JSE LIMITED INTEGRATED ANNUAL REPORT

FOR THE YEAR ENDED 31 DECEMBER 2018

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The integrated reporting process is an ongoing journey in which we strive to improve on the quality of the JSE's reporting.

REPORT OVERVIEW

REPORT OBJECTIVES

This integrated annual report is intended for our stakeholders and aims to tell the value creation story of the JSE Limited (the Group or the JSE). This report provides information that also enables all our stakeholders to make an informed assessment of our ability to create sustainable value over time.

This report was compiled with information that the Board and management believe is relevant to stakeholders and provides a comprehensive view of the Group's performance for the financial year ending 31 December 2018.

We welcome feedback from stakeholders on this report and invite you to contact ir@jse.co.za should you have any questions or recommendations.

SCOPE AND BOUNDARY

The information presented in this report describes the JSE and the five financial markets operated by the Group, and the investor protection funds¹ associated with its markets. The report excludes details on our associate, Strate Proprietary Limited, in which the JSE holds 44.55%, as Strate has an independent Board and management team. The JSE equity accounts for Strate. The Group legal structure can be found at ir.jse.co.za/results/annual-reports.

The Board and management assessed the economic environment, developments within capital markets, the role of exchanges, and the JSE's business model and performance in order to determine our material matters for this report. Refer to page 10 for further information.

This report outlines the Group's risk management processes and overall risk profile and considers the reasonable and legitimate needs and concerns of our stakeholder groups.

² Copyright and trademarks are owned by the Institute of Directors in Southern Africa NPC and all of its rights are reserved.

Page reference for additional	₽
reading in this report	
Reference to online data at www.jse.co.za	Ę
Indicates the relevant King IV principle	(*

¹ These funds consist of the JSE Guarantee Fund Trust, the JSE Derivatives Default Fund Trust, and the JSE Debt Guarantee Fund Trust.

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The JSE's reporting framework for this report is informed by a range of local and international requirements, standards and guidance, including, but not limited to:

- » The South African Companies Act, No 71 of 2008 (as amended) (Companies Act);
- » King Report on Corporate Governance[™] for South Africa, 2016 (King IV)²;
- » relevant indicators of FTSE Russell's environmental, social and governance (ESG) ratings methodology as applied for purposes of the FTSE/JSE Responsible Investment Index Series, of which the JSE is a constituent;
- » United Nations (UN) Global Compact (UNCG);
- » UN Principles for Responsible Investment (PRI);
- » Sustainable Stock Exchanges Initiative (SSEI); and
- » CDP (formerly known as the Carbon Disclosure Project).

ASSURANCE OVER THE REPORT 5 5

Our reporting suite contains a range of information governed by a diverse set of regulations and frameworks. Management decides and applies significant judgement in deciding what to report, based on principles of materiality and stakeholder inclusiveness. The Board's responsibilities include oversight of financial and non-financial value drivers against agreed performance measures and the annual corporate scorecard.

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.

Financial information in this report is drawn from the annual financial statements 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.

AQRate Verification Service, an accredited broad-based economic empowerment (BBBEE) verification agency, has verified our BBBEE performance. They have confirmed a Level 3 rating and the verification certificate is available at ir.jse.co.za/results/annual-reports.

The Board is satisfied that internal oversight sufficiently ensures the reliability of the information presented in this report, and did not obtain additional external assurance over this report.

REPORTING SUITE

Our full reporting suite is available at ir.jse.co.za/ results/annual-reports and comprises the following reports:

Integrated annual report

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

Annual financial statements

Sets out our financial results, with the Group Audit Committee (GAC) report, directors' report and annual financial statements prepared in accordance with International Financial Reporting Standards (IFRS).

Social value report (Reporting on social value creation)

Sets out details of our journey towards delivering on our sustainability mandate and our impact on society, structured according to six areas of value creation.

Remuneration report (Rewarding value creation)

Sets out the JSE's remuneration philosophy and policy, and how it was implemented in 2018. This report is subject to two nonbinding advisory votes at our AGM.

Group legal structure

Sets out the legal structure of the Group.

Notice of annual general meeting and proxy form

Sets out the notice of the JSE's AGM of shareholders to be held on Wednesday, 22 May 2019, together with the summarised report containing the required financial disclosures.

REPORT OVERVIEW continued

BOARD APPROVAL 5 5

The directors of the JSE acknowledge responsibility for the integrity of this integrated annual report. The Board, supported by the Group Audit Committee, endorsed the reporting frameworks utilised in this report and approved the material matters determined by management.

The directors have applied their minds to the report and believe that it covers all material matters, that the information contained in this report is reliable, and that it fairly presents the integrated performance of the Group.

Nonkululeko Nyembezi Independent non-executive chairman

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Fatima Daniels Independent non-executive director

INKLangile

Faith Khanyile Independent non-executive director

MAMatooane

Dr Mantsika Matooane Independent non-executive director

Dr Suresh Kana Lead independent non-executive director

Nolitha Fakude Independent non-executive director



Ben Kruger Non-executive director

Nicky Newton-King Chief executive officer

DRA

Zarina Bassa Independent non-executive director

Dr Michael Jordaan Independent non-executive director

David Lawrence

Aarti Takoordeen Chief financial officer

DISCLAIMER

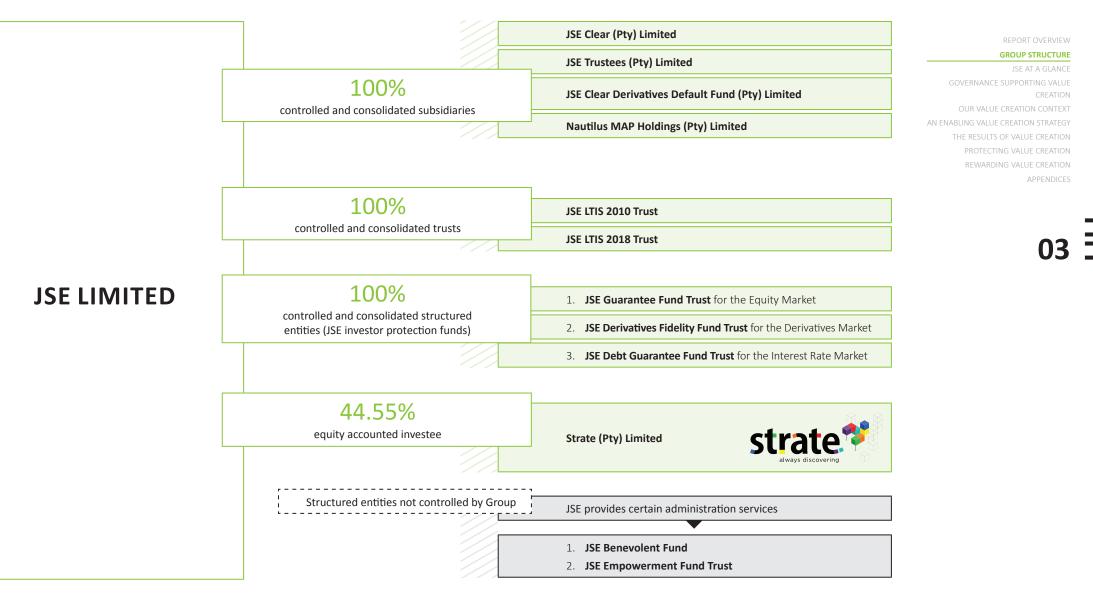
Many of the statements in this integrated annual report constitute forward-looking statements. These are not guarantees or predictions of future performance. The information on which forwardlooking statements were based were not audited. Like all businesses, the JSE faces risks and other factors outside 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.

GROUP STRUCTURE

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JSE LIMITED INTEGRATED ANNUAL REPORT 2018



JSE AT A GLANCE

The JSE is uniquely positioned

- » as a critical product and service provider to South Africa's financial market; and
- » as a facilitator between those who provide capital, those who need capital to fund their businesses and those who rely on returns for short-, medium- or long-term purposes; whether that link is of a regulatory, service provision or influencing nature.

The JSE's efforts to sustain a resilient, multi-asset class and world-class exchange that is well positioned for the future reflect an awareness of this positioning.

Who we are

The JSE is a self-regulatory, multi-asset class stock exchange offering deep liquidity across a wide range of tradable products, as well as post-trade, technology and information services.

The JSE is based in South Africa and is the largest stock exchange by market capitalisation in Africa and the 16th largest stock exchange in the world. It has been operating as a market place for the trading of financial products for 132 years. We are a member of the World Federation of Exchanges (WFE), the Committee of SADC Stock Exchanges (CoSSe) and the African Stock Exchanges Association (ASEA). We are a founding member of the Sustainable Stock Exchanges Initiative (SSEI).

Financial supervision of the JSE is shared between two regulators, the Prudential Authority (PA) and the Financial Sector Conduct Authority (FSCA), which were established on 1 April 2018. The PA is a department of the South African Reserve Bank and is responsible for prudential supervision of banks, insurance companies and market infrastructures (e.g. exchanges and clearing houses). The FSCA is responsible for the supervision of the conduct of financial institutions including market infrastructures, and replaces the Financial Services Board.

The JSE acts as self-regulatory organisation, supervised by the PA for prudential matters and by the FSCA for conduct matters.

Our vision

To be the best global platform in emerging markets

Our mission

We build better markets and co-create for growth

Our values

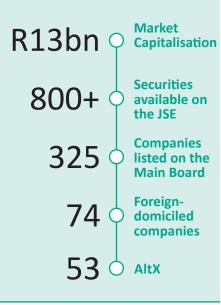
Resilience: We can always be counted on to be there for our clients

Energy: We are enthusiastic and proactive

Authenticity: We always do what we say we will do

Diversity: We value the strength in our differences

Insight: We gain understanding before we provide solutions



What we do

We connect buyers and sellers in a variety of financial products: equities and equity derivatives, commodity derivatives, currency derivatives and interest rate instruments.

Primary market

Sources issuers to list on the JSE's Equity and Interest Rate Markets. It also supports potential and existing issuers.

Secondary market

Provides trading and ancillary trading, colocation and customer support services in the Equities, Bonds, Financial Derivatives and Commodity Derivatives Markets.

Post-trade services

Provides post-trade clearing and risk management and settlement services for all JSE traded products.

Data

Produces, publishes and sells live, statistical, historical and end-of-day data from all its markets as well as reference data, corporate actions, client data, indices, valuations, business intelligence and statistics.

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How we deliver our products and services

Capital Markets

Capital Markets is responsible for operating the markets (asset classes) under the JSE's licence:

- Equity Market provides trading in equities. Products include primary and dual-listed ordinary shares, preference shares, depository receipts, property entities like real estate investment trusts (REITS), special purpose acquisition companies (SPACs), warrants, structured products and exchange-traded products (ETFs and ETNs).
- » Equity Derivatives Market includes index and single-stock futures and options, can-do futures and options, exchangetraded contracts for difference and other sophisticated derivative instruments.
- » Commodity Derivatives Market offers a range of cash-settled rand-denominated derivatives on various local and international

- benchmark commodities, including softs, energy and various metals, a beef carcass, Mexican white maize, lamb carcass and wool futures contracts.
- **Currency Derivatives Market** offers derivative instruments on a range of currencies.
- Interest Rate Market includes cash bonds, floating rate notes, commercial paper and hybrid instruments, interest rate derivatives and a green bond segment.

Post-Trade Services

Post-trade Services is responsible for the risk management, clearing and settlement assurance of the markets operated by the JSE. The JSE acts as the settlement authority for the exchange-traded equities market and as the clearing house for the exchange-traded derivatives market (via the central counterparty (CCP), JSE Clear).

Post-trade services is responsible for managing key risks – particularly counterparty credit risk, credit contingent market risk and liquidity risk. It does so through a comprehensive risk management framework, and by providing accurate measurement, control, and appropriate protection from all identifiable risks arising in the markets cleared.

Post-trade services is also responsible for the management of the Broker Deal Accounting (BDA) back-office services for the Equities Market. BDA provides the JSE with world-class surveillance capabilities, allowing the JSE to see certain transactions to client level in real time. Equity members are mandated to use the system, which keeps the securities records and books of individual broking firms and of their clients. The system also enables the JSE to provide settlement assurance for central order book equity transactions.

Information Services

provides market data, reference data, corporate actions, client data, indices, valuations, business intelligence, the London point of presence and statistics. Information Services is responsible for the promotion, licensing and sale of all JSE information products and services across all JSE markets, weighted towards the Equity Market.

Regulation

The JSE is a self-regulatory organisation (SRO) and acts as the frontline regulator of our issuers and of our trading and clearing members through the Issuer Regulation and Market Regulation divisions.

Technology

We are a fully electronic, efficient and secure market, with world-class regulation, trading and clearing systems, settlement assurance and risk management.

GOVERNANCE SUPPORTING VALUE CREATION

HOW WE VIEW OUR VALUE CREATION

The JSE enables value creation by providing a trusted and well-regulated financial market infrastructure to support the economy. Our value creation process is embedded in our vision (to be the best global platform in emerging markets).



This report focuses on those matters that impact materially on the JSE's ability to be a sustainable business. Our material matters influence our Group's strategy. The following material matters were identified:



The JSE's 2022 vision, material matters (page 10) and strategy (page 16) are informed by our central role in the financial market. Our business philosophy aims to balance the interests of all stakeholders, particularly in relation to the following:

- » achieving efficiencies for clients;
- » optimising shareholder value; and
- » reinvesting internally in people and technology.

This means balancing these elements by not seeking to maximise prices to clients, dividends to shareholders or rewards to employees.

Examples of material trade-offs include:

- keeping prices stable or reducing them to remain competitive and to provide clients with the benefits of scale when the JSE attracts increasing activity;
- » optimising personnel expenditure while ensuring remuneration is kept sufficiently competitive to attract and retain appropriately qualified and experienced employees; and
- » making long-term investments when markets appear to be volatile or slow so as to allow the JSE to meet client's needs across the business cycle.

The JSE actively promotes sustainable, transparent business and responsible investment, including:

- » being a global thought leader in the field of governance and sustainability and the related standards and disclosure;
- » evolving and expanding our responsible investment product offering through indices, bonds and other initiatives; and
- » our continued enhancement of regulatory regimes and disclosure to ensure that investors are equipped with transparent information to make informed investment decisions.

JSE LIMITED

Six areas of value creation

Our ongoing relevance as an exchange and our ability to create long-term value for stakeholders, are dependent on various forms of capital. We refer to these forms of capital as our six areas of value creation.



Financial resources are required to operate the business and support growth, expansion and innovation. Capital is obtained from sources such as:

- » JSE share capital; and
- » profits retained and reinvested.

The JSE balances the need to distribute value to investors through a balanced return to shareholders, reinvestment and reduced prices to clients.

By investing in our systems and people, we may put pressure on our available financial capital and reduce financial outcomes in the short-term. However, this is done to serve longer-term strategic objectives and aims to enhance outcomes for our brand, skills base and stakeholders.

