839.7**	876.2
9.4	**Diluted headline earnings per share**				
	Diluted headline earnings per share (cents) from continuing operations	**871.2**	934.1	**832.5**	870.8
	Diluted headline earnings/(loss) per share (cents) from discontinued operations	**–**	(3.4)	**–**	–
	Total diluted headline earnings per share (cents)	**871.2**	930.7	**832.5**	870.8

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

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 owned assets R'000	Total assets R'000
Group							
2021							
Balance at 1 January 2021		**541 217**	**67 980**	**132 988**	**338**	**742 523**	**742 523**
Additions		**35 820**	**14**	**63 811**	**–**	**99 645**	**99 645**
Disposals		**(4)**	**–**	**–**		**(4)**	**(4)**
Balance at 31 December 2021		**577 033**	**67 994**	**196 799**	**338**	**842 164**	**842 164**
Group							
2020							
Balance at 1 January 2020		520 590	66 751	128 745	338	716 424	716 424
Additions		19 838	283	3 999	–	24 120	24 120
Additions from business combination		831	947	244	–	2 022	2 022
Disposals		(42)	–	–	–	(42)	(42)
Balance at 31 December 2020		541 217	67 980	132 988	338	742 523	742 523

10.2 Accumulated depreciation

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total owned assets R'000	Total assets R'000
Group							
2021							
Balance at 1 January 2021		**435 132**	**53 987**	**113 350**	**127**	**602 597**	**602 597**
Depreciation charge for the year	7.2	**51 127**	**4 920**	**7 615**	**60**	**63 722**	**63 722**
Disposals		**–**	**–**	**–**	**–**	**–**	**–**
Balance at 31 December 2021		**486 259**	**58 907**	**120 965**	**187**	**666 319**	**666 319**
Group							
2020							
Balance at 1 January 2020		377 812	49 029	105 974	67	532 882	532 882
Depreciation charge for the year	7.2	57 349	4 958	7 376	60	69 743	69 743
Disposals		(29)	–	–	–	(29)	(29)
Balance at 31 December 2020		435 132	53 987	113 350	127	602 597	602 597

10. Property and equipment (continued)

10.3 Carrying amounts

	Computer hardware R'000	Furniture and equipment R'000	Leasehold improve-ments R'000	Vehicles R'000	Total owned assets R'000	Total assets R'000
Group						
2021						
At 31 December 2020	**106 085**	**13 993**	**19 638**	**211**	**139 927**	**139 927**
At 31 December 2021	**90 774**	**9 087**	**75 834**	**151**	**175 845**	**175 845**
Group						
2020						
At 31 December 2019	142 778	17 722	22 771	271	183 541	183 541
At 31 December 2020	106 085	13 993	19 638	211	139 927	139 927

10.4 Cost

	Computer hardware R'000	Furniture and equipment R'000	Leasehold improve-ments R'000	Vehicles R'000	Total owned assets R'000	Total assets R'000
Company						
2021						
Balance at 1 January 2021	**540 386**	**67 034**	**132 744**	**338**	**740 502**	**740 502**
Additions	**32 446**	**–**	**63 811**	**–**	**96 257**	**96 257**
Disposals	**–**	**–**	**–**	**–**	**–**	**–**
Balance at 31 December 2021	**572 832**	**67 034**	**196 555**	**338**	**836 759**	**836 759**
Company						
2020						
Balance at 1 January 2020	520 590	66 751	128 745	338	716 424	716 424
Additions	19 838	283	3 999	–	24 120	24 120
Disposals	(42)	–	–	–	(42)	(42)
Balance at 31 December 2020	540 386	67 034	132 744	338	740 502	740 502

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

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 owned assets R'000	Total assets R'000
Company							
2021							
Balance at 1 January 2021		**435 079**	**53 945**	**113 327**	**127**	**602 478**	**602 478**
Depreciation charge for the year	7.2	**49 612**	**4 416**	**7 537**	**60**	**61 624**	**61 624**
Disposals		**–**	**–**	**–**	**–**	**–**	**–**
Balance at 31 December 2021		**484 691**	**58 361**	**120 864**	**187**	**664 102**	**664 102**
Company							
2020							
Balance at 1 January 2020		377 812	49 029	105 974	67	532 882	532 882
Depreciation charge for the year	7.2	57 296	4 916	7 353	60	69 625	69 625
Disposals		(29)	–	–	–	(29)	(29)
Balance at 31 December 2020		435 079	53 945	113 327	127	602 478	602 478

10.6 Carrying amounts

	Notes	Computer hardware R'000	Furniture and equipment R'000	Leasehold improvements R'000	Vehicles R'000	Total owned assets R'000	Total assets R'000
Company							
2021							
At 31 December 2020		**105 307**	**13 089**	**19 417**	**211**	**138 024**	**138 024**
At 31 December 2021		**88 141**	**8 673**	**75 691**	**151**	**172 657**	**172 657**
Company							
2020							
At 31 December 2019		142 778	17 722	22 771	271	183 541	183 541
At 31 December 2020		105 307	13 089	19 417	211	138 024	138 024

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	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
11. Intangible assets							
11.1 Cost							
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**	**65 638**
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**
Group							
2020							
Balance at 1 January 2020		82 987	2 217	–	1 036 487	29 477	1 151 168
Additions		–	–	–	29 747	59 154	88 900
Acquisition of subsidiary		132 517	–	133 828	12 425	–	278 770
Transfer from software development		–	–	–	60 251	(60 419)	(168)
Balance at 31 December 2020		215 504	2 217	133 828	1 138 910	28 212	1 518 671
11.2 Accumulated amortisation and impairment losses							
Group							
2021							
Balance at 1 January 2021		**–**	**1 753**	**1 487**	**694 775**	**–**	**698 015**
Amortisation for the year	7.2	**–**	**–**	**8 922**	**145 306**	**–**	**154 228**
Balance at 31 December 2021		**–**	**1 753**	**10 409**	**840 081**	**–**	**852 243**
Group							
2020							
Balance at 1 January 2020		–	1 753	–	556 081	–	557 834
Amortisation for the year		–	–	1 487	138 694	–	140 181
Balance at 31 December 2020		–	1 753	1 487	694 775	–	698 015

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

11. Intangible assets (continued)

11.3 Carrying amounts

	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						
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**
Group						
2020						
At 31 December 2019	82 987	464	–	480 406	29 477	593 333
At 31 December 2020	215 504	464	132 341	444 134	28 212	820 656

11.4 Cost

	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
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**
Company					
2020					
Balance at 1 January 2020	82 987	1 829	1 016 643	26 840	1 128 299
Additions	–	–	29 747	59 154	88 902
Transfer from software under development	–	–	60 251	(60 419)	(168)
Balance at 31 December 2020	82 987	1 829	1 106 642	25 575	1 217 032

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	Goodwill R'000	Trade names R'000	Computer software R'000	Software under development R'000	Total intangible assets R'000
11.5 Accumulated amortisation					
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**
Company					
2020					
Balance at 1 January 2020	–	1 829	533 449	–	535 278
Amortisation for the year	–		137 991	–	137 991
Balance at 31 December 2020	–	1 829	671 440	–	673 269
11.6 Carrying amounts					
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**
Company					
2020					
At 31 December 2019	82 987	–	483 194	26 840	593 020
At 31 December 2020	82 987	–	435 201	25 575	543 763

11.7 Impairment testing for cash-generating units containing goodwill

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.