Our systems and infrastructure

As a technology-driven entity, our manufactured capital consists of the IT systems and infrastructure used for securely processing transactions between buyers and sellers, and processing analytical data to support our information services, as well as regulating our Primary and Secondary Markets.

Implementing world-class technology and remaining at the cutting edge of industry advances are core to our business model and sometimes require trade-offs in financial outcomes. Investment in new systems and related employee skills can maximise our outputs and enhance outcomes for our brand, people and stakeholders.

The JSE is located in Sandton (head office) and Cape Town, with disaster recovery facilities maintained off-site.

Our organisational knowledge and brand

The JSE's brand includes the technologies and systems we have developed and the intellectual know-how we need to facilitate an efficient and world-class market. The JSE brand relies on technology delivery and positive relations with our stakeholders.

We operate in a specialised environment, so we place a premium on developing and retaining the right skills and protecting the JSE's systems and intellectual property rights (both in terms of know-how and products). Ensuring the continued availability of these resources could deplete short-term financial resources, but it enhances our systems and infrastructure and stakeholder outcomes. REPORT OVERVIEW

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😣 Our people

The JSE is a specialised organisation requiring competent, motivated and diverse employees with specialist skills in financial markets technology, governance, risk and financial products trading.

We work to attract, develop and retain high calibre employees who are instrumental in the execution of our strategy and delivery of world-class markets.

Section 2 Sectio

The JSE plays a critical role in the local economy. We influence, regulate and interact with a broad range of stakeholder groups to ensure that we remain a trusted infrastructure, and to enable value creation for ordinary South Africans.

To achieve our strategy and optimise our outputs and related outcomes, we need an economic environment that is conducive to capital market activity, a licence to operate a market infrastructure and the participation of a range of clients (issuers and broader investor community).

We are able to respond to the needs of our stakeholders and reinforce confidence in our brand because we have reliable systems, our people are skilled and client-centred, and we apply our financial resources efficiently.

💋 Our environment

We seek to influence the sustainability practices of others and to create products, like the Green Bond segment, which support wider sustainability initiatives. In so doing, we have a far greater impact than just our own footprint.

We aim to be efficient in our water and electricity consumption and have a moderately negative impact on the natural environment because we have to ensure continuity in our systems to enable us to deliver our outputs to the benefit of our stakeholders.

REFLECTIONS FROM OUR CHAIRMAN

We have been able to grow earnings and provide a sustainable return for shareholders while playing a meaningful role as an engaged corporate citizen.





I am pleased to be able to share the JSE story of how we have generated value for our stakeholders in a challenging vear.

Our value creation in 2018 has been delivered in a period of subdued macroeconomic growth, slowing market activity, significant uncertainty both globally and in South Africa, as well as tighter monetary conditions. That said, we have been able to grow earnings and provide a sustainable return for shareholders while plaving a meaningful role as an engaged corporate citizen. Our integrated annual report reflects on our successes and challenges in 2018 and the contributions of the committed staff who work for the ISE.

ADAPTING IN A WORLD OF CHANGE

Exchanges and clearing houses are critical role-players in a market economy, fostering economic growth and strengthening market integrity. As market infrastructures, they enable the efficient allocation of capital by providing the marketplaces for raising capital and to connect buyers and sellers.

Over the past year, we have reviewed our strategy and sharpened our focus so as to enable our vision of being the best global platform in emerging markets. Our aim is to offer our clients a compelling proposition in all asset classes and across the value chain. In so doing, we have been able to reduce costs for all our clients through the tiered billing model for the Equities Market and the Government Bond ETP. Furthermore, the Integrated Trading and Clearing Programme (ITaC) initiative seeks to provide the JSE with integrated trading and clearing platforms for all asset classes traded on the Exchange and is intended to reduce technology operating costs over time. We are committed to ensuring that investments in new IT infrastructure and applications generate value and downstream benefits for our stakeholders.

We are reaching the end of a significant technology upgrade and expect to reap efficiency gains in the medium-term. Our executive team is also examining closely how best to optimise our legacy systems while

retaining reliability and resilience. In the past year, we have seen a significant reduction in operational incidents and clear strengthening of our functional resilience as an exchange. This work is being undertaken against a backdrop of sustained regulatory change. The pace and volume of regulatory activity, and the implications for our business model, not least the regulatory capital requirements, require a nimble approach from management. We

> expect this regulatory pressure to increase in the shortterm. We welcome the challenge of direct competition as it encourages us to seek new efficiencies and more agile operating models.

ETHICAL LEADERSHIP COUNTS

Ethical leadership and integrity are bedrock principles of a functioning democracy. We have watched with great regret the eroding of our state institutions and hard won fiscal probity. We stand on the brink of yet another ratings downgrade. Corporate governance scandals in the private sector have also tarnished South Africa's reputation as an investment destination.

Responsible leadership is needed more than ever in our country, at a political level, in our critical state owned entities, within the civil service and in corporate South Africa.

Promoting ethical leadership can serve as a catalyst for collaboration on the key socioeconomic challenges facing the country. In the absence of this form of leadership, factionalism and rent-seeking will continue to prevail and the growth prospects of our country will remain stunted. We will forever make little-to-no

progress in addressing the pressing triple challenge of unemployment, poverty and inequality. Without meaningful and rapid progress on these deep-seated challenges, our society and democracy remain at risk.

Programmes by the CEO Initiative and Business Leadership SA can contribute to unlocking growth opportunities, but this work must be matched by a commitment from all role-players to act with integrity and fairness.

A WELL-GOVERNED EXCHANGE GROUP

The Board is ultimately responsible for ensuring the Group adheres to sound corporate governance practices, the highest standards of ethics and operates in a fair and transparent manner. During 2018, we concluded an important phase in our programme of Board renewal. I am satisfied that the Board is sufficiently diverse in terms of experience, expertise and thinking to address the critical contemporary and future issues facing the JSE. The composition of our Board also reflects South Africa's diversity (eight of our 12 directors are Black and seven are Black women).

I would like to pay warm tribute to Anton Botha (formerly our lead independent director) and to Andile Mazwai, both of whom have served the JSE with dedication since its demutualisation in 2005 and who retired at the AGM in May 2018 in accordance with our policy on non-executive director tenure. Nomavuso Mnxasana also stood down at the AGM, having served diligently on our Board for the past five years. In August 2018, Nigel Payne resigned from the Board following his appointment as non-executive chairman of Strate. The Board and I are grateful for the insight and wise counsel shared by Nigel in more than a decade of service as a non-executive director.

The work of our Board committees is crucial to the effective functioning of the Board and the discharge of its important role in executive oversight. Dr Suresh Kana has assumed responsibility as lead independent director and also chairs the Group Audit and Group Social and Ethics Committees. Nolitha Fakude, who joined the

Board in 2017, serves as chairman of the Group Human Resources Committee while Zarina Bassa has accepted the role of chairman of our Group SRO Oversight Committee, responsible for oversight of all regulatory matters.

Under the guidance of the Group Human Resources Committee we have engaged meaningfully in 2018 on the issues of executive remuneration, both from a policy perspective and with respect to implementation. Our annual bonus schemes have been simplified and streamlined into one scheme for all staff. our guaranteed pay levels aligned so as to be competitive with the market for key talent, and we are pleased that shareholders endorsed at the AGM in 2018 the new long-term performance share scheme (LTIS 2018) for senior staff. We remain mindful of the debates and scrutiny this topic attracts and the Board is comfortable that our remuneration model is sound, our pay practices fair. and our rewards for 2018 commensurate with the performance and value delivered by management and staff.

The Board has devoted significant attention to technology governance during 2018, given its critical importance as an enabler of value creation. Management has made headway in addressing the JSE's legacy technology challenges, and in setting the ITaC programme launch date. Information security and cyber-readiness remain squarely on the Board's agenda, and we continue to engage our executive team on the quality of our cyber defences and management's preparedness to respond effectively to this evolving threat. The JSE's technology portfolio demands energetic and dedicated leadership. A new CIO. Hendrik Kotze, was appointed during 2018 following important work by Len de Villiers, as interim CIO, to address key IT priorities. In the year ahead the Group Risk Management Committee, under the leadership of Dr Mantsika Matooane, will continue to exercise close oversight on technology and information governance.

We plan to continue enhancing our governance model in the year ahead, with the focus on JSE Clear, our clearing house subsidiary. The clearing business remains a key component of our Group strategy. We anticipate a change in the JSE Clear licence (from associated to independent clearing house) and will also enhance the JSE Clear governance structures (with the appointment of an independent Board).

APPRECIATION

I would like to thank our Chief Executive Officer, Nicky Newton-King, her executive team and all JSE staff members for the solid performance delivered in 2018, and for their ongoing commitment to building a resilient and agile JSE.

I am grateful for the contribution and counsel of my fellow Board members, and the fresh perspectives being shared by our new non-executive directors, Ben Kruger, Fatima Daniels, Faith Khanyile and Zarina Bassa.

In his first State of the Nation address, President Ramaphosa reminded us of the importance of service – Thuma Mina.

As South Africans, we should grasp this opportunity to reset the moral compass of our country, restore decency and respect in our engagement as citizens and strengthen the vital institutions which serve as the backbone for a well-functioning state. The urgent structural inequities so evident in our society – poverty, inequality and unemployment – can be addressed successfully by working together, and by harnessing the energy that will result from a thorough overhaul of South Africa's state-owned enterprises coupled with the initiative of private enterprise.

The JSE is well positioned for the business challenges and opportunities ahead, and to execute on our demanding 2022 strategy. By building free and competitive markets and balancing short- and longterm needs, the JSE contributes sustainable economic value. This enables our support of the social and economic transformation needed in our country – value that translates into a real and lasting difference for society.

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OUR VALUE CREATION CONTEXT

MATERIAL MATTERS AND KEY RISKS

Our material matters, which also represent our primary risk themes, are those matters that have the ability to influence our financial performance, our reputation or impact on our licence to operate.

Material matters determination process (5)

In the material matter determination process, the JSE assessed our economic environment, developments within capital markets, the role of exchanges, and the JSE's business model and performance. Although there have been developments across all these dimensions, there have been no material changes – however, we have noted the increase in corporate governance failures. This incorporated as a new material matter "perception of South African market and regulatory quality".

Identifying and determining matters and key risks that are material to the Group and our stakeholders is an ongoing process as new developments shape the macroenvironment and the needs of our stakeholders change. The material matters for reporting were workshopped by JSE senior management and ultimately approved by the JSE Board.

The following material matters identified influence our Group strategy and assist the Board in accessing the material information to be included in our integrated report.

	Innovative technology solutions for clients	The demand for innovation and evolving products, cyber risk and information security remains a key focus area in an era of increasing technological innovation. This increases our operational risk and has an impact on financial capital and corporate resources. It also provides us with an opportunity to enhance the JSE's products, services and processes through the innovative use of technology. We respond by investing in agile technology delivery to adapt to new innovative products; perform IT infrastructure refresh and business as usual upgrades; and engage with clients to enable us to prioritise the delivery of those technology solutions which will be most useful to them.
2	Operational resilience	The reliability, effectiveness and efficiency of systems, processes and employees, and their impact on the JSE as a trusted infrastructure provider has a direct impact (positive or negative) on earnings. The success of the JSE depends on its ability to continuously find opportunities to provide a reliable and safe trading and clearing environment that meets its client's requirements. We respond by investing in our operational capability and technology environment and the continued enhancement of incident management.
3	Long-term viability in a low growth economy	A low growth economic environment impacts the trade environment which in turn results in less revenue for the JSE. Short-term volatility can result in increased trading activity, however, these gains/losses may have a longer-term impact on performance. The JSE continuously reviews its business model to find areas of opportunity to grow sustainably across the value chain and diversify revenue streams from organic and non-organic business lines.

	South Africa's failure to achieve broad-based growth, however small, will impede the growth of the size of the JSE's future client base	JSE LIMITE INTEGRATED ANNU REPORT 201
Transformation in an unequal society	and hence poses a risk to the Group. We seek to actively engage with government and other stakeholders which gives us the opportunity to participate in policy forums, roadshows and workshops to drive SA Inc.	REPORT OVERVI
,	We aim to lead by example by exploring ways to enhance the JSE's transformation credentials and support the country's transformation agenda. We also use our regulatory powers to drive changes (like those of the Listings Requirements) which focus our clients on their responsibilities regarding transformation.	GROUP STRUCTU JSE AT A GLAP GOVERNANCE SUPPORTING VAI
Perception of South African	Corporate governance failures have resulted in a corporate trust deficit and impacted the JSE's reputation through the Group's perceived regulatory role. Further, the impact of this for South Africa is reduced foreign investor confidence in the country – increasing South Africa's cost of capital and reducing economic growth.	CREAT OUR VALUE CREATION CONT AN ENABLING VALUE CREAT STRAT
market and regulatory quality	This presented us with the opportunity to engage with companies on the JSE Listings Requirements to establish areas of possible improvement.	THE RESULTS OF VALUE CREAT PROTECTING VALUE CREAT
	We will continue with such stakeholder engagement to raise market perception and regulatory quality.	REWARDING VALUE CREAT
Management of critical and essential skills and talent for our	Skills required in the financial market and technology areas, specifically risk, post-trade services, regulation and information services expertise are scarce and highly sought-after skills. The JSE needs a motivated, skilled and diverse workforce led by a strong executive team to support its business model, achieve its outputs and execute its strategy.	
current and future business model	As such, this provides us with the opportunity to implement training, coaching and mentoring programmes for all staff as we seek to invest in and retain world-class talent.	1
Evolving business models in	The nature of the local capital market brings about interdependency with key stakeholders and a concentration in clients, products and service providers. Further, changes in the regulatory environment, technology landscape, evolving clients' needs and expectations may necessitate a change in the JSE's future business model.	
-	It is thus important to maintain collaborative stakeholder relationships, including with market infrastructures (e.g. Strate), regulators and clients for an enhanced market infrastructure.	
capital market eco-system	The JSE continuously reviews its business model to find areas of opportunity to grow sustainability across the value chain and diversify revenue streams.	
	The fast changing regulatory environment impacts the way the JSE operates and how clients interact with the JSE. Regulations impacting the JSE have a related financial and opportunity cost.	
Regulatory and compliance environment	We aim to comply with all relevant laws and regulations that impact the Group. Our governance process is proactive in identifying and acting on legislative changes.	
	Regulation requires the JSE to provide settlement assurance for trades executed on the central order book, running the risk of having to settle large amounts in the event of default. To mitigate this risk, we perform daily monitoring of the risk taken by each member, the adequacy of each member's capital and ensure that the member's main business activity is that of securities broking. Furthermore, the JSE maintains sufficient capital on its own balance sheet to protect against a default event.	
	As do most companies, we face the risk of business disruptions and competition, which can have a negative effect on earnings.	
Potential disruptors	This requires the JSE to be conscientious regarding its offerings and seek opportunities that ensure that the services the JSE provides are of the highest quality possible.	
	We continue to evolve the JSE's business model to better serve the market and maintain the JSE's ongoing competitiveness.	