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 CGU. A weighted average cost of capital (WACC) of 20.9% (2020: 18.3%) was used to discount the future earnings, taking into account any specific risk premiums that may be applicable. These cash flows have been based on the financial forecasts for the 2021 financial year and strategic plans over a seven-year period, which is consistent with past experience. These are in line with inflation.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
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11. Intangible assets (continued)

11.7 Impairment testing for cash-generating units containing goodwill (continued)

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 R185 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 2021 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:

- A 100 basis point increase in the discount rate would decrease the recoverable amount of the CGU by R10.6 million at 31 December 2021 (R6.2 million at 31 December 2020).
- A 100 basis point decrease in the growth rate would decrease the recoverable amount by R4.7 million at December 2021 (R11.6 million as at 31 December 2020).

11.8 Impairment testing for goodwill acquired in a business combination

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 free cash flow model was used to calculate the recoverable amount of R360 million based on the cash flow projections covering a five year period beyond 31 December 2021 of which one year is from formally approved budgets 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 discount rate of 20.2% (2020: 20.7%) was used to calculate the present value of future cash flows
- Funding will be sourced under market related conditions as required
- Average growth rate of 8% was used with a terminal rate of 4%
- Five year projection was used

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 2021 financial year. Goodwill was allocated to the JIS CGU which forms part of the Capital Markets reportable segment.

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:

- A 100 basis point increase in the discount rate would decrease the recoverable amount of the CGU by R26 million at 31 December 2021 (R26 million at 31 December 2020).
- A 100 basis point decrease in the growth rate would decrease the recoverable amount of the CGU by R16 million at 31 December 2021 (R25 million at 31 December 2020).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
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	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
12. Investment in associate				
12.1 Carrying amount				
Strate (Pty) Limited				
Carrying amount at beginning of year	**319 907**	292 786	**21 416**	21 416
– Dividends received	**(43 242)**	(27 230)	**–**	–
– Share of profit	**51 597**	54 351	**–**	–
Total investment in associate*	**328 262**	319 907	**21 416**	21 416

* *JSE's portion of the net assets of Strate (Pty) Limited amounts to R328 million (44.55% of net assets – R737 million (2020: R320 million – 44.55% of net assets – R718 million).*

	STRATE (PTY) LIMITED	
	2021 R'000	2020 R'000
12.2 Summarised financial statements at 31 December		
Non-current assets	**234 781**	259 223
Current assets	**649 765**	592 587
Total assets	**884 546**	851 810
Equity	**736 833**	718 398
Non-current liabilities	**21 059**	12 500
Current liabilities	**126 654**	120 912
Total equity and liabilities	**884 546**	851 810
Revenue	**483 754**	487 903
Other income including finance income	**25 378**	20 788
Expenses	**(347 173)**	(349 498)
Taxation	**(43 963)**	(41 128)
Profit for the year	**117 996**	118 065

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	Effective holding 2021 %	Effective holding 2020 %	Number of shares held 2021 R'000	Number of shares held 2020 R'000
12. Investment in associate (continued)				
12.3 Unlisted associated company				
Group and Company				
Strate (Pty) Limited	**44.55**	44.55	**4 346**	4 346

Strate (Pty) Limited is an authorised Central Securities 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.

	Issued share capital/trust capital	Percentage holding 2021 %	Percentage holding 2020 %	Carrying value of shares held 2021 R'000	Carrying value of shares held 2020 R'000
13. Subsidiaries					
13.1 Investments in subsidiaries					
13.1.1 JSE Clear (Pty) Limited[1]					
– Ordinary shares of 12.5 cents each	8 300	**100**	100	**3 201**	3 201
– Ordinary shares of 12.5 cents each	1	**100**	100	**100 000**	100 000
13.1.2 JSE Clear Derivatives Default Fund (Pty) Limited[2]					
– Ordinary shares of R1 each	1	**100**	100	*	*
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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	Issued share capital/trust capital	PERCENTAGE HOLDING 2021 %	PERCENTAGE HOLDING 2020 %	CARRYING VALUE OF SHARES HELD 2021 R'000	CARRYING VALUE OF SHARES HELD 2020 R'000
13. Subsidiaries					
13.1 Investments in subsidiaries (continued)					
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**	231 623
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**	–
Investments in subsidiaries		**–**	–	**511 426**	435 975

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) Limited operates as the JSE's appointed clearing house in terms of the Financial Markets Act. In order to achieve recognition as a qualifying central counterparty (QCCP) under the CPSS-IOSCO provisions, clearing houses are required to establish a default fund for mutualising losses in the event of a clearing member default. JSE Clear (Pty) Limited has established such a default fund, and has been recognised by the Financial Sector Conduct Authority "FSCA" as a QCCP with effect from January 2013.*

[2] *JSE Clear Derivatives Default Fund (Pty) Limited is incorporated as a private for profit company wholly owned by JSE Limited with a limited purpose of holding these funds.*

[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.*

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

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 carrying value of the net assets of JIS (excluding goodwill on the original acquisition) was R148 439 000.

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

Financial information of JIS provided below:

Proportion of equity interest held by non-controlling interests:	2020 R'000
Accumulated balances of material non-controlling interest:	37 586
Profit allocated to material non-controlling interest:	254

The assets and liabilities recognised as a result of the acquisition are as follows:	2020 R'000
Cash and cash equivalents	27 512
Trade and other receivables	19 933
Deposits	432
Current tax receivable	3 901
Other assets	819
Intangible assets	12 425
Plant and equipment	2 022
Right-of-use asset	4 674
Indemnified asset	4 680
Deferred tax asset	1 258
Customer relationship	133 828
Trade and other payables	(14 041)
Lease liabilities (current)	(2 479)
Lease liabilities (non-current)	(4 086)
Liability	(4 680)
Deferred tax liability	(37 761)
Net identifiable assets acquired	148 439
Less: non-controlling interests	(37 332)
Add: Goodwill	132 517
Net assets acquired	243 623

13. Subsidiaries – Company (continued)

13.2. Acquisition of additional interest in JIS (continued)

13.2.1 Summary of acquisition (continued)

The summarised financial information of JIS is provided below for 2020. This is no longer presented for 31 December 2021 because of the buy out of the minority interest. This information is based on amounts before intercompany eliminations.