GOVERNANCE OF RISK

The JSE's enterprise risk management (ERM) programme and risk aware culture, enables the Group to respond to a dynamic business environment with significant regulatory change, drive business performance, innovation and growth, and protect and enhance value for our stakeholders.

RISK CULTURE AND KEY PRINCIPLES

The JSE seeks to embed a risk culture, where strategy, performance management and risk management are linked thus ensuring that risks and opportunities are effectively identified and managed appropriately according to the JSE Group risk appetite. The risk culture is actively promoted by the CEO and Executive Committee. The Executive Committee discusses the JSE risk profile on a monthly basis and more regularly as necessary. Focused risk initiatives and awareness programmes are in place to improve operational stability and operational resilience. Risk management is incorporated into performance measurements, with clear risk accountability.

GOVERNANCE OF RISK

The Board retains the ultimate responsibility for the oversight of risk. The Group Risk Management Committee (GRMC) assists the Board and:

- provides risk management oversight by monitoring the implementation of the JSE ERM framework;
- » drives corrective actions in instances where risks manifest as incidents; and
- » is responsible for the annual review of all risk-related policies, frameworks and roadmaps, to ensure alignment to the Board's stance on risk management.

The Executive Committee is accountable to the Board for implementing the agreed risk management principles and monitoring the process of ongoing risk management. The executive head of each business unit is accountable to ensure adherence to these principles and for integrating effective risk management practices into day-to-day operations in line with the Group's risk management framework and policies.

ERM framework	Defines the structure and methodology within which the JSE manages risks and is aligned with the ISO 31000 international risk management standard.
ERM policy	Governs the management of the full spectrum of risks faced by the JSE.

The ERM team provides oversight on strategic and operational risk management with specialised risk teams responsible for IT governance, information security, business continuity and financial risk management.

RISK REPORTING OVERSIGHT

Risk disclosure and oversight are fundamental components of risk management.



As at 31 December 2018, the JSE Board was satisfied that the Group's risk and opportunity management processes are generally operating effectively.

Risk appetite

Risk appetite is a measure and allocation of the amount of risk that the JSE is willing to accept in pursuit of its strategy.

The JSE will only tolerate risks that permit us to:

- » achieve our strategic business objectives;
- » comply with all applicable laws and regulations;
- » conduct our business in a safe and sound manner; and
- » protect and/or enhance our value.

Risk appetite statements

ntal	Capital positions	Sufficient eligible capital to cover regulatory and economic capital requirements, including a buffer to accommodate stress events.
	Financial	 Earnings before interest and tax (EBIT) will not be less than the threshold.
		 » Liquidity will be sufficient to cover a market participant default in cash equities and derivatives.
	Operational	Operational losses will be minimised to be within an expected target range.
2	Compliance and ethics	Comply with all regulatory requirements and operate in a responsible and ethical manner.

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KEY SUBSIDIARIES

Two of the JSE's wholly-owned subsidiaries involve risktaking activities:

- » Nautilus Managed Account Platform Proprietary Limited (Nautilus) is a licensed manager in terms of the Collective Investment Schemes Control Act and operates a managed account platform for a number of hedge fund clients. The main risks to which it is exposed are operational and regulatory compliance risks.
- » JSE Clear Proprietary Limited (JSE Clear) is a licenced clearing house in terms of the Financial Markets Act and is a CCP for trades executed on the JSE's derivatives markets. JSE Clear manages counterparty credit risk, operational risk and regulatory compliance risk.

The governance structures are similar to that of JSE: ultimate responsibility for the management of risk lies with the Boards of each organisation; and each has a risk committee that was established to assist their respective Boards. These Boards have executive and independent expert representation. The risk committees of JSE Clear and Nautilus are mandated to:

- » Annually review and assess the quality, integrity and effectiveness of risk management plans and systems and ensure that the risk policies and strategies are effectively managed and that risks taken are within the agreed tolerance and appetite levels.
- » Define their organisation's appetite or tolerance for risk, oversee the implementation of an effective ongoing process to identify and measure risks, and

to ensure that these risks are proactively managed. A framework and process to anticipate risks is also maintained via their respective risk management frameworks.

Both subsidiaries have reporting obligations to the JSE Board and the GRMC, allowing for appropriate Group oversight. Other Group Committees such as the Group Audit Committee fulfil these responsibilities on behalf of these subsidiaries.

Following a review of the strategic fit to the Group the Board decided to discontinue the Nautilus business within the Group. Refer to notes 6 and 13 in the 2018 Consolidated Annual Financial Statements.

REPORT OVERVIEV GROUP STRUCTUR JSE AT A GLANC GOVERNANCE SUPPORTING VALU CREATIOI

OUR VALUE CREATION CONTEXT

AN ENABLING VALUE CREATION STRATEGY THE RESULTS OF VALUE CREATION PROTECTING VALUE CREATION REWARDING VALUE CREATION APPENDICES

STAKEHOLDER ENGAGEMENT ⑤

The JSE is committed to developing and sustaining quality long-term relationships with all our key stakeholders and building trust and legitimacy through stakeholder engagement.

A wide range of stakeholders are influenced or impacted by our regulatory, commercial and other activities. A number of stakeholders also impact on the Group's ability to meet its strategic objectives and operational priorities. It is therefore critical to understand and be responsive to the circumstances and needs of our stakeholders.

Efficient engagement enables us to identify the issues and opportunities that affect our stakeholders and our business, while strengthening the transparency and accountability necessary to sustain valued relationships.

We actively manage engagement with seven interconnected stakeholder groups at various levels, all of whom play an important role in enabling us to create value, and share in the value that is created. Beyond these there are also other stakeholders such as the media, who enable transparency and information sharing, and who influence the flow of debate with other stakeholders in the public domain.

Our key stakeholder groups are:

» Clients

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- » Shareholders and financial analysts
- » Regulators and policy makers
- » Community
- » SA Inc
- » Suppliers
- » Employees

Material stakeholder needs and expectations

Our engagement focus areas for the year included keeping current clients engaged with the JSE and its products and services, and demystifying the role of a well-functioning exchange in an emerging economy to try to build an understanding of the JSE as a partner in the success of South Africa.

To achieve this:

- » various channels are employed to ensure the creation of an enabling environment within which constructive dialogue can take place, for instance, through focused client engagements;
- » the JSE participates in and initiates a wide range of forums and initiatives, such as SA Tomorrow and business-government interaction; and
- » advisory committees are used as a platform for stakeholders to discuss and influence JSE activity.

» Social Value Report



Engagement methods

- » AGMs
- » Integrated annual report and interim report
- » Direct interaction or one-on-one meetings
- » Notices distributed through SENS
- » JSE website
- » Roadshows, conferences Radio, TV and newspaper articles
- » Client relationship officers
- » Client forums
- » Advisory committees
- » Market notices
- » Service hotline
- » Press releases and social media
- » Whistle-blowers' hotline
- » Employee committees
- » Intranet for employees

OPERATING ENVIRONMENT

The JSE's business is impacted by the level of market activity. Market activity is influenced by economic performance, government policy and general financial market conditions globally and in South Africa.

2018 YEAR	AT A GLANCE	HOW THIS IMPACTED ACTIVITY IN OUR MARKET	REPORT OVERVIEW GROUP STRUCTURE JSE AT A GLANCE
	US trade policy and dollar strength put pressure on global	Primary market » Fewer IPOs although larger corporate actions » Depressed additional listing activity	GOVERNANCE SUPPORTING VALUE CREATION OUR VALUE CREATION CONTEXT AN ENABLING VALUE CREATION STRATEGY
	financial markets Uncertainty increased as global growth became less synchronised following slowdown from China and Eurozone	Equity transactions Muted value traded New liquidity providers resulted in greater number of trades 	THE RESULTS OF VALUE CREATION PROTECTING VALUE CREATION REWARDING VALUE CREATION APPENDICES
GLOBAL	Shifting market sentiment and contagion effects had a greater impact on emerging markets, affecting currencies and cash equities	 Equity derivatives market Main index continued to lose appeal as an effective hedge Open interest 17% lower Value of ALSI down 11% 	15
	UK continued to feel strain of unresolved Brexit negotiations	Bond market » Record nominal value traded » Foreigners net sellers of bonds	
	Intra-year technical recession, with SA ending the year lagging peers in emerging markets	Interest rate derivatives market Lower hedging activity resulted in flat year-on-year number of contracts traded 	
SOUTH	Foreigners were net sellers of equities and bonds	Current derivatives market Increased options activity due to uncertainty in the direction of currency movement 	
AFRICA	Low business confidence, fears of further ratings downgrade and uncertainty of policy on land reform	Commodity derivatives market » Record number of physical deliveries, bumper crop » Higher use of derivatives hedging at year-end	<u>ه</u>
	Raised lending rate due to increased inflation and weaker exchange rate		 Further reading » Operational performance page 25

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A STRATEGY THAT ENABLES VALUE CREATION

OUR 2022 STRATEGY

Our 2022 strategy is informed by our clients' needs, our assessment of the global macroeconomic context, broad financial market services as well as more specific market infrastructure trends and developments, and by the global competitive context. We continually seek inputs into this process from our stakeholders. Core to this is our aim to be a responsible corporate citizen and use our place in the financial ecosystem to build better markets across all asset classes. We aim for our process of value creation to contribute to the economy and society in a way that furthers the interests of sustainable development.

We operate in a dynamic and fast-moving industry, so strategic planning is an ongoing process. Our strategy development process is supported by the Group strategy team and developed by the JSE's leadership team. The Board has annual oversight of the JSE strategy and approves the direction taken. Various elements of its implementation are tabled at the Board's quarterly meetings. The key elements underpinning the 2022 strategy are as follows:

PUT OUR CLIENTS AT THE CENTRE OF WHAT WE DO

Align business initiatives to expedite those that provide the most value in order to enhance the customer experience.

OPERATE, TO GLOBAL STANDARDS, SOUTH AFRICA'S MOST TRUSTED, STABLE, ROBUST AND COMPETITIVE MARKET INFRASTRUCTURE

Move trading and clearing systems and information services platform to next generation by upgrading and refreshing the base technology.

GROW SUSTAINABLY ACROSS THE VALUE CHAIN

Build out the JSE's offering into new and under served parts of the value chain:

- » to preserve, grow and diversify financial performance; and
- » further enhance the customer experience.

INVEST IN AND RETAIN WORLD-CLASS TALENT

Nurture a world-class employee complement that is inspired, motivated and supported to deliver.

LEAD BY EXAMPLE ON THE NATIONAL AGENDA

Position the JSE as a champion of sustainable business in South Africa across our stakeholder base – ensure our performance builds better markets for all.



To be the best

global platform

in emerging

markets

MISSION:

We build better

markets and

co-create

for growth

YIT

The key performance indicator (KPI) deliverables in the 2018 corporate scorecard are intended to ensure that we will achieve our strategic vision and have been translated into the key elements underpinning our 2022 strategy.

CORPORATE SCORECARD PERFORMANCE SUMMARY

JSE LIMITED INTEGRATED ANNUAL REPORT 2018

1	PILLAR 1 2018 objectives	Put our clients at the centre of what we do Performance	3	PILLAR 3 2018 objectives	Grow sustainably across the value chain Performance	REPORT OVERVIEW GROUP STRUCTURE JSE AT A GLANCE GOVERNANCE SUPPORTING VALUE CREATION OUR VALUE CREATION CONTEXT
	Halve priority 1 incidents related to people or process failures	 Above target A decrease in combined business and priority 1 incidents reported Impact of priority 1 incidents also significantly lower 		Launch two new products on ITaC platform	 Delayed as ITaC dependent > Launched several other new products that are not ITaC dependent > Refer to CEO's strategic review 	AN ENABLING VALUE CREATION STRATEGY THE RESULTS OF VALUE CREATION PROTECTING VALUE CREATION REWARDING VALUE CREATION
	Demonstrate trend of reducing fees	On-target » Tiered billing model for the Equities Market went live on 30 July 2018		Deliver financial performance in line with Board-approved annual Group budget	Above target » Refer to CFO's financial review	APPENDICES
2) PILLAR 2	Operate, to global standards, South Africa's most trusted, stable, robust an competitive market infrastructure	4) PILLAR 4	Invest in and retain world class talent	17
\smile	2018 objectives	Performance	\sim	2018 objectives	Performance	
	Complete ITaC project 1b and 1c	Below target » Significant progress has been made and go-live scheduled for 8 April 2019		Employee engagement survey	On-target » Refer to Human Capital Overview	
	Implement Bond ETP	On-target » Bond ETP for Government Bonds launched in August 2018		Launch the JSE Way, our values refresh and leadership brand	On-target » Refer to our Social Value Report	
	Address ITaC critical project 1 spill over and progress planning of transition of at least interest rate spot and derivative products to ITaC	 Delayed as ITaC dependent » Initial work on identifying, prioritising and sequencing ITaC remaining items has been completed for the transition of interest rate spot and derivative products 	(5	Employee retention plan approved and implemented PILLAR 5	On-target » Refer to Human Capital Overview Lead by example on the national agenda	
	IT infrastructure refresh and business-as-usual (including RTC and MilleniumIT)	 Delayed as ITaC dependent >> Upgraded MilleniumIT infrastructure environment >> Software upgrade to be implemented after ITaC go-live 		2018 objectives Demonstrate visible, JSE-wide commitment to transformation and achieve level 3 B-BBEE status	Performance On-target » Achieved level 3 BBBEE status » Refer to page 30, Transformation Outcomes	

THE RESULTS OF VALUE CREATION CEO'S STRATEGIC REVIEW

In a year with its share of macroeconomic challenges, we are pleased to report Group earnings growth of 8%, a growth rate in excess of CPI and reflecting a better year for the JSE than 2017. In doing this, the JSE has shown that, even in difficult times, we can continue to: serve our clients well; stay relevant and competitive; create sustainable value; and reward our shareholders.

A detailed explanation of the Group's financial performance is contained in the CFO's financial review report (page 21).

OVERVIEW OF 2018

The excitement generated by the possibility of a new dawn for the country in the first quarter settled into the more sombre reality that building momentum towards inclusive growth requires policy clarity and political alignment – both of which were in short supply. As a result of that national narrative, compounded by a generally risk off position to emerging markets globally, the value and volume traded in most of our markets has been inconsistent, affecting the performance of our asset classes.

At an SA Inc. level we are very alive to our responsibilities as a corporate citizen and committed to being a constructive part of this country. To this end, the work we do, whether on SA Tomorrow, with Business Leadership South Africa, on non-deal roadshows with the National Treasury, or with rating agencies, the Presidency and other ministries, remains a privilege.

Overall, I am proud of our performance this year, a reflection of calm heads and resilient delivery across a range of areas in a demanding year.

Nicky Newton-King Chief Executive Officer

Together with Standard Bank, Old Mutual and UBS, we hosted the 6th annual SA Tomorrow conference in New York on 1 and 2 November 2018. It was well received, with 19 companies (including Eskom and Transnet) and nearly 100 US investor companies (30% up from 2017) attending. We had very good high-level Team SA attendance, with the Governor and Deputy Governor of the Reserve Bank, the Minister of Finance and the Minister of Public Enterprises, as well as two investment envoys, speaking. As one might expect, investors were happier than in 2017 but, I would say, are still to be convinced that the government will, in fact, be able to keep a lid on fiscal commitments or accelerate growth, given the looming elections.

We continue to work hard with key Minsters, regulators and clients to position South Africa to local and foreign investors and ratings agencies. We expect that the pending elections will make some of these engagements more pointed than usual, but, that is exactly when the voices of committed South Africans need to be heard.

The noise around corporate scandals

The South African financial markets have, over the past year, been shaken by a range of corporate scandals, rumours and innuendo. These have led to questions about how certain alleged activities were able to occur, whether regulators such as the JSE could have taken action to prevent certain activities, and whether those events have highlighted any regulatory provisions that might need to change.

In response to this, we released a consultation paper in September 2018 suggesting a broad range of possibilities for improving the regulatory environment related to listed companies. Our consultation was very well received and, after considering those responses, our Issuer Regulation Division is now preparing formal proposed changes to a number of our Listings Requirements. Although no amount of regulation will prevent misconduct by those intent on avoiding regulatory scrutiny, we should not forget the critical role to be played by a broad range of guardians of governance (from boards of directors to analysts, from pension fund trustees to auditors) in ensuring that the right questions are asked of management and the right disclosures made to the market timeously.

The investigations into possible market conduct discuss breaches continue and we await the outcome of FSCA's range of processes in this regard.

The governance of SOEs is attracting much-needed attention. In September, we published for consultation what is probably our most wide-ranging set of changes to the Debt Listings Requirements. These will require significant changes to how SOEs operate, from the constitution of their Boards to stringent corporate governance requirements. We expect considerable debate around the disclosure requirements, which were developed in very close cooperation with the National Treasury.

Competition

While we have done well in retaining over 99.9% of the market share in counters dual-listed on the JSE and on other SA exchanges, we expect the competitive attention to continue. Our approach remains to ensure that we deliver products and services that our clients want at a price that continues to offer them value.

Our competitors continue to work hard to try to attract trading activity and we remain as vigilant as ever about our cost base. The importance of investing in the way we do things (known internally as the JSE Way) so that we are better able to prioritise our clients and change the speed at which we are able to respond to our changing environment, is a critical focus for us in 2019.

Building better markets

As we deliver, we are focused on building better markets. In 2018, we were pleased to be able to launch the Government Bonds ETP after extensive collaboration with National Treasury and the Primary Dealers. The benefits of the price transparency enabled by that platform can be seen in the increased use of it and, in discussions with clients, the opportunity to expand the range of products and participants on the platform.

We are in the final stages of the ITaC delivery with golive scheduled for 8 April 2019. This will enable us to provide a robust trading and clearing environment for our equity derivatives and currency markets with enhanced and more flexible risk management methodologies enabling our clients to use their capital more effectively.

We have also made significant strides in addressing our operational stability with performance across the exchange significantly better in this regard than in 2017.

ESG leadership

We continue to enjoy global recognition as a thought leader in environmental, social and governance (ESG) matters, most recently at the World Federation of Exchanges AGM. The JSE was represented on the key panel at the Sustainable Stock Exchanges (SSE) Initiative's 10th anniversary in Geneva at the end of October and the JSE (together with four other exchanges) received the SSE Ground Breaker Award for thought leadership in this space.

OUR CLIENT CENTRIC APPROACH

We endeavour to operate our markets such that the benefit of tight cost control and increased efficiencies in processes and technology are able to be shared between clients, shareholders and the business. With this in mind, the tiered billing model for the Equities Market went live on 30 July 2018. This resulted in an aggregate discount to clients of approximately R21 million (12%).

The Bond ETP will also result in a significant reduction in the overall cost of trading for the trades that are booked on the ETP, as the fees charged by the inter-dealer brokers will be removed.

Servicing our clients and treating our customers fairly, in a manner that prioritises what the clients need and which results in clients recognising the value of the service they receive from the JSE, is important. We have placed strong emphasis on what we mean by "put our clients at the centre of what we do" through a number of broad-based JSE-wide initiatives.

OUR BROAD-BASED TRANSFORMATION

We are pleased to have reached our target level 3 BBBEE status for 2018.

Management's focus has been on:

- » strong recruitment disciplines resulting in 90% of all hires being from previously disadvantaged background;
- » the introduction of a new learnership programme for people with disabilities;
- » the absorption of 100% of learners from the 2017 learnership programme;
- » the amendment of our procurement policy to embed preferential procurement practices that take into account the BBBEE levels of potential suppliers; and
- » the launch of our supplier development initiative that focuses on the development of SMEs. This programme helps SMEs to expand their customer base, increase their turnover and profitability and scale their operations to be more sustainable.

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With this firm foundation, we are now engaged in strategic target-setting up to 2022 and beyond, with clear direction and support from management and leadership. This ensures that the delivery of BBBEE transformation is well-entrenched and integrated into individual business strategies.

OUR STRATEGY

Our 2022 strategy articulates our vision which is to be the best global platform in emerging markets. The key elements underpinning our 2022 strategy are to:

- » put our clients at the centre of what we do;
- » operate, to global standards, South Africa's most trusted, stable, robust and competitive market infrastructure;
- » grow sustainably across the value chain;
- » invest in and retain world-class talent; and
- » lead by example on the national agenda.

Our 2022 strategy will continue to drive performance and shape our future. We are clear about our 2019 priorities and hence the issues that we need to focus on in order to improve our operational resilience and to achieve our 2022 strategy and to grow this business sustainably.

OUR FUTURE FOCUS

In any year, an organisation needs to choose between compelling, but often competing, initiatives. This is even more so when resources are limited, as they are in the case of the JSE. After a strategic review of its fit to the Group, we decided to wind up our hedge fund platforms. Refer to the CFO's financial review on page 21. Our tactical and strategic choices for 2019 commit us to the delivery of ITaC by 8 April 2019 and recognise that this gives us the opportunity to lift our heads and direct more of our corporate resources to new and innovative initiatives and blue sky thinking that both strengthen our operating platform and enable us to grow in the manner anticipated in our 2022 vision.

Our ability to operate our markets to the level we expect is dependent on us having the right technical hardware and software. This, of course, means the JSE needs to continuously make those investments, even while building new functionality. We upgraded the key MilleniumIT infrastructure environment and start the installation of the new MilleniumIT software on that environment after the ITaC go-live.

Other infrastructure refreshes for the network, uninterruptible power supply batteries and business-asusual environment are planned for 2019 and 2020.

Our focus for 2019 will be to:

- » implement our ITaC project 1b and 1c on 8 April 2019;
- » deliver meaningful new operating revenue through business lines not currently a substantial part of the JSE income;
- embed an agile, client-led culture embodied in the JSE Way;
- maintain strong cost controls and deliver on committed cost savings of R170 million by end-2019; and
- » lead by example on the national agenda and pursue the visible transformation of the business.

APPRECIATION

2018 was a demanding year for the JSE. As we tackle 2019, I would like to thank all my colleagues at the JSE for their energy, resilience and dedication. I look forward to the next stage of our journey as we embed the agile, client-led culture, embodied in the JSE Way.

My thanks also to all our stakeholders for their interaction with the JSE team. We look forward to continuing our collaboration in the year ahead.

Finally, I am deeply indebted to our Chairman and to our Board for their robust engagement during the year which has enabled us to raise our game as we deliver on our strategic vision. It is truly a privilege to lead this special institution.

Further reading

» Refer to our Social Value Report

CFO'S FINANCIAL REVIEW

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JSE LIMITED INTEGRATED ANNUAL REPORT 2018

Our growth in earnings in a subdued operating environment demonstrates the resilience of our business model and reflects the outcomes of deliberate management action to address the JSE's structural cost base.



FINANCIAL OVERVIEW

In a year that was not without its macroeconomic challenges, we are pleased to report Group earnings growth of 8% to R904 million (compared to a 9% decline in 2017 to R836 million). These results demonstrate the resilience of our multi-asset class business model, achieving a 1% increase in revenue to R2.28 billion (compared to a 5% decline in 2017 to R2.27 billion) and a 1% contraction in operating costs to R1.35 billion (compared to a 4% contraction in 2017 to R1.36 billion).

REVENUE

The year was characterised by interquarter disparity in market activity which impacted most of our asset classes in the following ways:

Primary markets

 Revenue declined by 15% to R155 million (2017: R181 million) due to significantly lower additional capital raising activity. Although the number of IPOs for the year was lower (with 12 IPOs versus the 21 IPOs in 2017) the capital raised was higher.

Aarti Takoordeen Chief Financial Officer

FINANCIAL PERFORMANCE – SUMMARISED CONSOLIDATED INCOME STATEMENT

(Rm)	2018	2017*
Continuing operations Revenue Other income	2 199 82	2 215 52
Total revenue	2 281	2 268
Personnel expenses Other expenses	(506) (843)	(544) (815)
Total expenses	(1 349)	(1 359)
EBIT EBIT (%) Net finance income Share of profit from associate (net of income tax)	932 41 239 56	909 40 233 35
Profit before income tax Income tax expense	1 228 (323)	1 176 (316)
Profit for the year from continuing operations Loss after tax for the year from discontinued operations	904 (1)	860 (24)
NPAT	904	836
NPAT (%)	40	37
EPS (cents)	1 056.5	1 006.0
HEPS (cents)	1 056.2	996.5

* Restatement of comparative figures

Following a review of the strategic fit to the Group, the Board decided to discontinue the Nautilus business within the Group. Refer to note 6 and 13 in the Consolidated Annual Financial Statements.

Further reading

- » This review focuses on the key line items from the financial statements, which management considers material to the Group's performance.
- » This review should be read in conjunction with the audited Consolidated Annual Financial Statements available online at ir.jse.co.za/results/annual-reports.

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CFO'S STRATEGIC REVIEW continued

Capital markets

- » Equity Market revenue was 2% lower at R499 million (2017: R507 million). This follows flat billable value traded for the full year although central order book activity improved in the last quarter following an increase in colocation service activity. Colocation activity contributed 37% to value traded (2017: 31%). The implementation of the tiered billing model resulted in an aggregate discount to clients of approximately R21 million or 12% year-on-year.
- » As the main index continued to lose appeal as an effective hedge in current market conditions, Equity Derivatives value traded declined by 3%. Coupled with the 11% decline in the value of the main index Equity Derivatives revenue declined by 16% to R143 million (2017: R170 million).
- » Currency Derivatives Market revenue was flat at R48 million (2017: R48 million) and can be attributed to a 9% increase in the number of contracts traded, offset by a dilution in the effective price.
- » Record physical deliveries contributed to a 15% increase in Commodity Derivatives revenue to R78 million (2017: R68 million).
- » Interest Rate Market revenue grew 12% to R56 million (2017: R50 million) as bond nominal value reached a record high, up 11% on the back of global uncertainty and foreign sales of emerging market assets. However, expectation of lower volatility in the local interest rate market decreased trading of Interest Rate Derivative contracts, with total contracts traded flat year-on-year. Revenue from the Bond ETP contributed R3 million.

Post-trade services

- » BDA revenue increased by 3% to R303 million (2017: R293 million) following a similar increase in the number of transactions. This reflects smaller transaction sizes.
- » Clearing and Settlement revenue increased by 5% to R404 million (2017: R384 million), benefiting from increased central order book activity and smaller transaction sizes.

Information services

» Revenue remained almost flat at R267 million (2017: R272 million). Normalised for a prior year overstatement, revenue increased in Market Data and Indices by 5% and 8% respectively.

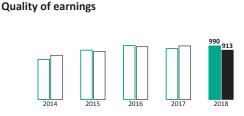
Other income

» Increased to R82 million (2017: R52 million). Revenue growth was positively impacted by a forex gain of R26 million (2017: R9 million forex loss) on foreign denominated assets. The JSE holds USD12 million in cash (2017: USD8 million).

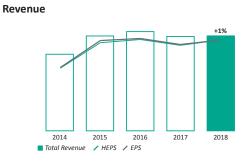
OPERATING EXPENDITURE

The JSE continued its strong control of costs. As such, our operating costs decreased for the second consecutive year to R1.35 billion (2017: R1.36 billion):

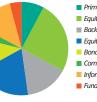
- » Personnel costs are 7% lower at R506 million (2017: R544 million) due to reduced headcount;
- » Technology cost are 5% lower at R241 million (2017: R253 million) as a result of cost optimisation initiatives on software licences, and hardware maintenance and support;
- » Depreciation was almost flat at R110 million (2017: R109 million). This can be attributed to the annualised impact of project functionality that has been implemented offset by fully depreciated assets; and







2018 Revenue as a % of total



Primary Markets: 8% (2017: 9%)
 Equity Market: 25% (2017: 25%)
 Back-Office Services (BDA): 15% (2017: 14%)
 Equity Clearing and Settlement: 19% (2017: 18%)
 Bonds and Financial Derivatives: 12% (2017: 13%)
 Commodity Derivatives: 4% (2017: 3%)
 Information Services: 13% (2017: 14%)
 Funds under management: 4% (2017: 4%)

» General expenses increased 9% to R492 million (2017: R452 million) as corporate resources were prioritised towards strengthening operational resilience and revenue enhancing initiatives.

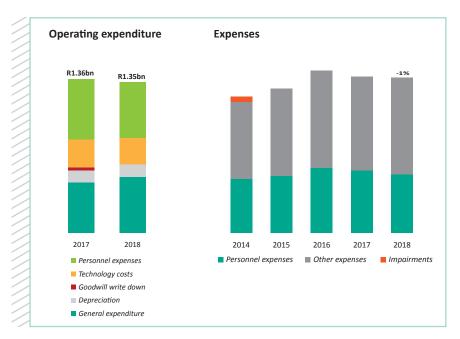
The overall reduction in the cost base allowed the JSE to absorb the impact of the tiered billing model.

Group earnings before interest and tax (EBIT) improved by 3% to R932 million (2017: R909 million).

Group earnings after tax increased by 8%, bolstered by:

- » the effective tax rate declining to 26% (2017: 27%) with the inclusion of a prior year tax credit of R26 million;
- » a higher share of profit received from associate (Strate) of R56 million (2017: R35 million), as a result of their revenue growth and the absence of prior year one-off costs; and
- » a lower loss from the discontinued operation at R1 million (2017: R24 million).