	2020 R'000
Summarised statement of comprehensive income for the period as at 31 December 2020:	
Revenue from contracts with customers	17 071
Personnel and other expenses	(9 275)
Administration expenses	(5 792)
Finance costs	(320)
Finance income	85
Profit before tax	1 769
Income tax	(761)
Profit for the period	1 008
Attributable to:	
Equity holders of parent	754
Non-controlling interest	254
Summarised statement of financial position as at 31 December 2020:	
Total assets	72 919
Total current assets	53 877
Total non-current assets	19 042
Total liabilities	(31 828)
Total current liabilities	(28 164)
Total non-current liabilities	(3 664)
Total equity	(41 091)
Summarised cashflow information for the period as at December 2020:	
Operating activities	(6 123)
Financing activities	(803)
Net increase in cash and cash equivalents	5 320

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

	2021 R'000	2020 R'000
Nautilus MAP RF (Pty) Limited	**31 576**	31 576
Allowance for impairment loss	**(29 076)**	(28 319)
Owing to Nautilus MAP RF (Pty) Limited	**(2 467)**	(3 224)
JSE Clear (Pty) Limited	**40 214**	39 765
JSE Clear Derivatives Default Fund (Pty) Limited	**–**	6
JSE Trustees (Pty) Limited	**8 255**	7 603
JSE Guarantee Fund Trust	**(108)**	(28)
JSE Debt Guarantee Fund Trust	**448**	421
JSE Empowerment Trust (refer to note 2.4)	**25 784**	25 932
JSE Investor Services (Pty) Limited	**–**	12 140
JSE Private Placements (Pty) Limited	**–**	–
Total due from Group entities – current assets	**74 626**	85 872

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

An additional R0.8 million allowance for impairment loss was accounted for in 2021 (2020: R2 million).

The amount due from JSE Investor Services (Pty) Limited in the prior period was unsecured, carries interest at prime (7%) and is payable within 12 months. The loan was provided to the subsidiary for the purchase of software from Link Intime India Private Limited and Link Australia respectively. The software acquisitions formed part of the acquisition of the issued shares of JSE Investor Services from Link Australia and fully paid in 2021.

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.

13. Subsidiaries – Company (continued)

13.4 Due from Group entities (continued)

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. As explained in note 3.1, JSE Empowerment Fund Trust was consolidated effective 1 January 2020.

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
14. Other investments				
14.1 Investor protection funds fair value through OCI financial assets				
14.1.1 JSE Derivatives Fidelity Fund Trust				
Bonds*	**15 639**	18 030	**–**	–
Listed equities	**87 430**	70 431	**–**	–
Protective cell funds	**142 597**	116 391	**–**	–
	245 666	204 852	**–**	–
14.1.2 JSE Guarantee Fund Trust			**–**	–
Bonds*	**11 676**	14 253	**–**	–
Listed equities	**64 061**	52 288	**–**	–
Protective cell funds	**114 607**	100 824	**–**	–
Collective investment scheme	**6 747**	5 084	**–**	–
	197 091	172 449	**–**	–
	442 756	377 301	**–**	–
14.2 Other investments				
Stock Exchange Nominees (Pty) Ltd	**1**	1	**1**	1
Non-listed equity instruments designated at fair value through OCI (Globacap)	**86 480**	–	**86 480**	–
	529 237	377 302	**86 481**	1

* *The Group believes that no impairment allowance is necessary in respect of the bonds. 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. AngloGold Ashanti Limited, Compagnie Fin Richemont, Naspers Limited "N", Mondi PLC and British American Tobacco PLC. These disposals were actioned as part of the investment mandate. The proceeds of these equity instruments amounted to R8.5 million (2020: R16.8 million) and the cumulative gain on disposal was R1.7 million (2020 R12.3 million).The amount of the proceeds is equal to fair value. There were no transfers in equity during the year.

15. Trade and other receivables

15.1 Trade and other receivables

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Interest receivable	**190 959**	139 857	**5 419**	5 235
Other receivables*	**46 475**	65 937	**24 580**	30 124
Prepaid expenses	**69 103**	80 170	**65 611**	77 009
Trade receivables	**286 885**	188 742	**248 772**	201 157
	593 423	474 706	**344 382**	313 525

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

The age analysis of trade receivables is as follows:

	GROUP		COMPANY	
	Gross R'000	**Allowance for impairment losses R'000**	**Gross R'000**	**Allowance for impairment losses R'000**
At 31 December 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**
At 31 December 2020:				
Fully performing: 0-30 days	156 591	–	176 114	–
Past due: 31-90 days	23 319	–	18 920	–
Past due: More than 90 days	17 124	8 093	14 017	7 894
Total	197 034	8 093	209 051	7 894

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	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
At 1 January	**8 093**	3 690	**7 894**	3 690
Increase in allowance for impairment	**1 386**	4 403	**729**	4 204
Receivables written off during the year as uncollectable	**–**	–	**–**	–
At 31 December	**9 479**	8 093	**8 623**	7 894

Expected credit losses reflected on the statement of comprehensive income includes the increase in the allowance for impairment and actual bad debts written off.

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, no ECL was recognised because the amount is immaterial.

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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	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
16.1 Margin deposits				
Derivatives funds held by JSE Clear (Pty) Limited	**55 072 710**	46 000 016	**–**	–
Equities	**339 964**	308 464	**339 964**	308 464
	55 412 674	46 308 480	**339 964**	308 464
16.2 Collateral deposits	**169 962**	880	**169 962**	880
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 2021, interest-bearing collateral deposits of R169 million (2020: R0.9 million) have been lodged as security against securities lending transactions with a market value of R105 million (2020: R0.6 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.				
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 (2020: R100 million).				
JSE Clear Derivatives Default Fund (Pty) Limited members' contributions	**400 000**	400 000	**–**	–

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
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	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
17. Cash and cash equivalents				
Cash and cash equivalents comprises:				
Bank balances	**1 319 750**	1 203 821	**1 030 717**	926 447
Term deposits	**1 073 252**	1 255 391	**951 267**	1 120 384
Total cash and cash equivalents	**2 393 002**	2 459 212	**1 981 984**	2 046 831

Cash and cash equivalents for the Group includes regulatory capital of R789 million as at 31 December 2021.

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
18. Stated capital and reserves				
18.1 Authorised stated capital				
400 000 000 ordinary shares at 10 cents per share	**40 000**	40 000	**40 000**	40 000
18.2 Issued stated capital at 10 cents per share				
Balance at 1 January	**8 588**	8 620	**8 588**	8 620
Treasury shares sold	**4**	17	**4**	17
Acquisition of treasury shares	**(54)**	(49)	**(54)**	(49)
Balance at 31 December*	**8 537**	8 588	**8 537**	8 588

* *The difference between the balance and issued ordinary shares as per note 9.1 relates to unvested LTIS..*

18. Stated capital and reserves (continued)

18.3 Stated capital and reserves

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Stated capital	**(67 741)**	(32 514)	**(62 027)**	(26 800)
Non-distributable reserves made up as follows:	**684 648**	601 191	**21 420**	21 282
Accumulated dividends paid to JEF	**33 329**	17 889	**–**	–
Fines reserve	**19 494**	21 282	**19 494**	21 282
JEF Trust[4]	**54 360**	54 360	**–**	–
Fair value reserve[1]	**1 926**	–	**1 926**	–
Investor protection funds	**575 539**	507 660	**–**	–
Fair value reserve[1]	**233 413**	167 811	**–**	–
– JSE Derivatives Fidelity Fund Trust	**119 900**	84 177	**–**	–
– JSE Guarantee Fund Trust	**113 513**	83 634	**–**	–
Capital and accumulated funds[2]	**342 126**	339 849	**–**	–
– JSE Debt Guarantee Fund Trust	**118 679**	117 585	**–**	–
– JSE Derivatives Fidelity Fund Trust	**131 535**	127 676	**–**	–
– JSE Guarantee Fund Trust	**91 912**	94 588	**–**	–
Share based payment reserve[3]	**72 839**	75 387	**72 839**	75 387
Retained earnings	**3 529 234**	3 472 638	**3 335 762**	3 254 275
Non-controlling interest	**–**	37 586	**–**	–
Total	**4 218 982**	4 154 288	**3 367 994**	3 324 145

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 2021 was 3 662 367 (2020: 3 778 968).*

18. Stated capital and reserves (continued)

18.4 Dividends declared and paid*

	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
Ordinary dividend of 725 cents (2020: 690 cents) per share	**614 423**	584 760	**629 863**	599 455
Special dividend of NIL cents (2020: 150 cents) per share	**–**	127 122	**–**	130 316
Total dividend of 725 cents (2020: 840 cents) on unallocated treasury shares	**(1 637)**	(1 151)	**(1 637)**	(1 151)
	612 785	710 732	**628 225**	728 621

* *The dividend paid to the JSE Empowerment Fund amounting to R15.4 million (2020: R17.9 million) was eliminated in the current and prior year.*

19. Employee benefits

19.1 Group and Exchange

	Notes	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
Non-current liabilities		**4 035**	5 952	**4 035**	5 952
Cash-settled liability	19.4	**4 035**	5 952	**4 035**	5 952
Current liabilities		**130 699**	132 036	**128 446**	130 922
Leave pay accrual		**41 360**	36 330	**39 107**	35 216
Cash-settled liability	19.5	**13 551**	12 086	**13 551**	12 086
Discretionary bonus and bursary scheme		**75 788**	83 620	**75 788**	83 620

19.2 Discretionary bonus

The Group Remuneration Committee (GRC) 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 GRC) 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 2021 amounted to R72.3 million (2020: R76 million), of which R23.2 million (2020: R24.3 million) was paid to executive management.

19. Employee benefits (continued)

19.3 Retirement benefits

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

19.4 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.

During the current financial year, the award granted in 2019 has vested and a new award was granted which will vest in March 2023. 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 R12.2 million (2020: R16.9 million).

	Critical Skills Cash Scheme 2021 R'000	Critical Skills Cash Scheme 2020 R'000
Total cash value of award approved by Board	**10 752**	15 883

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

The LTIS 2010 scheme was approved by shareholders at the annual general meeting in April 2010, and closed in December 2018 after eight years in accordance with the scheme rules. The LTIS 2018 scheme, modelled on the same basis as the 2010 scheme, was approved by shareholders at the annual general meeting held in May 2018.

Scheme objective and design

The main objective of LTIS 2010 (and the successor scheme 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.

19. Employee benefits (continued)

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

Allocation #8 under LTIS 2010 – fully vested

The eighth and final award ("Allocation 8") under LTIS 2010 was granted in March 2017 with the following vesting profile:

	Corporate performance shares
Share price at grant date (rands per share)	147.92
Total number of shares granted	290 530
Dividend yield (%)	3
Grant date	3 March 2017
Vesting profile:	
50% of the shares awarded vest on 1 March 2020 (Tranche 1)	145 265
50% of the shares awarded vest on 1 March 2021 (Tranche 2)	145 265
The vesting of Tranche 2 was completed during the year under review	

Tranche 2 – fully vested

Tranche 2: 50% of the total award, vested on 1 March 2021. All participants in the employ on the Company as at 1 March 2021 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 four-year vesting term against the pre-set financial and strategic targets and determined that 59.9% of these Tranche 2 shares vested for those participants still in the employ of the JSE on 1 March 2021.

19. Employee benefits (continued)

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

Tranche 2 – fully vested (continued)

	Corporate performance shares
As at 31 December 2021, details of Tranche 2 were as follows:	
Original number of Tranche 1 shares awarded in March 2017	145 265
Forfeited by leavers to date	(30 740)
Tranche 2 shares forfeited for missing performance targets	(45 924)
Accelerated for good leavers to date	(32 415)
Tranche 2 shares vested on 1 March 2021	(36 186)
Tranche 2 shares outstanding	–

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

	2021	2020
Allocation #7 (granted October 2016)	–	(R1.5m)
Allocation #8 (granted March 2017)	(R0.4m)	(R0.5m)
	(R0.4m)	(R2.0m)

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

19. Employee benefits (continued)

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

Allocation #1 under LTIS 2018 (continued)

	Corporate performance shares
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

Tranche 1 – fully vested

Tranche 1: 50% of the total award, vested on 31 August 2021. All participants in the employ on the Company as at 31 August 2021 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 42.93% of these Tranche 1 shares vested for those participants still in the employ of the JSE on 31 August 2021.

	Corporate performance shares
Senior management award	
As at 31 December 2021, details of Tranche 1 were as follows:	
Original number of Tranche 1 shares awarded in September 2018	101 825
Forfeited by leavers to date	(9 620)
Tranche 1 shares forfeited for missing performance targets	(52 621)
Accelerated for good leavers to date	(8 086)
Tranche 1 shares vested on 31 August 2021	(31 498)
Tranche 1 shares outstanding	–

19. Employee benefits (continued)

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

	Corporate performance shares
Tranche 1 – fully vested (continued)	
As at 31 December 2021, details of Tranche 2 were as follows:	
Original number of Tranche 2 shares awarded in September 2018	101 825
Forfeited by leavers to date	(9 620)
Accelerated for good leavers to date	(18 835)
Tranche 2 shares available for vesting in August 2022	73 370
Executive committee award	
Original number of Tranche 1 shares awarded in September 2018	87 910
Forfeited by leavers to date	–
Tranche 1 shares forfeited for missing performance targets	(50 170)
Accelerated for good leavers to date	(22 880)
Tranche 1 shares vested on 31 August 2021	(14 860)
Tranche 1 shares outstanding	–
As at 31 December 2021, details of Tranche 2 were as follows:	
Original number of Tranche 2 shares awarded in September 2018	87 910
Forfeited by leavers to date	(6 585)
Accelerated for good leavers to date	(53 295)
Tranche 2 shares outstanding	28 030

19. Employee benefits (continued)

19.5 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 38 840 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 320 755.

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 49 362 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 444 808.

19. Employee benefits (continued)

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

	Corporate performance shares
Allocation #4 under LTIS 2018	
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 27 628 (Tranche 1 and Tranche 2). The total shares outstanding at year end are 515 354.

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:

	2021	2020
Allocation #1 (granted in September 2018)	**R1.1m**	R7.4m
Allocation #2 (granted in March 2019)	**R5.1m**	R9.1m
Allocation #3 (granted in March 2020)	**R7.4m**	R7.6m
Allocation #4 (granted in March 2021)	**R9.3m**	–
	R22.9m	R24.1m

20. Deferred tax assets and liabilities

Deferred tax is calculated in full on temporary differences under the liability method using a tax rate of 28% (2020: 28%). Refer to note 3.14.