Basic earnings per share (EPS) and headline earnings per share (HEPS) for continuing operations increased by 5% and 6%, respectively, to 1 056.5 cents and 1 056.2 cents.



ROBUST BALANCE SHEET

Material line items from our Group balance sheet are reflected below with summary explanations of the key figures.

SUMMARISED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Rm)	2018	2017
Assets Non-current assets	1 403	1 316
Property and equipment Intangible assets Other investments Investment in associate Other non-current assets	220 518 303 270 92	187 487 316 233 93
Current assets	40 522	37 372
Margin deposits JSE Clear Derivatives Default Fund deposit Trade and other receivables Cash and cash equivalents Other current assets	36 767 500 490 2 574 191	33 934 500 495 2 377 66
Total assets	41 925	38 688
Equity and liabilities Total equity	3 968	3 626
Stated capital Reserves Retained earnings	(18) 512 3 475	12 513 3 101
Non-current liabilities Current liabilities	133 37 824	139 34 922
Margin deposits JSE Clear Derivatives Default Fund contribution Other current liabilities	36 767 400 657	33 934 400 588
Total equity and liabilities	41 925	38 688

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» Refer to page 25 to 28 for further information on operational performance.

CHIEF FINANCIAL OFFICER'S REVIEW continued

Equity

Overall equity continues to grow from profits generated from continuing operations less dividends paid and the net impact of share-based transactions related to our long-term incentive scheme.

Return on equity (ROE)

ROE is a key measure of financial performance as it combines all our critical drivers, including earnings growth and capital utilisation, into a single metric. Our medium-term target ROE range is 16% to 25%. We have exceeded the top-end of this range with an average ROE of 26% over the past four years.

Fixed assets

Our business is heavily reliant on human capital and technology rather than a large asset base.

We reduced capital expenditure to R174 million (2017: R187 million). However, we were able to harness additional capacity within business, as the ITaC project reached the final stages (with go-live planned for 8 April 2019), allowing us to accelerate business-as-usual expenditure to enable faster delivery of strategic growth initiatives.

All currently planned investments and 2019 capital requirements can be funded from the Group's own resources.

STRONGLY CASH GENERATIVE

The Group continues to be highly cash generative with net cash from operations of R913 million (2017: R977 million). Cash and cash equivalents on hand at 31 December was R2.6 billion (2017: R2.4 billion).

ORDINARY AND SPECIAL DIVIDEND DECLARED

The Board has declared an ordinary and a special cash dividend for the year ended 31 December 2018:

- » Ordinary dividend of 655 cents per share (2017: 605 cents).
- » Special dividend of 185 cents per share (2017: Nil).

This is consistent with our dividend philosophy in terms of which we aim to grow nominal value of the ordinary dividend. In addition, now that the quantum of the capital requirements per the Financial Markets Act has been established and are in effect, surplus cash can be released.

We distribute surplus cash after accounting for our capital and investment requirements.

Our business remains well capitalised, and we continue to meet the regulatory capital requirements for a licensed market infrastructure.

OUR FUTURE FOCUS

Our 2022 strategy will continue to drive performance and shape our future. The JSE is a largely fixed-cost business. Therefore we will maintain our focus on costs, while making the necessary capital investments in areas that will enhance the Group's sustainability and diversify revenue.

Our revenues are variable and largely driven by activity on the various markets that we operate. For this reason, we make no projections regarding the Group's financial performance in 2019.



AUDIT MATTERS

We changed external auditors in 2017 in line with our audit rotation policy. The 2018 audit review process with Ernst & Young Inc was robust and thorough and their unmodified audit opinion is available for inspection at the JSE's registered office.

APPRECIATION

I thank my colleagues on the Board and the executive team for their wise counsel and leadership during this challenging year. I'm also grateful for the dedication and hard work of the finance team.

Finally, I thank you, our shareholders, for your interest and your investment in our Group.

OPERATIONAL PERFORMANCE

The JSE's drive to build a resilient and sustainable business has many elements. This section focuses on the revenue elements in the business. This is therefore not a complete operating view; more detail on JSE initiatives can be found throughout the integrated report and in the CEO's strategic review.

CAPITAL MARKETS

How money is made	2018 Highlights		
Primary Market Fees for new issuances, annual listing fees for existing issuers, and documentation fees for dealing with specific corporate actions that companies undertake	 Revenue decreased by 15% to R155 million (2017: R181 million) 12 new company listings, 12 new ETFs, 12 new ETNs, 236 new warrants and structured products (2017: 21 listings; 15 ETFs; 2 ETN; 253 warrants and structured products). There were 16 delistings (2017: 32) 1 REITs and 2 fast-track listings (2017: 2 REITs, 2 SPAC and 2 fast-track listings) 1 new listing on AltX (2017: 8) 539 new bonds issued (2017: 629), the total nominal value of listed bonds was R2.7 trillion (2017: R2.9 trillion) launched listed project bonds listed Growthpoint Green Bond 	TOTAL REVENUE 8% (2017: 9%)	Capital markets revenue (R million)
 Equity Market The tiered billing model was implemented effective from 30 July 2018. The billing model is configured such that trading fees are charged for value traded on a tiered basis: six tiers with a trade cap of R400 for central order book trades complex order suite: 0.53 bps with a R3 000 cap Rental charged for colocation racks, with specific corporate actions that companies undertake 	 » Revenue decreased by 2% to R499 million (2017: R507 million) » Billable value traded flat, at R6.7 trillion » The number of transactions year-on-year increased by 3% to 70 million (2017: 68 million) » Colocation activity contributed 37% (2017: 31%) of overall value traded » Expanded colocation offering with 9 new racks. This brings us to 32 racks in total (2017: 23) 	TOTAL REVENUE 25% (2017: 25%)	166 116 101 162 2016 2017 2017 2 Bonds Equity capital 2017 2 Billable value traded (trillion) 6,7 6,7 6,7

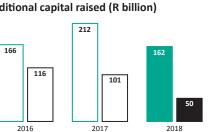
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OPERATIONAL PERFORMANCE continued

How money is made	2018 Highlights		
Bonds and Financial	Division	Equity derivatives value traded (trillio	on)
Derivatives Market » Revenue is generated through a	 Total divisional revenue decreased by 7% to R261 million (2017: R281 million) 	6,9 6,2	5,9
range of fee models based either on the contracts traded, the	Equity Derivatives Market		
market value of transactions or	» Revenue decreased by 16% to R143 million (2017: R170 million)		
the value of the applicable index	» Value traded decreased by 3% to R5.9 trillion (2017: R6.2 trillion)		
 In order to promote on-screen trading, the fee associated with 	» The number of contracts traded decreased by 64% to 113 million (2017: 312 million)	2016 2017	2018
on-screen trading is normally	Currency Derivatives Market		
lower than that for reported	» Revenue flat to R48 million (2017: R48 million)	Represents	
trades	 The number of contracts traded increased by 18% to R1.116 trillion (2017: R947 billion) 	12% of total Currency derivatives value traded (tr	illion)
	» Value traded increased by 9% to R74.2 million (2017: R67.3 million)	Group	74,2
	Bond and Interest Rate Market	revenue ^{67,3}	
	» Revenue increased by 11% to R70 million (2017: R63 million)	46,2	
	 Bond Market volumes increased to a nominal value of R31 trillion (2017: R28 trillion) 		
	» The number of interest rate derivatives contracts traded decreased by 0.3% to 12.2 million (2017: 12.3 million)		
	» Open interest in the Interest Rate Derivatives Market as at 31 December 2018 decreased by 13% to (969 thousand) contracts from (1.119 million) contracts during the same period in 2017	2016 2017	2018
	» Bond ETP went live in August 2018 and traded R192 billion		1/5
		Commodity derivatives contracts trade	
Commodity Derivatives Market » A fee per contract traded, based	» Revenue increased by 15% to R78 million (2017: R68 million)	3,4 3,0	4
on the underlying instrument	» Value traded increased by 19% to R678 billion (2017: R569 billion)		
 A fee per ton of grain physically delivered 	 The number of contracts traded increased by 14% to 3.4 million (2017: 3 million) 	Represents 4% of total Group	
			10
		revenue 2016 2017 2017)18

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POST-TRADE SERVICES

How money is made

- » Risk management revenue reflects only the value-based Equity Market clearing and settlement fees, which were set at a 0.0036% value-based charge, with a maximum fee per transaction leg of R162.47, for 2018
- » Although the division manages the clearing of derivative transactions, the JSE does not bill separately for this service. Trading and clearing of derivative transactions are billed using a per contract fee, which is accounted for in the Capital Markets division. A risk management fee is derived based on the margin collected for derivatives transaction and is calculated as a percentage of the interest earned upon the investment of the margin
- » Revenues for back-office services are somewhat linked to the number of equity transactions that take place on the Cash Equity Market. BDA fees are mostly charged on a per BDA transaction basis, with connectivity, subscription and dissemination fees being charged differently

2018 Highlights

Equity Clearing and Settlement

- » Revenue increased by 5% to R404 million (2017: R384 million)
- » Reflects only Equity Market clearing fees
- » Percentage of total revenue (excluding Strate ad valorem fees): 19%

Back-Office Services (BDA)

- » Revenue increased by 3% to R303 million (2017: R292million)
- » Percentage of total revenue (excluding Strate ad valorem fees): 15%
- » Trades increased by 3% to 70 million (2017: 68 million)

Represents 19% of total

Group

revenue

Represents

15%

of total

Group

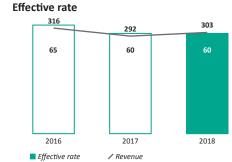
revenue



Back-office Services

Clearing and settlement

Effective rate



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OPERATIONAL PERFORMANCE continued

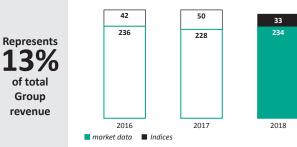
INFORMATION SERVICES

How money is made

2018 Highlights

- » Revenue is generated by selling data products across all of the JSE's markets and licensing the distribution and use of these data products. Licensing fees include end user terminal fees, nondisplay use fees and fees for passively tracking products on indices
- » Revenue decreased by 2% to R267 million (2017: R272 million). Revenue was impacted by a 2017 overstatement, with a resultant 2018 understatement. Allowing for the adjustment, adjusted revenue increased 5% to R277 million (2017: R262 million)
 » 27 new clients have signed up for Market Data products (11 local discussion)
- clients and 16 international clients)
- » Forex impact negligible across full year
- » Net new passive tracking products increased to 8 products
- Passive assets under management fell by 17% to R512 billion (2017: R604 billion)

Information services



HUMAN CAPITAL OVERVIEW

The JSE is a specialised organisation. It requires talent that is diverse, motivated and has deep knowledge and expertise in financial markets, technology, governance, risk and trading in financial products. We have positioned our employee value proposition to attract, invest in and retain the necessary top talent to help us execute our business strategy and deliver a world-class market.

MANAGING OUR PEOPLE

Our people's progress relies on the JSE taking a long-term strategic, integrated approach to talent management to meet future business challenges and by focusing on:

- » Training and development
- » Agile talent management practices
- » Driving change
- » Engagement
- » Retention plans
- » Transformation in the workplace

Permanent employees	369 Total permanent employees (2017: 358)	51% Female (2017: 50%)	70% ACI (<i>2017: 69%</i>)	0.002% Employee with a disability (2017: 0.002%)
	3 Fixed-term contract employees <i>(2017: 6)</i>	49% Male (2017: 50%)	30% White (2017: 31%)	
	14.7% employee turnover (2017: 29.56%)	The average age of JSE employees is 39 (<i>2017: 39</i>)	No fines, accidents or other health and safety incidents reported (2017: Nil)	
			The average length of service across all categories is $f 8$ years (2017: 8)	
Learners	17 Learners (2017: 28) and	71% Female (2017: 82%)	100% African (2017: 100%)	100% External learners (2017: 100%)
	21 People with disabilities	29% Male (2017: 18%)		
	Skills and development spend R5.4 million (2017: R5.3 million)		1 711 training days (2017: 1 034) at an average of 1.2 days per employee trained <i>(2017: 1.2)</i>	

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Our transformation strategy reflects an integrated approach to transformation across our business, is value adding and empowers our stakeholders.

TRANSFORMATION OUTCOMES

At the JSE we start from within, becoming demographically representative in terms of knowledge, skills, experience, race, gender and disabilities thereby creating a diverse workforce from different cultures, backgrounds, skills and communities.

COMMITMENT STATEMENT

The Board, executive management and senior employees of the JSE:

- » recognise and understand that transformation is a moral and strategic business imperative;
- » embrace the challenge of being a progressive and transformed organisation;
- » value equity, fairness and diversity; and are
- » active participants in the journey to drive the appropriate mindset and behaviour.

The Board believes that this mindset will ensure that the JSE's transformation efforts are focused on areas that will broaden the talent pool, develop people, improve stakeholder relationships, improve enterprise and supplier development, and support procurement initiatives.

OUR PROGRESS

We are measured under the revised Financial Services Charter (RFSC) and are a level 3 (2017: level 4), reaching our 2018 target.



PROTECTING VALUE CREATION

COMMITMENT TO GOVERNANCE

The JSE Board regards corporate governance as fundamental in achieving the JSE's mission, its financial and nonfinancial objectives, fulfilling its corporate responsibilities and meeting stakeholder expectations. Robust corporate governance underpins the delivery of sustainable value for stakeholders.

GOVERNANCE FRAMEWORK

Our governance arrangements actively contribute to creating an ethical culture and effective control environment within the Group, and translate into good performance and legitimate outcomes.

The JSE's governance practices and reporting are informed by a range of local and international requirements, standards and guidance, including, but not limited to:

- » Companies Act;
- » Listings Requirements; and
- » King IV.

The Board is ultimately responsible for the JSE's adherence to sound corporate governance practices, the highest standards of ethics and to operate in a transparent manner. This is done by instilling the appropriate culture, values and behaviours in the boardroom and beyond. The Board further ensures that clear strategic direction and appropriate management structures are in place to ensure the JSE's long-term sustainability.

The Board leads the Group by directing its strategy in the interests of long-term sustainability and engage responsibly with investors and other key stakeholders.

All directors are expected to take decisions objectively in the interests of the Group and act in good faith to promote the JSE's success. The Board, as a whole, is collectively responsible for the sustainability of the JSE. The Board is satisfied that it has fulfilled its responsibilities as set out in the Board charter. We are confident that the Board and its respective committees discharged their fiduciary duties, acted in good faith, with due diligence and care, and in the best interests of the JSE and all its stakeholders.

The JSE endorses the holistic approach to corporate governance and the mindful application of the principles contained in King IV. The Board has satisfied itself that the JSE has complied with these principles in all material respects throughout the year.

This integrated annual report details the practices implemented and progress made towards achieving the following governance outcomes:

- » ethical foundation and culture;
- » adequate and effective board;
- » continued effectiveness and performance;
- » sustainable value creation and performance; and
- » trust and legitimacy through stakeholder engagement.