20. Deferred tax assets and liabilities (continued)

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

	ASSETS		LIABILITIES		NET	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000	**2021 R'000**	2020 R'000
Group						
Intangible assets	**–**	1 675	**(34 666)**	(37 383)	**(34 666)**	(35 708)
Fixed asset	**227**	–	**–**	–	**227**	–
Operating lease asset	**–**	–	**(6)**	(6)	**(6)**	(6)
IFRS 16 *Leases*	**32 196**	33 477	**–**	–	**32 196**	33 477
Employee benefits	**30 900**	35 312	**–**	–	**30 900**	35 312
Allowance for impairment losses	**1 592**	1 658	**–**	–	**1 592**	1 658
Prepayments	**–**	–	**(5 366)**	(7 448)	**(5 366)**	(7 448)
Cash restraint payments	**2 064**	2 809	**–**	–	**2 064**	2 809
Fair value adjustment – Globacap investment	**–**	–	**(556)**	–	**(556)**	–
Loan to the JSE Empowerment Fund Trust	**284**	243	**–**	–	**284**	243
Interest accrued	**–**	–	**(53)**	(5)	**(53)**	(5)
Income received in advance	**7 803**	5 192	**–**	–	**7 803**	5 192
Total	**75 066**	80 366	**(40 648)**	(44 842)	**34 418**	35 524

A deferred tax liability of R34.7 million and deferred tax asset of R69.1 million is recognised on the statement of financial position.

20.2 Movement in temporary differences during the year:

	Balance 1 January 2020 R'000	Recognised in profit or loss R'000	Balance 31 December 2020 R'000	**Recognised in profit or loss R'000**	**Balance 31 December 2021 R'000**
Group					
Intangible assets	(109)	(35 599)	(35 708)	**1 042**	**(34 666)**
Fixed assets	–	–	–	**227**	**227**
Operating lease asset	(4)	(2)	(6)	**(0)**	**(6)**
IFRS 16 *Leases*	32 763	714	33 477	**(1 281)**	**32 196**
Employee benefits	31 447	3 865	35 312	**(4 412)**	**30 900**
Allowance for impairment losses	774	884	1 658	**(66)**	**1 592**
Prepayments	(3 054)	(4 394)	(7 448)	**2 082**	**(5 366)**
Cash restraint payments	1 965	844	2 809	**(745)**	**2 064**
Loan to the JSE Empowerment Fund Trust	448	(205)	243	**41**	**284**
Interest accrued	–	(5)	(5)	**(48)**	**(53)**
Income received in advance	1 360	3 832	5 192	**2 611**	**7 803**
Total	65 590	(30 066)	35 524	**(551)**	**34 973**

The tax of R0.6 million on the fair value adjustment related to the Globacap investment has been charged directly to other comprehensive income or equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

20. Deferred tax assets and liabilities *(continued)*

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

	ASSETS		LIABILITIES		NET	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000	**2021 R'000**	2020 R'000
Company						
Operating lease asset	**–**	–	**(6)**	(6)	**(6)**	(6)
IFRS 16 *Leases*	**31 862**	33 477	**–**	–	**31 862**	33 477
Employee benefits	**29 418**	35 313	**–**	–	**29 418**	35 313
Allowance for impairment losses	**1 449**	1 658	**–**	–	**1 449**	1 658
Prepayments	**–**	–	**(5 269)**	(7 449)	**(5 269)**	(7 449)
Cash restraint payments	**2 064**	2 809	**–**	–	**2 064**	2 809
Loan to the JSE Empowerment Fund Trust	**284**	243	**–**	–	**284**	243
Income received in advance	**7 803**	5 192	**–**	–	**7 803**	5 192
Fair Value adjustment through OCI – Globacap	**–**	–	**(556)**	–	**(556)**	–
Total	**72 879**	78 692	**(5 831)**	(7 455)	**67 050**	71 237

20.4 Movement in temporary differences during the year

	Balance 1 January 2020 R'000	Recognised in profit or loss R'000	Balance 31 December 2020 R'000	**Recognised in profit or loss R'000**	**Balance 31 December 2021 R'000**
Company					
Operating lease asset	(4)	(2)	(6)	**(0)**	**(6)**
IFRS 16 *Leases*	32 763	714	33 477	**(1 615)**	**31 862**
Employee benefits	31 447	3 866	35 313	**(5 895)**	**29 418**
Allowance for impairment losses	774	884	1 658	**(209)**	**1 449**
Prepayments	(3 054)	(4 395)	(7 449)	**2 180**	**(5 269)**
Cash restraint payments	1 965	844	2 809	**(745)**	**2 064**
Loan to the JSE Empowerment Fund Trust	448	(205)	243	**41**	**284**
Income received in advance	1 360	3 832	5 192	**2 611**	**7 803**
Total	65 699	5 539	71 237	**(3 632)**	**67 605**

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 tax of R0.6 million on the fair value adjustment related to the Globacap investment has been charged directly to other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
21. Trade and other payables				
Trade payables*	**195 961**	164 303	**169 656**	152 814
Interest payable	**183 068**	138 979	**2 034**	1 861
Receipts in advance	**1 267**	2 175	**1 267**	2 175
	380 296	305 457	**172 957**	156 850

* *Includes accruals, VAT output, customer deposits and deferred income.*

22. Notes to the statement of cash flows

22.1 Cash generated by operations

	GROUP 2021 R'000	GROUP 2020 R'000	COMPANY 2021 R'000	COMPANY 2020 R'000
Profit before tax from continuing operations	**994 987**	1 064 816	**971 841**	1 027 796
Loss before tax from discontinued operations	**–**	(2 842)	**–**	–
Profit before tax	**994 987**	1 061 974	**971 841**	1 027 796
Adjustments for:				
– depreciation of property and equipment	**63 722**	69 743	**61 625**	69 625
– amortisation of intangible assets	**154 228**	140 181	**140 483**	137 991
– depreciation of right of use assets	**39 736**	39 243	**38 017**	39 028
– impairment of loans due from group entities	**–**	–	**–**	2 319
– write-off of software under development	**5 558**		**5 558**	
– JSE LTIS 2010	**(410)**	(1 776)	**(410)**	(1 776)
– JSE LTIS 2018	**22 943**	24 076	**22 943**	24 076
– share of profit from associate	**(51 597)**	(54 351)	**–**	–
– finance costs	**1 850 862**	2 234 354	**44 988**	71 463
– finance income	**(1 996 538)**	(2 434 182)	**(94 294)**	(170 631)
– dividend received	**(5 402)**	(2 119)	**(43 242)**	(27 230)
– non-cash items in respect of employee benefits	**91 317**	104 269	**91 317**	104 107
– unrealised (gain)/loss on forex	**(8 305)**	5 953	**(8 305)**	5 953
– profit on disposal of property and equipment	**4**	(37)	**–**	(37)
Surplus from operations	**1 161 105**	1 187 328	**1 230 521**	1 282 684
Changes in:				
– (increase)/decrease in trade and other receivables	**(69 705)**	11 178	**(33 518)**	(16 365)
– increase in trade and other payables	**(56 945)**	(85 931)	**(78 000)**	(81 488)
Cash generated by operations	**1 034 454**	1 112 575	**1 119 003**	1 184 831

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

22. Notes to the statement of cash flows *(continued)*

22.2 Taxation paid

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Taxation (receivable)/payable at beginning of year	**(2 784)**	(5 277)	**3 485**	(4 215)
Acquisition of subsidiary	**–**	(3 901)	**–**	–
Deferred tax effects	**(551)**	5 950	**(3 633)**	5 540
Current tax charge	**271 812**	283 331	**263 917**	280 960
Finance income included in taxation payable at year end		(133)		(133)
Taxation (payable)/receivable at year end	**(7 210)**	2 784	**(8 426)**	(3 485)
	261 267	282 755	**255 343**	278 667

22.3 Finance income

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Finance income receivable at beginning of year	**139 857**	201 651	**5 235**	–
Finance income received during the year	**1 996 538**	2 434 182	**94 294**	170 631
Finance income receivable at year end	**(190 959)**	(139 857)	**(5 419)**	(5 235)
	1 945 435	2 495 975	**94 110**	165 396

23. Directors' and executives' remuneration[3]

23.1 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	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											
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**
2020											
L Fourie	CEO	6 297	257	46	6 600	–	9 900	9 900	16 500	–	84 570
A Takoordeen	CFO	3 328	153	165	3 646	–	2 100	2 100	5 746	715	24 916
		9 625	410	211	10 246	–	12 000	12 000	22 246	715	109 486

23.2 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	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[10]	Director of Human Resources	**2 122**	**88**	**36**	**2 246**	**–**	**–**	**–**	**2 246**	**636**	**–**
H Kotze	CIO	**3 229**	**136**	**130**	**3 495**	**–**	**–**	**–**	**3 495**	**–**	**22 530**
VSM Lee[11]	Director of Marketing and Corporate Affairs	**2 411**	**132**	**42**	**2 585**	**–**	**2 000**	**2 000**	**4 585**	**–**	**19 988**
I Monale[12]	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**
EI 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**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
for the year ended 31 December 2021

23. Directors' and executives' remuneration[3]

23.2 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	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]
2020											
JH Burke[8]	Director of Issuer Regulation	548	38	39	625	7 058	–	7 058	7 683	787	–
A Greenwood	Director of Post-Trade Services	3 669	209	1	3 879	–	2 700	2 700	6 579	760	26 506
D Khumalo	Director of Human Resources	2 727	112	39	2 878	–	2 200	2 200	5 078	507	19 668
H Kotze	CIO	3 104	131	126	3 361	–	2 200	2 200	5 561	–	22 962
Z Luhabe-Morrison[7]	Director of Marketing and Corporate Affairs	1 391	66	915	2 372	–	–	–	2 372	–	16 060
MH Randall	Director of Information Services	2 816	118	104	3 038	–	2 200	2 200	5 238	202	20 754
VJ Reddy[9]	Director Capital Markets	2 785	192	232	3 209	1 750	3 000	4 750	7 959	336	23 918
EI Haniff	Managing Director: JSE Investor Services	363	40	–	403	–	–	–	403	–	–
		17 403	906	1 456	19 765	8 808	12 300	21 108	40 873	2 592	129 868

Footnotes 1-12 below are applicable to notes 23.1-23.2

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 2021 (prior year: as at 31 December 2020), granted under the provisions of the LTIS 2018 Long-Term Incentive Schemes in the current year.*
7. *Appointed Director of Marketing and Corporate Affairs effective 1 February 2019, resigned effective 31 August 2020.*
8. *Resigned effective 29 February 2020.*
9. *Appointed Director Capital Markets effective 1 February 2020.*
10. *Resigned effective 30 September 2021.*
11. *Appointed Director of Marketing and Corporate Affairs effective 1 March 2021.*
12. *Appointed Chief Operating Officer effective 20 January 2021.*

23. Directors' and executives' remuneration (continued)

23.3 Non-executive director emoluments

		Total R'000	Board member fees R'000	Committee member fees R'000
2021				
Z Bassa	Chairman of Group SRO Oversight Committee	**1 130**	**425**	**705**
MS Cleary		**915**	**425**	**490**
N Fakude	Chairman of Group Remuneration Committee	**995**	**425**	**570**
SP Kana	Lead Independent Director; chairman of Group Audit Committee; chairman of Group Sustainability Committee	**1 683**	**425**	**1 258**
F Khanyile		**940**	**425**	**515**
I Kirk		**860**	**425**	**435**
BJ Kruger	Chairman of Group Deal Committee	**1 155**	**425**	**730**
MA Matooane	Chairman of Group Risk Management Committee	**925**	**425**	**500**
P Nhleko[6]		**733**	**213**	**520**
NMC Nyembezi	Board Chairman, chairman of Group Nominations Committee	**2 500**	**425**	**2 075**
		11 835	**4 038**	**7 798**
2020				
Z Bassa	Chairman of Group SRO Oversight Committee	1 025	370	655
MS Cleary[1]		833	339	494
F Daniels[2]		474	192	281
N Fakude	Chairman of the Group Remuneration Committee	790	370	420
M Jordaan[3]		268	185	83
SP Kana	Lead Independent Director; chairman of the Group Audit Committee; chairman of the Group Sustainability Committee	1 501	370	1 131
F Khanyile		851	370	481
I Kirk[5]		246	93	154
BJ Kruger	Chairman of the Group Deals Committee	943	370	573
DM Lawrence[4]		485	185	300
MA Matooane	Chairman of Group Risk Management Committee	820	370	450
NMC Nyembezi	Board Chairman, chairman of Group Nominations Committee	2 300	370	1 930
		10 535	3 584	6 951

[1] *Appointed 1 February 2020.*
[2] *Resigned 8 July 2020.*
[3] *Resigned 25 June 2020.*
[4] *Retired 25 June 2020.*
[5] *Appointed 1 October 2020.*
[6] *Appointed 1 July 2021.*

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
24. Deferred income				
Distribution from the JSE Guarantee Fund Trust	**–**	–	**3**	5 099
Initial listing fees	**24 490**	14 371	**24 490**	14 371
	24 490	14 371	**24 493**	19 470

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 25 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 2021:

	2022 R'000	2021 R'000
Revenue expected to be recognised	**1 844**	970

	2021 R'000	2020 R'000
Deferred income at 1 January	**14 371**	6 803
Deferred during the year	**11 565**	8 374
Recognised as revenue during the year	**(1 446)**	(806)
Balance at 31 December	**24 490**	7 568

25. Related parties

25.1 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 (2020: R1.7 billion) for the year.

The associated companies and subsidiaries of the Group are identified in notes 13 and 14 respectively.

The directors and key executives are listed in note 23.

25.2 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 23
Other key executives' remuneration	– see note 23
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 24.