A checklist providing a broad summary of how the King IV principles have been applied is available online at ir.jse.co.za/results/annual-reports.

The Board has a number of standing committees to facilitate efficient decision-making and to assist in the execution of the Board's duties, powers and authority. We have structured our Board committees to address our organisational requirements. Specifically, we have aimed to ensure that the roles, mandates and committee composition allows for shared responsibilities, dispersed influence and balanced perspectives on the strategic matters facing the Board.

These committees oversee the following broad strategic areas within the JSE, such as audit and finance; risk; remuneration; sustainability and ethics; execution of the JSE's regulatory mandate; and Board renewal and related matters.

Each Board committee operates in accordance with its written terms of reference, which are reviewed annually by each committee and the Board. Although the Board delegates relevant responsibilities to each committee, it remains ultimately accountable for the work and decisions of the committees. The chairman and members of each standing committee are nominated by the Board with each committee comprising at least three non-executive directors.

Each committee confirmed that it has executed its responsibilities in accordance with its terms of reference.

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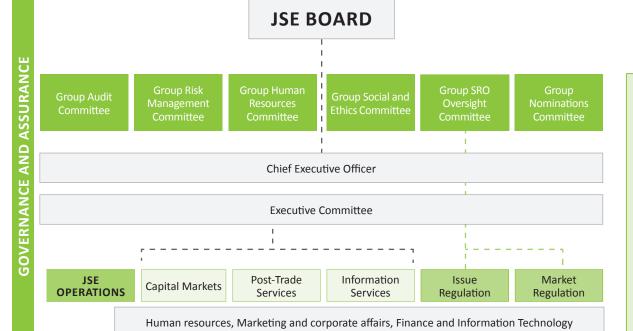


DELEGATION AND GOVERNANCE STRUCTURES

The Board is satisfied that the composition of the committees of the Board and the arrangements of delegation within its own structures promote independent judgement and assist with the balance of power and effective discharge of its duties.

In discharging its responsibilities, the Board is empowered to delegate to management. As such, the Board is supported by senior management, together with various Board committees and other governance forums and advisory committees.

Governance structures and processes are formally reviewed annually and adopted where appropriate to accommodate internal developments and market best practice.



The Board is responsible for risk management and is the custodian of corporate governance in the Group.

The Board:

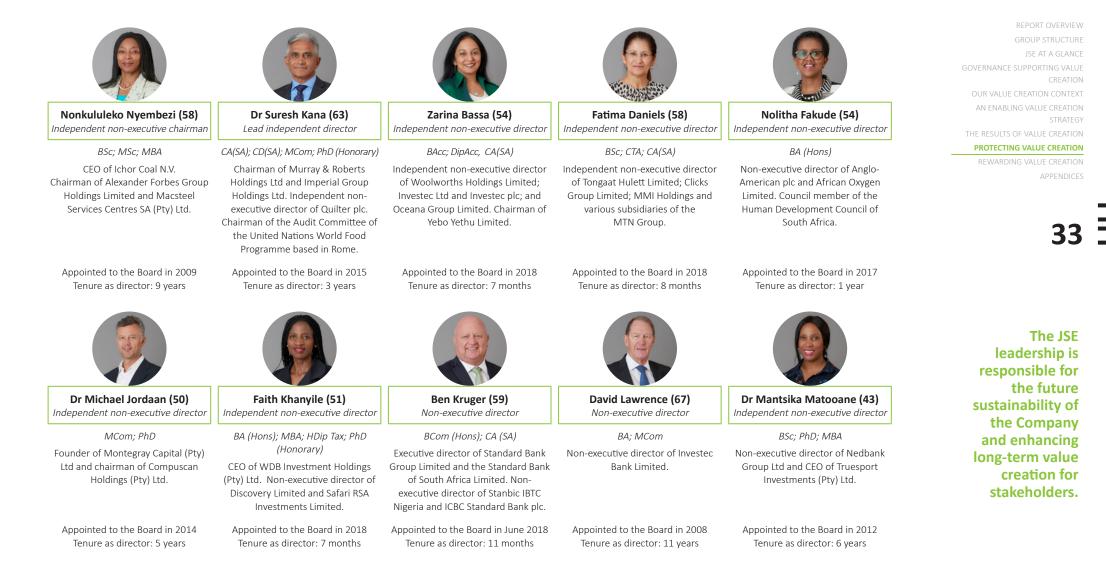
- » Leads the JSE's governance policies and practices to ensure an ethical Group culture, good performance, effective control and legitimacy
- » Provides strategic direction to the JSE and monitors its financial and operating performance
- » Manages relationships with executive management, shareholders and other stakeholders
- » Devotes sufficient time to strategy deliberations. With a deep drive every May during a special strategy session outside of the normal meeting schedule

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JSE LIMITED

OUR LEADERSHIP TEAMS

NON-EXECUTIVE DIRECTORS



EXECUTIVE DIRECTORS

ALTERNATE DIRECTOR

GROUP COMPANY SECRETARY



NON-EXECUTIVE DIRECTORS RETIRED OR RESIGNED DURING THE YEAR

Anton Botha (65)

Lead independent non-executive director BCom (Hons); BProc;

Appointed to the Board in 2005 Tenure as director: 13 years Retired: 17 May 2018 Andile Mazwai (47) Independent non-executive director BCom (Hons) Appointed to the Board in 2005 Tenure as director: 13 years Retired: 17 May 2018

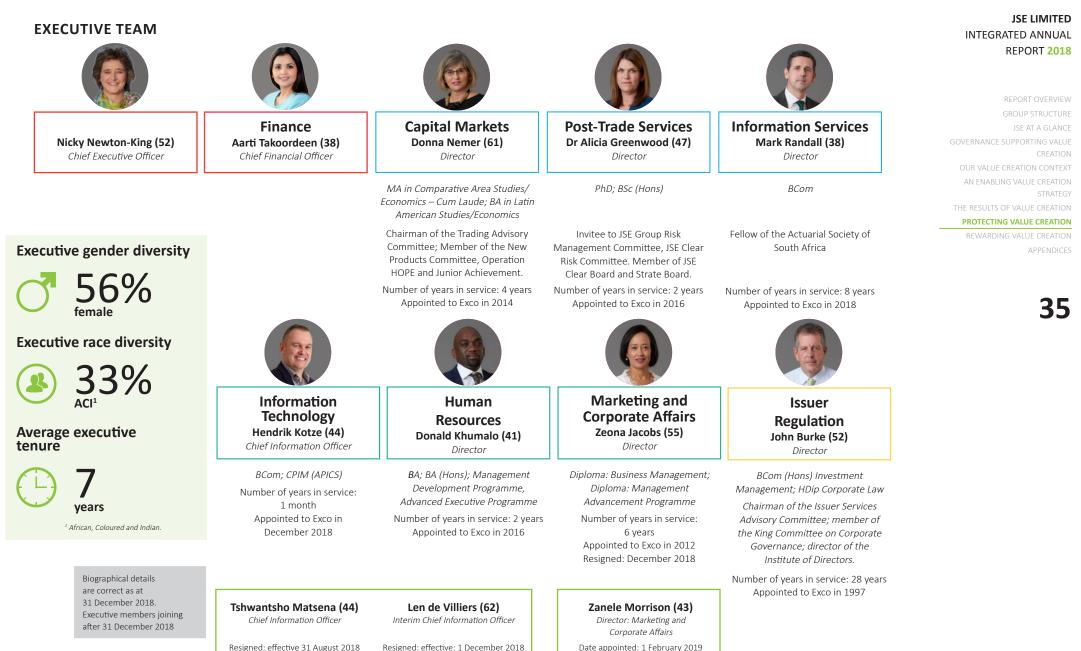
Nomavuso Mnxasana (62)

Independent non-executive director BCompt (Hons); CA(SA) Appointed to the Board in 2012 Tenure as director: 6 years Retired: 17 May 2018

Nigel Payne (58)

Independent non-executive director BCom (Hons); HDip (Acc); CA(SA); Certified Internal Auditor; MBL

Appointed to the Board in 2005 Tenure as director: 13 years Resigned: 3 August 2018 Biographical details are correct as at 31 December 2018. Tenure as director is calculated from the date that an appointment is first ratified by shareholders to the date of the AGM to be held on 22 May 2019.



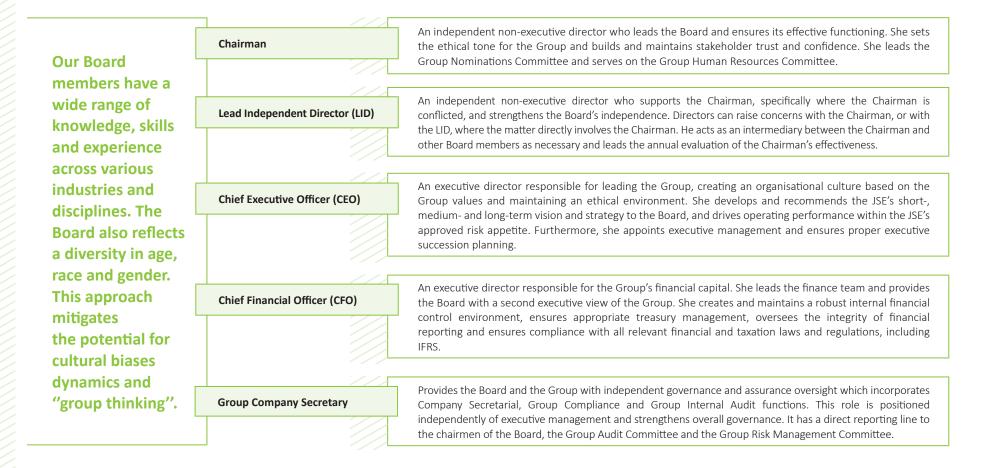
DIRECTORS' RESPONSIBILITIES

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The role of a non-executive director includes, among other things, the responsibility to uphold high standards of integrity and probity, to scrutinise management performance, to ensure the integrity of financial information, the effectiveness of financial controls and risk management systems, and to engage stakeholders.

The Board retains full and effective control over all the companies and entities in the Group and assumes overall responsibility for the JSE's compliance with applicable legislation and governance provisions (except for Strate Proprietary Limited as it has an independent board and management team, and JSE does not exercise control).

We consider the running of the Board and the executive responsibility for managing the JSE's business, as two separate and distinct tasks. Consistent with this approach, the roles of chairman and chief executive officer are separate, with specific responsibilities divided between them to ensure a balance of power and authority. Therefore, no single individual has unfettered powers of decision-making, nor can dominate the Board's decisions.



BOARD DIVERSITY AND TENURE (1)

Board composition

Policy: Majority of independent non-executive directors with separate roles for Chairman and CEO

8 Independent 2 Non-executive 2 Executive directors 2 directors

Board tenure

Policy: At least one third of all directors (including executive directors) are required to retire by rotation each year. Retiring directors, if eligible, may be reelected by shareholders.

Non-executive directors who have served for nine consecutive years, may thereafter stand for annual reelection up to a total term of 12 consecutive years. In exceptional circumstances, the Board may recommend to shareholders for an extension beyond 12 years.

Average non-executive director tenure:

0 – 5 years 6 – 9 years > 9 years Independent Dr Suresh Kana Nonkululeko Nyembezi Nolitha Fakude Dr Mantsika Matooane Dr Michael Iordaan Zarina Bassa Fatima Daniels Faith Khanvile Non-executive Ben Kruger David Lawrence Executive Aarti Takoordeen Nicky Newton-King Average tenure 1.4 vears 6.7 years 12.6 years

Age profile Policy: No formal	Average age of all directors	Average age of 0 – 5 years tenure	Average age of 6 – 9 years tenure	Average age of > 9 years tenure	
policy on retirement age applies.	54	55 years	50 years	58 years	

Independence

An independent director should be independent in character and judgement. There should be no relationships or circumstances which are likely to affect, or could appear to affect, this independence. It is the absence of undue influence and bias, which can be affected by the intensity of the relationship between the director and the JSE, rather than any particular fact such as length of service or age.

2018 assessment outcome: The Board considers all of its non-executive directors to be independent, except for David Lawrence and Ben Kruger, as a result of the business relationship that their affiliated companies have with the JSE. Refer to the directors' report in the annual financial statements for non-executive directors' interests in JSE Limited.

Board skills diversity

Policy: Maintain a wide range of knowledge, skills, experiences and behavioural competencies across various industries and disciplines.

» Investment banking

» Regulatory

» Technology

and financial services

The Board's areas of expertise are:

- Accounting, audit and internal control
- » Commerce

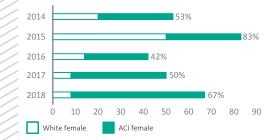
» Risk

» Entrepreneurship

Board gender diversity

Policy: Maintain a minimum of 50% female Board members.

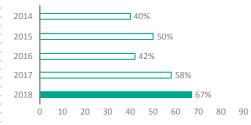
Female representation: percentage of total Board



Board race diversity

Policy: Maintain a minimum of 67% ACI Board members.

ACI representation: percentage of total Board



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GOVERNANCE STRUCTURES

MEETING ATTENDANCE

The Board is required to meet a minimum of four times a year and more frequently, should circumstances require. The Board also participates in an annual Board strategy session. Meetings are conducted according to a formal agenda, with supporting documentation delivered to directors one week prior to the scheduled meetings.

			Board						
Director	Role	Board	strategy session	GAC	GRMC	GHRC	GSEC	GSROOC	GNC
Number of schedu	lled meetings	4	1	3	3	5	3	2	4
N Nyembezi	Chairman of Board and GNC	4	1	3 (I)	3 (I)	5	3 (I)	2 (I)	4
Z Bassa 1	Independent non-executive director	1			1(I)				
AD Botha ²	LID; chairman of GHRC	4	1	1		1			2
F Daniels ³	Independent non-executive director	1		1	1(I)				
VN Fakude	Independent non-executive director	3	1		2 (I)	4	3		
M Jordaan	Independent non-executive director	4	1		3				
SP Kana	LID; Chairman of GSEC; Chairman of GAC	4	1	3	3		3	2	4
FN Khanyile ⁴	Independent non-executive director	1		1	1(I)		I		
MA Matooane	Chairman of GRMC	4	1	2	3		3		
AM Mazwai ⁵	Chairman of GSROOC	4	1		1	2	1	1	
NP Mnxasana ⁶	Independent non-executive director	4	1	1		2	1	1	
NG Payne 7	Chairman of GAC	4	1	2	2		I	2	
Non-executive dire	ector								
BJ Kruger ⁸		2			2	3	I		
DM Lawrence		4	1		3	5	3		4
Executive director									
NF Newton-King	CEO	4	1	3 (I)	3	5 (I)	3 (I)		4 (I)
A Takoordeen	CFO	4	1	3 (I)			1	2	
JH Burke	Alternate	4	1					2 (I)	

Legend

GAC – Group Audit Committee GSEC – Group Social and Ethics Committee (I) – Invitee GRMC – Group Risk Management Committee GSROOC – Group SRO Oversight Committee GHRC – Group Human Resources Committee GNC – Group Nominations Committee

¹ Appointed with effect from 1 November 2018.