Management fees from related entities	R127 million (2020: R135.0 million)

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

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26. Leases

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Impact on the statements of financial position as at 31 December 2021				
Assets				
Right-of-use assets at initial application 1 January	**256 298**	251 624	**251 624**	251 624
Acquisition of subsidiary	**–**	4 674	**–**	–
Accumulated depreciation	**(118 575)**	(78 840)	**(116 050)**	(78 033)
Total assets*	**137 723**	177 458	**135 574**	173 590
Lease Liabilities				
Current portion	**56 051**	40 882	**53 415**	38 494
Non-current portion	**196 657**	252 938	**195 951**	249 366
Total liabilities	**252 708**	293 820	**249 366**	287 860
The following amounts are recognised in the statement of comprehensive income for the year ending 31 December 2021				
Depreciation	**(39 736)**	(39 243)	**(38 017)**	(39 028)
Profit/(Loss) from operating activities	**(39 736)**	(39 243)	**(38 017)**	(39 028)
Finance cost	**(23 971)**	(27 889)	**(24 126)**	(27 740)
Impact on profit for the year	**(63 706)**	(67 133)	**(62 142)**	(66 768)
Changes in liabilities arising from financing activities				
Opening balance 1 January 2021	**293 820**	329 570	**287 860**	329 570
Acquisition of subsidiary	**–**	6 565	**–**	–
Loan repayments for the year	**(65 083)**	(70 264)	**(62 620)**	(69 510)
Interest charges for the year	**23 971**	27 949	**24 126**	27 800
Balance 31 December 2021	**252 708**	293 820	**249 366**	287 860

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

26. **Leases** (continued)

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

	GROUP		COMPANY	
	2021 R'000	2020 R'000	**2021 R'000**	2020 R'000
Not later than one year	**56 051**	70 301	**53 415**	67 913
Between one and five years	**196 656**	296 886	**195 950**	293 314
	252 707	367 187	**249 365**	361 227

27. 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.

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.

27. Financial risk management (continued)

Risk management framework (continued)

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.

27.1 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.

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.

27. Financial risk management (continued)

27.2 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.

27.2.1 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.

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
2021						
Financial assets	**135 910**	**–**	**–**	**135 910**	**–**	**–**
Trade receivables	**27 295**	**–**	**–**	**27 295**	**–**	**–**
Cash and cash equivalents	**108 615**	**–**	**–**	**108 615**	**–**	**–**
Financial liabilities	**–**	**(51)**	**(75)**	**–**	**(51)**	**(75)**
Trade payables	**–**	**(51)**	**(75)**	**–**	**(51)**	**(75)**
Net exposure	**135 910**	**(51)**	**(75)**	**135 910**	**(51)**	**(75)**
2020						
Financial assets	122 237	–	–	122 237	–	–
Trade receivables	23 045	–	–	23 045	–	–
Cash and cash equivalents	99 192	–	–	99 192	–	–
Financial liabilities	(10 474)	(1)	114	(10 474)	(1)	114
Trade payables	(8 923)	(1)	114	(8 923)	(1)	114
Long-term payables	(1 551)	–	–	(1 551)	–	–
Net exposure	111 763	(1)	114	111 763	(1)	114

* *Other investments which include foreign exposure are considered as part of the fair value sensitivity analysis in note 28.*

27. Financial risk management (continued)

27.2 Market risk (continued)

27.2.1 Currency risk (continued)

As at 31 December 2021:

Bank buying rates
USD – 15.949 (2020: 14.3712)
EUR – 18.0832 (2020: 17.526)
GBP – 21.5517 (2020: 19.5566)

Bank selling rates
USD – 15.9236 (2020: 14.9802)
EUR – 18.0505 (2020: 18.3791)
GBP – 21.5054 (2020: 20.5637)

Sensitivity analysis

A 10% (2020: 10%) weakening of the rand against the USD and a 5% (2020: 5%) weakening of the rand against the EUR and a 5% (2020:5%) strengthening of the rand against the GBP, at 31 December, would have increased profit by R13.6 million (2020: R11.2 million) and equity by Rnil (2020: Rnil). This analysis assumes that all other variables remain constant. The analysis is performed on the same basis as 2020.

	GROUP		COMPANY	
	Profit or loss R'000	Equity R'000	Profit or loss R'000	Equity R'000
2021				
USD	**13 591**	**–**	**13 591**	**–**
GBP	**(3)**	**–**	**(3)**	**–**
EUR	**(4)**	**–**	**(4)**	**–**
Net impact	**13 585**	**–**	**13 585**	**–**
2020				
USD	11 176	–	11 176	–
GBP	–	–	–	–
EUR	6	–	6	–
Net impact	11 182	–	11 182	–

A 10% (2020: 10%) weakening of the rand against the USD and a 5% (2020: 5%) weakening of the rand against the EUR and a 5% (2020:5%) strengthening of the rand against the GBP, at 31 December, would have had an equal and opposite effect on the amounts shown above, on the basis that all other variables remained constant.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued
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27. Financial risk management (continued)

27.2 Market risk (continued)

27.2.2 Fair value interest rate risk

Interest rate risk is the risk of the JSE being exposed to fluctuations in the fair values or future cash flows of financial instruments because of changes in market interest rates. The Group is exposed to cash flow interest rate risk in respect of its floating rate financial assets and financial liabilities as set out below and to fair value interest rate risk in respect of fixed rate bonds classified as 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.

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

	GROUP		COMPANY	
	Fixed rate R'000	Floating rate R'000	Fixed rate R'000	Floating rate R'000
2021				
Assets	**36 266 362**	**22 236 589**	**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**
2020				
Assets	33 407 865	15 892 988	1 429 689	1 026 485
Investments	32 283	–	–	–
JSE Clear Derivatives Default Fund collateral deposit	347 000	153 000	–	100 000
Margin and collateral deposits	31 500 000	14 809 359	–	309 343
Cash and cash equivalents	1 528 582	930 629	1 429 689	617 142
Liabilities	(31 777 600)	(14 931 759)	–	(309 343)
JSE Clear Derivatives Default Fund contributions	(277 600)	(122 400)	–	–
Margin and collateral deposits	(31 500 000)	(14 809 359)	–	(309 343)
Net exposure	1 630 265	961 229	1 429 689	717 142

Floating rate assets yield interest at call rates.

27. Financial risk management (continued)

27.2 Market risk (continued)

27.2.2 Fair value interest rate risk (continued)

Sensitivity analysis

A change of 100 (2020: 100) basis points on the fixed rate bonds and 100 (2020: 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 2020.

	GROUP		COMPANY	
	Profit or loss R'000	Equity R'000	Profit or loss R'000	Equity R'000
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)**	**–**
2020				
Fixed-rate bond: +100 bps	–	(1 510)	–	–
Fixed-rate bond: -100 bps	–	1 407	–	–
Floating-rate instruments: +100 bps	9 612	–	7 171	–
Floating-rate instruments: -100 bps	(9 612)	–	(7 171)	–

Other market price risk

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

Sensitivity analysis – other market price risk

The fair value financial instruments through other comprehensive income 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 27.2.2.

The fair value 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% (2020: 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 R6.1 million (2020: R4.9 million) and profit by Rnil (2020: Rnil). This analysis is performed on the same basis as 2020.

The collective investment schemes and protective cell funds are predominately benchmarked against the MSCI World Index. A 5% (2020: 5%) increase/decrease in the MSCI World Index at the reporting date, with all other variables held constant, would have increased/decreased equity by R13.2 million (2020: R11.1 million). The analysis is performed on the same basis as in 2020.

27. Financial risk management (continued)

27.3 Liquidity risk

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

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

	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)**

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27. Financial risk management (continued)

27.3 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**
2020							
Financial assets	37 200 108	12 463 000	1	377 301	2 155 457	523 106	100 000
Other investments	–	–	1	377 301	–	–	–
Trade and other receivables (excluding payments in advance)	254 680	–	–	–	231 281	–	–
Interest receivable	139 857	–	–	–	5 235	–	–
Due from Group entities	–	–	–	–	47 767	38 106	–
Margin and collateral deposits	34 409 359	11 900 000	–	–	309 343	–	–
JSE Clear Derivatives Default Fund collateral deposit	422 000	78 000	–	–	–	–	100 000
Cash and cash equivalents	1 974 212	485 000	–	–	1 561 831	485 000	–
Financial liabilities	(35 069 650)	(12 015 499)	(298 227)	–	(482 822)	(51 283)	(294 865)
Trade payables	(166 478)	–	–	–	(154 989)	–	–
Lease liabilities	(17 234)	(53 099)	(296 676)		(16 629)	(51 283)	(293 314)
Long-term payables	–	–	(1 551)		–	–	(1 551)
Interest payable	(138 979)	–	–	–	(1 861)	–	–
JSE Clear Derivatives Default Fund collateral deposit	(337 600)	(62 400)	–	–	–	–	–
Margin and collateral deposits	(34 409 359)	(11 900 000)	–	–	(309 343)	–	–
Net impact	2 130 458	447 501	(298 226)	377 301	1 672 635	471 822	(194 865)

27.4 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.

27. Financial risk management (continued)

27.4 Credit risk (continued)

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 2021.

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.

27.5 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.

28. Fair value estimation

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

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

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
2021					
Assets					
Other investments					
– Equity securities (financial instruments)	14.1/2	**151 489**	**263 953**	**–**	**415 442**
– Debt investments (financial instruments)	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**
2020					
Assets					
Other investments					
– Equity securities (financial instruments)	14.1/2	122 719	222 299	–	345 018
– Debt investments (financial instruments)	14.1/2	–	32 283	–	32 283
Total assets		122 719	254 582	–	377 301

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

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

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

28. Fair value estimation (continued)

Reconciliation: level 3 recurring fair value measurements

Equity investments	R'000
Opening balance	
Globacap acquisition	84 000
Fair value gain recognised OCI during the period (pre-tax)	2 480
Closing balance	86 480

IAS 21 states that a foreign currency transaction shall be recorded, on initial recognition in the functional currency, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. The investment was therefore initially recorded at R84 million. The equity investment has been adjusted in relation to unrealised foreign currency translation gains or losses recognised in other comprehensive income.

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 2021 are shown below:

Valuation technique		Significant unobservable inputs	Range	Sensitivity of the input to fair value
Non-listed equity instruments designated at fair value through OCI	Net Present Value (NPV) Method	Weighted average cost of capital (WACC)	20%	5% increase in the WACC would result in a decrease in fair value of R27.1 million
		Revenue growth rate	48%	3% decrease in revenue growth rate from 2023 onwards results in a decrease in fair value by R21 million
		Exchange rate	R21.51	10% strengthening of the rand against the GBP will result a decrease in fair value by R8.9 million

Equity instruments designated at fair value through OCI include investments in equity shares of non-listed companies. These investments were irrevocably designated at fair value through OCI, as the Group considers these investments to be strategic in nature.

Globacap investment

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.

No dividends were received within the period.

External, independent valuators were used (RMB) in performance of the valuation at acquisition. At 31 December 2021, fair value was measured using the NPV model valuation technique and 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.

28. Fair value estimation (continued)

Globacap investment (continued)

The following valuation approach and key assumptions were used which are subject to estimation uncertainty:

- 10-year free cash flow to equity forecast;
- 20% WACC;
- 297% revenue growth for 2022, 48% revenue growth from rate for years 2023 to 2031; and
- 15% operating growth rate.

The fair value was calculated as at 31 December 2021.

29. Funds under management

29.1 JSE Trustees (Pty) Limited and JIS CSDP (Pty) Ltd

	Year ended 31 December 2021 R'000	Year ended 31 December 2020 R'000
Assets under administration		
Interest receivable	**146 305**	110 829
Fixed deposits	**26 800 000**	25 250 000
Current and call accounts	**15 249 322**	12 941 079
Total assets under administration	**42 189 627**	38 301 908

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 A1 and 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 50 (2020: 50) days. At least 30% of the fund size must be invested on call at all times.

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

30. Guarantees, contingent liabilities and commitments

30.1 Guarantees

A guarantee of an amount of 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 R7 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.

30.2 Contingent liabilities

No material commitments existed as at 31 December 2021.

30.3 Commitments

The table below refers to future minimum lease agreements.

		GROUP AND COMPANY	
		2021 R000	2020 R000
30.3.1	**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	**295**	365
	Between one and five years	**25**	388
		320	753

No other commitments exist as at 31 December 2021.

31. Events after reporting date

There have been no material events that would require adjustment or disclosure in the annual financial statements between 31 December 2021 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[1]	Shares in issue	Market capitalisation	Closing price R billion
31 December 2020	400 000 000	86 877 600	112.50	9.8
30 June 2021	400 000 000	86 877 600	106.30	9.2
31 December 2021	400 000 000	86 877 600	112.00	9.7

[1] *Further details of the stated capital for the period under review are disclosed in note 18 of the Company's audited annual financial statements, available at https://www.jse.co.za/investor-relations/results.*

Shareholder spread as at 31 December 2021

	Number of shareholders	Shares held	%
Public			
Institutional shareholders	**1590**	**77 699 937**	**89.44%**
Non-institutional shareholders	**5 245**	**4 979 307**	**5.73%**
Total	**6 835**	**82 679 244**	**95.17%**
Non-public			
JEF Trust	**1**	**2 129 639**	**2.45%**
JSE LTIS Trusts	**1**	**1 995 784**	**2.30%**
Directors and company secretary	**6**	**72 933**	**0.08%**
Total		**4 198 356**	**4.83%**
Total identified shares		**86 877 600**	**100%**
Total share capital			
Geographic ownership			
South Africa	**35**	**48 350 950**	**55.7%**
United States	**30**	**12 377 419**	**14.2%**
United Kingdom	**14**	**9 431 561**	**10.9%**
Sweden	**1**	**1 378 300**	**1.6%**
Rest of Europe	**12**	**575 934**	**0.6%**
Rest of world	**6**	**204 689**	**0.2%**
Total	**98**	**72 318 853**	**83.2%**

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 2021

N Nyembezi[1] (Chairman)
Z Bassa[1]
MS Cleary[1]
VN Fakude[1]
Dr SP Kana[1] (Lead Independent Director)
FN Khanyile[1]
IM Kirk[2]
BJ Kruger[2]
Dr MA Matooane[1]
P Nhleko[1,4] (Chairman designate)
Dr L Fourie (Group CEO)[3]
A Takoordeen (Group CFO)[3]

Changes to the Board in 2021

Mr P Nhleko[4]

[1] *Independent non-executive directors.*
[2] *Non-executive directors.*
[3] *Executive directors.*
[4] *Appointed effective 1 July 2021.*

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*

GREYMATTERFINCH # 15951

www.jse.co.za