² Retired with effect from 17 May 2018.

³ Appointed with effect from 1 October 2018.

- ⁴ Appointed with effect from 1 November 2018.
- ⁵ Retired with effect from 17 May 2018.
- ⁶ Retired with effect from 17 May 2018.

⁷ Resigned with effect from 3 August 2018.

⁸ Appointed with effect from 1 June 2018.

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JSE LIMITED INTEGRATED ANNUAL REPORT 2018

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Governance functional areas that support the Board in setting and achieving its strategic objectives.

Further reading

» Director's report and Group Audit Committee Report in the Consolidated Annual Financial Statements.

Group Audit Committee (GAC)

- » Oversees the Group's financial performance and risks, internal controls and internal audit, and external reporting
- » Nominates the independent auditor, and evaluate their independence (in alignment with section 22.15(h) of the Listings Requirements), effectiveness and performance, the fees to be paid and allowable non-audit services

>>

Composition as at 31 December 2018

Constituted as a statutory committee under section 94(7) of the Companies Act and executed its responsibilities in term of section 3.84(g) of the Listings Requirements.

	Meeting atter	idance
Member	Number	%
Dr SP Kana (Chairman)	3/3	100
F Daniels	1/1	100
FN Khanyile	1/1	100
MA Matooane	2/2	100

Changes during the year

		Meeting atten	idance
Member	Effective date	Number	%
AD Botha	17/05/2018	1/1	100
NP Mnxasana	17/05/2018	1/1	100
NG Payne	3/08/2018	2/2	100
Other invitees		Meeting atten	dance
FSCA Representative			3/3
Investment advisors			3/3

Investment advisors	3/3
Internal Audit	3/3
External auditors	3/3
Group Company Secretary	3/3

Independence of committee: 100%

Areas of focus

- Reviewed and approved the 2018 Annual Results and dividend recommendation
- Reviewed and approved the Annual Financial Statements for all JSE related Entities
- Reviewed and considered the Internal Audit planning and findings »
 - Reviewed and considered external audit reports
- Considered the JSE's Proactive Monitoring Report submitted to all listed companies »
- Monitored performance of the JSE's funds as managed by Investec »
- Approved the 2019 Budget for recommendation to the Board »
- Oversaw tax management matters »
- Performed oversight role for JSE Clear and Nautilus Managed Account Platform

The GAC is satisfied that the Group has appropriate financial reporting control frameworks and procedures, and that these procedures are operating effectively.

The GAC reports that, based on a formal assessment process, it was satisfied as to the appropriateness of the expertise, effectiveness and experience of the CFO during the reporting period.

In addition, the GAC is satisfied with:

- » the expertise, effectiveness and adequacy of resources and arrangements in the finance function; and
- » the experience, effectiveness, expertise and continuous professional development of senior members of the finance function.

The GAC confirms that it was able to carry out its work to fulfil its statutory mandate under normal and unrestricted conditions. The committee is satisfied that the assurance obtained during the meetings, corroborated by the review of the documentation deemed necessary and its own analyses sustain its conclusions reached for the 2018 financial year.

Group Risk Management Committee (GRMC)

» Oversees the Group's risk management policies, procedures and activities

» Interrogates identified risks and opportunities to ensure validity and completeness

» Oversees the governance of technology and information

Composition as at 31 December 2018

	Meeting atten	dance
Member	Number	%
Dr MA Matooane (Chairman)	3/3	100
Z Bassa	1/1	100
Dr M Jordaan	3/3	100
Dr SP Kana	3/3	100
BJ Kruger	2/2	100
DM Lawrence	3/3	100
NF Newton-King	3/3	100

Changes during the year

		Meeting atter	ndance
Member	Effective date	Number	%
AM Mazwai	17/05/2018	1/1	100
NG Payne	3/08/2018	2/2	100
	·		
Other invitees		Meeting atter	ndance
FSCA representative		3/3	
Chief information officer		3/3	
Internal Audit		3/3	
Director of post trade serv		3/3	
Director of capital markets		3/3	
Group Company Secretary			3/3

Independence of committee: **57%**

Areas of focus

- » Oversaw Enterprise Risk Management function
- » Approved 2019 Internal Audit Plan
- » Reviewed updated committee terms of reference and the 2019 work plan
- » Reviewed and considered regulatory updates
- » Approved the Internal Audit charter
- » Monitored progress in respect of the ITaC Programme and interrogated treatment of associated project risks
- » Monitored Priority 1 incidents and remedial actions
- » Focused on IT risk: operational issues as well as strategic issues
- » Risk management oversight of JSE Clear and Nautilus

» Refer to page 12 on Risk Governance

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Group Human Resources Committee (GHRC)

» Oversees strategic human resource matters and, in particular, the governance of remuneration for directors, executives and employees

» Ensure accurate, complete and transparent remuneration disclosure

Composition as at 31 December 2018

	Meeting atter	ndance
Member	Number	%
VN Fakude (Chairman)	5/5	100
F Daniels	0/0	0
BJ Kruger	3/3	100
DM Lawrence	5/5	100
N Nyembezi	5/5	100

Changes during the year

		Meeting atte	ndance
Member	Effective date	Number	%
AD Botha (Chairman)	17/05/2018	1/1	100
AM Mazwai	17/05/2018	2/2	100
NP Mnxasana	17/05/2018	2/2	100
	·		

Other invitees	Meeting attendance
CEO	4/4
Director of human resources	4/4
Group Company Secretary	5/5

Independence of committee: 60%

Areas of focus

- » Monitored transformation progress and plans
- » Monitored employment equity progress and plans
- » Reviewed Leadership Continuity initiatives
- » Recommended Long Term Incentive Scheme 2010 vesting of awards (Allocation 5 Tranche 2 and Allocation 6 Tranche 1)
- » Recommended the non-executive director fees
- » Approved the committee terms of reference
- » Approved the 2019 work plan
- » Considered the Corporate and CEO Scorecard
- » Reviewed and considered Group remuneration practices against best practice
- » Approved the Long Term Incentive Scheme 2018
- » Oversaw talent pipeline and leadership continuity initiatives

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Group Social and Ethics Committee (GSEC)

» Oversees all social, ethics and sustainability matters for the Group

Composition as at 31 December 2018

	Meeting atter	ndance
Member	Number	%
Dr SP Kana (Chairman)	3/3	100
VN Fakude	3/3	100
DM Lawrence	3/3	100
Dr MA Matooane	3/3	100

Other invitees	Meeting attendance
CEO	3/3
Director of human resources	3/3
Director of marketing and corporate affairs	3/3
Group Company Secretary	3/3

Group Nominations Committee (GNC)

» Oversees Board governance policies, Board composition and succession, and the annual Board effectiveness review

Composition as at 31 December 2018

	Meeting a	Meeting attendance	
Member	Number	%	
N Nyembezi (Chairman)	4/4	100	
DM Lawrence	4/4	100	
Dr SP Kana	4/4	100	

Other invitees	Meeting attendance
CEO	0/4
Group Company Secretary	4/4

Independence of committee: 67%

Areas of focus

- » Oversaw the Board renewal programme in terms of which extensive searches for suitable candidates were undertaken and four new members were appointed to serve on the Board (refer to page 9).
- » Oversaw the Group's policy on the promotion of gender and race diversity at Board level (refer to page 37).

Independence of committee: 75%

Areas of focus

- » Oversaw stakeholder relationship initiatives and plans to improve internal and external communication
- » Oversaw transformation plans and progress
- » Oversaw Group sustainability strategy and initiatives
- » Reviewed and approved committee terms of reference
- » Approved the 2019 work plan

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Group SRO Oversight Committee (GSROOC)

» The GSROOC was created as a committee of the JSE Board in 2011. The purpose of the committee is to oversee the GRO activities of the JSE. It serves as an independent check on all regulatory matters, policies and related activities for the Group

Composition as at 31 December 2018

	Meeting a	Meeting attendance	
Member	Number	%	
Z Bassa (Chairman)	0/0	0	
F Daniels	0/0	0	
Dr SP Kana	2/2	100	
FN Khanyile	0/0	0	
N Nyembezi	2/2	100	

Areas of focus

- » Examined the JSE's regulatory function to the extent required to fulfil its statutory obligation as a self-regulatory organisation.
- » Monitored any real or perceived conflicts of interests in relation to the JSE's Self-Regulatory Oversight role.

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Changes during the year

		Meeting at	Meeting attendance	
Member	Effective date	Number	%	
AM Mazwai	17/05/2018	1/1	100	
NP Mnxasana	17/05/2018	1/1	100	
NG Payne	3/08/2018	2/2	100	

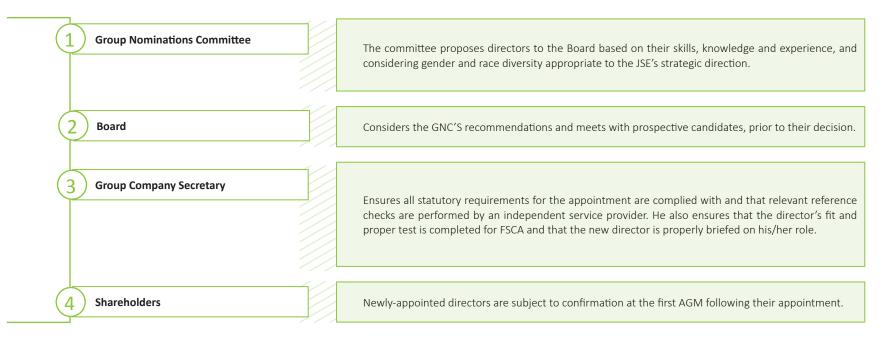
Other invitees	Meeting attendance
FSCA Representative	0/2
Director of issuer regulation	2/2
Director of market regulation	2/2
CEO	0/2
Group Company Secretary	2/2

Independence of committee: 100%

BOARD EFFECTIVENESS AND PERFORMANCE

APPOINTMENT, INDUCTION AND TRAINING

We have a formal and transparent director appointment policy. Non-executive directors are required to sign a letter of appointment, setting out all salient engagement terms. Among others, it includes key responsibilities, time commitment, committee service, outside interests, director evaluation and emoluments.



The induction programme is a formal one-year process and is supplemented with ongoing education. The programme considers each director's background, knowledge, experience and skills, and equips new directors with the requisite knowledge of the JSE's strategy, risks, operations and industry perspectives. The induction programme requires attending the GRMC meetings for the first year. Furthermore, representatives of the JSE's sponsor meet with each new director to explain key provisions of the JSE Listings Requirements and to formally advise them of their responsibilities as a director of a listed entity.

Existing Board members are encouraged to attend relevant elements of the induction programme from time to time to stay abreast of new developments.

Continuing director education encompasses an annual sponsor and governance update (mandatory for all directors) as well as industry briefings on topical developments at May and August Board meetings each year.

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Evaluation process

An independent service provider, The Board Practice, has annually assessed the Board's effectiveness, and that of the Board committees and individual directors (including the chairman, CFO and Group company secretary), since 2015.

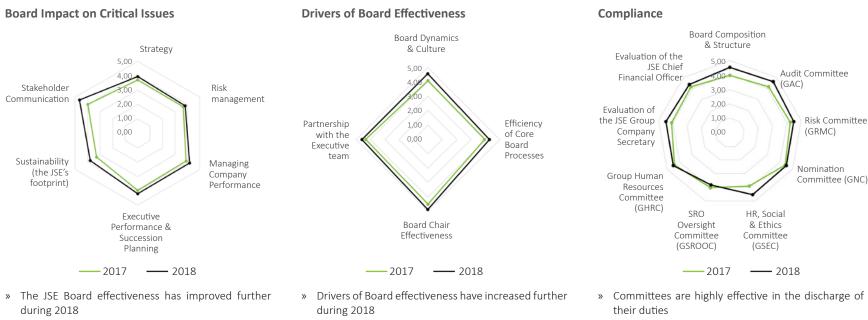
The Chairman and the Group company secretary are responsible for designing and managing the annual effectiveness review in conjunction with the service provider. Individual interviews are also held with each Board member and with the Group company secretary.

The Chairman discusses findings from the effectiveness review in one-on-one meetings with the directors, where required. The full report is presented to the Group Nominations Committee for discussion, and is tabled for consideration by the Board.

Key insights from the 2018 review

» The Board has a positive impact on all areas of critical

importance



- » The work of the GSEC has improved significantly during the last year
- » There is an expectation that the Group SRO Committee will remain effective
- » The Company Secretary and CFO remain very effective

The Board is satisfied that the evaluation process is improving its performance and effectiveness, and will continue to find ways to improve on the evaluation process.

DIRECTOR ROTATION

At least one third of all directors (including executive directors) are required to retire by rotation each year and shareholders have the right to vote thereon at the annual general meetings (AGM).

2019	2018	2017	2016	2015	2014
SP Kana	A Takoordeen	N Nyembezi	AD Botha	A Takoordeen	N Nyembezi
	NP Mnxasana	M Jordaan	AM Mazwai	NP Mnxasana	AM Mazwai
	MA Matooane	NF Newton-King	DM Lawrence	MA Matooane	NG Payne
					NF Newton-King
N Nyembezi	NG Payne	AD Botha			
DM Lawrence		AM Mazwai			
		NG Payne			
BJ Kruger	VN Fakude		SP Kana	L Fourie	
F Daniels					
FN Khanyile					
Z Bassa					
Legend					

Triennial rotation in terms of
memorandum of incorruptionAnnual re-election (after a nine year
tenure) in terms of JSE tenure policyFirst election by shareholders

The following resolutions are included in the AGM notice available at ir.jse.co.za/results/annual-reports:

- » Ordinary Resolution number 1: Re-election of director retiring by rotation (triennial rotation)
- » Ordinary Resolution number 2: Election of directors appointed to the Board of directors during the year
- » Ordinary Resolution number 3: Re-election of directors who retire in terms of the Company's policy on nonexecutive director tenure

SUCCESSION PLANNING 10

Board succession planning, including CEO succession, is the responsibility of the GNC while executive talent planning falls within the remit of the Group Human Resources Committee (GHRC).

Board composition, future retirements and succession are monitored at each GNC meeting. The committee considers the JSE strategy and emerging risks and opportunities in determining the possible requirements for future Board appointments. The committee retains an external service provider to assist in identifying and approaching potential members. It also maintains a list of emerging Board talent for future consideration, focusing on a diversity of skills, age, race and gender.

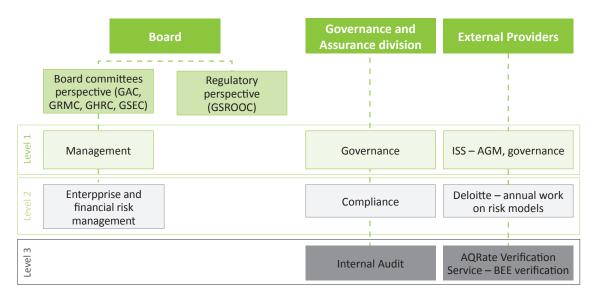
The CEO, supported by the director of human resources, is responsible for hiring the executive team and shaping the senior talent pool in order to deliver on the JSE's strategy. The GHRC interrogates the detailed talent maps and development plans for each JSE senior manager on an annual basis. They also review progress on previous goals set for these managers' development. The committee sets race and gender targets for management to incorporate in its talent planning. All executive committee appointments are discussed with the Board Chairman prior to finalisation.

GROUP INTERNAL AUDIT AND COMBINED ASSURANCE

The Board derives assurance on a combined basis from the work of the various Board committees, Group Internal Audit (GIA) Function, the Enterprise and Financial Risk Management Function and external auditors.

The Board is responsible for combined assurance and is assisted by the various Board committees to ensure that a combined assurance plan is in place and that assurance functions and activities are executed effectively.

We continue to refine our integrated combined management assurance approach and reporting. The objective is a practical and cost-efficient approach that is effectively integrated with the Enterprise and Financial Risk Management function and management assurance processes to provide a comprehensive risk-based and robust assurance process.



During the year, the GAC received regular reports from GIA on any weaknesses in controls that were identified, including financial controls, and considered corrective actions to be implemented by management. The GAC is satisfied with the expertise, effectiveness and adequacy of arrangements in place for combined assurance.

The Group has an independent in-house internal audit function which operates in terms of an approved charter. The GIA charter spans across all JSE Group entities.

GIA's purpose is to be a proactive business partner, providing integrated, risk-based, objective assurance, insight and related advisory services.

The GIA scope includes providing independent assurance over the internal control systems, the regulatory and economic capital models, regulatory reporting and technology and information governance.

The audit plans are presented at the various business unit management committees and to the JSE Executive Committee. The GIA audit plan is revised on a quarterly basis to remain agile and aligned to key risks in the organisation.

GIA is headed by the chief audit executive who reports functionally to the GAC chairman and administratively to the chief operating officer, and has the mandate to communicate directly and freely on relevant matters.

GIA has adopted the in-house ESM platform which maintains a database of audit findings and facilitates tracking and monitoring of remediation efforts.

GIA interrogates the audit findings databases to gain insights on common themes across the business, which in some instances may not be significant individually, however, when considered holistically can point to pervasive control weaknesses which warrant management attention. JSE LIMITED INTEGRATED ANNUAL REPORT 2018

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The primary objective of combined assurance is to facilitate the integration, coordination, and alignment of risk management and assurance activities within the Group to optimise the level of risk, governance, and control oversight on the Group's risk landscape. We have established a combined assurance framework which will be embedded across business units in the year ahead.

The Board has mandated the GAC and GRMC with the oversight of risk management.

The key focus areas of our combined assurance activities in key areas are set out in the table below.

Key activities and focus areas	Assurance provider	Board committee oversight
		-
Implementation of the ITaC project	» Group Internal Audit	» GRMC » GAC
Go-live readiness assurance review on the Government Bond ETP	» Group Internal Audit	» GRMC
Deep dive on Post-trade Services controls and processes and improvements recommended where required	» ContinuitySA» Group Internal Audit	» GRMC
Review of information and technology general controls relating to revenue as part of financial statement audit	» Ernst & Young Inc	» GRMC » GAC
Deep dive on the IT landscape and key risks	» Group Internal Audit	» GRMC » GAC
Proactive valuation of the JSE's risk models, including its design and parameters. The results are then reported to the FSCA	» Deloitte	» GRMC
FSCA-onsite visits during the year. These onsite visits typically include understanding the division, key processes involved and controls. These are mapped against the FMA and the JSE Listing requirements	» FSCA	» GSROOC
Data breach management and IT controls relating to the handling of client data	» Client	» GRMC
Full compliance audit of the Nautilus group	» FSCA » Group Internal Audit	» GRMC » GAC

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12 **LEADING ETHICALLY**

The JSE is committed to high standards of integrity and fair dealing in the conduct of its business.

WHAT GUIDES OUR APPROACH TO ETHICS

The Board is responsible for ethics in the Group and is committed to the King IV principles of accountability, integrity, fairness and transparency, which are reflected in the Board's charter. Ethics is part of our corporate culture - it is embedded through employees' behaviour in the workplace, day-to-day operations and values demonstrated through actions and decision-making.

Ethical behaviour and anti-corruption measures are instilled formally through policies, procedures and compliance to the relevant laws and regulations. It is based on a strong foundation of ethical leadership and a commitment to "doing what is right" across all levels of the Group.

The Board is mindful that the ethics and performance of the JSE's management and employees must meet high standards. It is also aware that the JSE's reputation is built on our interactions with all stakeholders. When we display the expected behaviour and values, the JSE's reputation is strengthened and a healthy workplace is promoted, where original and innovative thinking occurs. This embeds a robust culture of ethics and integrity at the JSE.

We also promote responsible business and good governance through the JSE Listings Requirements, market regulation, the FTSE/JSE Responsible Investment Index Series and support for a variety of good governance initiatives in South Africa and beyond.

ETHICS IMPLEMENTATION AND MONITORING

The JSE has a zero-tolerance approach to unethical conduct. A whistle-blowing mechanism is in place that promotes the anonymous reporting of any unethical behaviour as described in the code of ethics.

The whistle-blowing hotline is available to all employees, stakeholders and the public via an independent service provider. This ensures the anonymity of all callers. A whistleblower may report any breach or alleged breach of the JSE's governance and ethics code or policies as well as any illegal acts, bribery, corrupt practices, procurement failures, grievances or malfeasance. No calls were received during 2018 (2017: Nil).

COMPLIANCE⁽³⁾

The JSE is committed to complying with both the spirit and the letter of the applicable statutory and regulatory requirements and to always act with due skill, care and diligence.

WHAT GUIDES OUR APPROACH TO COMPLIANCE

The Board is ultimately accountable for overseeing compliance with statutes and regulations. The responsibility to facilitate compliance throughout the JSE was delegated to the director of governance and assurance. A new Group compliance team was established in 2018 as part of the Governance and Assurance division, to ensure a coordinated approach to compliance throughout the Group.

Our key focus areas during 2018 included completing the annual self-assessments for FSCA; managing the various on-site reviews from FSCA and other third parties; updating the compliance roadmap for 2019/20: initiating a review of JSE compliance policies. including a refresh of the JSE Code of Conduct and Ethics. We also developed a Protection of Private Information (PoPI) and a General Data Protection Regulation (GDPR) plan to further enhance the JSE's capabilities and to address gaps in compliance with PoPI Act provisions, as well as to create employee awareness.

GIA undertakes compliance reviews on critical functions including compliance with the conflict of interest policy, the JIBAR code of conduct issued by SARB, and compliance with internal treasury mandates. A review of Nautilus compliance was a priority.

Other than the suspension by FSCA of the hedge fund licence held by Nautilus (for new business only), which was subsequently reinstated, there were no other or repeated regulatory penalties, sanctions or fines for contraventions of, or non-compliance with statutory obligations. No fraud misdemeanours, bribery or corruptive practices were reported during the period under review.

Conflicts of interest: financial market infrastructure	As a financial market infrastructure, the JSE is required to take necessary steps to avoid, eliminate, disclose and otherwise manage possible conflicts of interest between its regulatory functions and commercial services. This includes the implementation and documentation of appropriate arrangements in accordance with the Board Notice 1 of 2015 (Board Notice) on conflicts of interest, issued by the Registrar of Securities Services. The conflicts of interest policies prescribed in the Board Notice were in effect during the year.
Conflicts of interest: Directors and employees	At all Board and committee meetings, directors are required to table their updated directorships and to declare any conflicts of interest. This is updated in the corporate register.
Insider trading	Our dealing policy prohibits directors and employees from dealing in JSE shares when they possess price-sensitiv information. Dealing is permitted only during two limited open periods of the year, immediately following th release of the annual and interim financial statements. A director may not deal in JSE shares without obtaining pric written approval from the Board chairman. The Board chairman must obtain approval from the lead independen director.
	A dealing policy is also in place for employees and directors dealing in all listed securities other than JSE shares. Price approval from the relevant executive head and director market regulation, for these transactions is mandatom Employees in specific divisions, such as market regulation and issuer regulation, are prohibited from dealing in an listed securities as a result of their ongoing exposure to company information.
	Refer to the directors' report in the annual financial statements for dealings by directors and prescribed officers.
Anti-corruption	A strict zero-tolerance approach is adopted and we do not engage in, accept or condone engaging in any illegal act This includes, among others, any form of bribery, facilitation payments, political donations or any corruptive practic in the conduct of our business. The Board's policy is to actively pursue and encourage the prosecution of perpetrator of fraudulent and other illegal activities, should it become aware of such acts.
Tax compliance	Where complex treatment is required as a result of tax law amendments, tax opinions are sought from externate experts to ensure correct treatment and compliance.
Ombudsman for JSE complaints and disputes	The JSE is authorised in terms of section 14(a) of the Financial Services Ombud Scheme Act, 37 of 2004, (Ombu Act) to operate a financial services Ombud scheme. The scheme's rules are set out in the Rules of the JSE. This regulates the resolution of complaints and dispute between authorised users and clients, and among authorised users. The monitoring body of the scheme is the JSE Executive Committee. The scheme allows the JSE to facilitate the resolution of complaints that are made by or against clients an authorised users in a timely and cost-effective way. This eliminates the need for either party to resort to lega proceedings.

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COMPANY SECRETARY[®]

The JSE's Group company secretary is responsible for the duties set out in section 88 of the Companies Act. He is also responsible for ensuring compliance with the JSE Listings Requirements, and providing guidance and assistance in line with King IV. He plays a pivotal role in the effective functioning of the Board, ensuring that all directors have full and timely access to relevant information. All directors have unlimited access to the Group company secretary.

The Group company secretary, Graeme Brookes, is accountable to the Board chairman, and is not an executive director of the JSE. In addition, he also serves as the executive responsible for governance and assurance, and reports to the CEO.

The performance of the Group company secretary is monitored by the CEO and formally assessed by the Board on an annual basis. The appointment and removal of the Group company secretary are matters for the Board as a whole.

The Board and the CEO are satisfied that the Group company secretary:

- » is competent, suitably qualified and experienced;
- » has the requisite skills, knowledge and experience to advise the Board on good governance;
- » maintains an arm's length relationship with the Board and the directors; and
- » has discharged his responsibilities.

In reaching their assessment, the Board and the CEO have considered and concluded:

- » Explicit independence: There is no direct or indirect relationship between the directors and the Group company secretary.
- » Implicit independence: The company secretariat is properly resourced, and the Group company secretary has provided advice and guidance to the Board in an independent and objective manner, and in accordance with the principles of King IV, the JSE's Board charter and our code of ethics.

The Board considers their arrangements for accessing professional corporate governance services as effective.



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Remuneration is linked to performance to ensure that high levels of pay are awarded only for high performance and where there is sustained value creation for shareholders.

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The JSE's remuneration reporting framework is informed by a range of local and international requirements, standards and guidance, including, but not limited to:

- » Companies Act;
- » JSE Listings Requirements; and
- » King IV.

Related remuneration information can be found in the remuneration report, the notice of annual general meeting and the annual financial statements available online at ir.jse.co.za/results/annual-reports.

The organisation-wide remuneration policy should be read in the context of the integrated annual report and the remuneration report as a whole, for stakeholders to fully understand how the policy gives effect to the JSE's overall business strategy.

Remuneration philosophy

The JSE's remuneration philosophy is founded on enduring principles, which are applied consistently each year. Our remuneration philosophy applies across the organisation and informs all our remuneration policies.

This philosophy seeks to engender a culture of enterprise, diligence and delivery throughout the organisation, with an explicit linkage between pay and performance, in order to align the interests of staff with those of stakeholders.

The GHRC is satisfied that the JSE's remuneration policies are aligned with the overall remuneration philosophy, and that the policies have achieved their stated objectives for the year under review. There has been no change to our core philosophy during 2018.

Remuneration model

Our remuneration model comprises three core elements:

- » guaranteed pay;
- » annual incentives; and
- » long-term incentives.

These are linked to performance to ensure that high levels of pay are awarded only for high performance and where there is sustained value creation for stakeholders.

Engagement with shareholders

In line with King IV, the remuneration policy and implementation report will be tabled annually for separate non-binding advisory votes by shareholders at the annual general meeting (refer to advisory endorsement resolution number 10.1 and 10.2 in the notice of annual general meeting). The Group's remuneration policy, implementation report and non-executive director's fees were put to shareholder vote at the previous annual general meeting and endorsed with a majority (AGM in May 2018: 95.92%, 94.71%, and 99.38%, respectively).

To the extent that either the remuneration policy resolution or the implementation report resolution, or both, are voted against by 25% or more of the voting rights exercised at a shareholder meeting, the Board will engage with shareholders.

The Board will continue to encourage regular dialogue with shareholders to create and maintain a mutual understanding of what performance and value creation for the Group constitutes for evaluating the remuneration policy.

2018 focus areas and key changes

- Endorsed the overall remuneration philosophy after reviewing it (no changes made);
- » Simplified the STI model for 2018, by eliminating the deferred compensation bonus scheme with a compensating increase in fixed pay;
- Introduced a new long-term incentive scheme LTIS 2018 given that the previous scheme (LTIS 2010) has reached it end of life (term);
- » Considered leadership development and talent pipeline including employment equity; and
- » Interrogated management's proposals regarding leadership continuity to ensure that JSE operations are supported by an appropriate pipeline of fresh talent.

- » Remuneration report
- Notice of annual general meeting
- » Annual Financial Statements

REMUNERATION MODEL

The model ensure employees are remunerated in a fair and reasonable manner for the role performed. It attracts and retain individuals of the appropriate calibre and motivate employees to deliver above-target performance while living the JSE values.

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	FIXED PAY	VARIABLE PAY	VARIABLE PAY			
Element	Guaranteed pay and benefits	Annual incentives	Long-term incentives	REPORT OVERVIEW GROUP STRUCTURE		
	 » Set around median for the specific role » Based on the premise of equal pay for work of equal value » Provides a guaranteed level of earnings 	 Payable for the financial year Rewards high performance Linked to corporate financial performance, delivery of strategic priorities and personal performance 	 Payable in respect of sustained corporate performance over three to four years Attract and retain high-performing talent and critical and scarce skills Create a "share ownership culture" among senior employees Measured against pre-set financial and strategic targets 	JSE AT A GLANCE GOVERNANCE SUPPORTING VALUE CREATION OUR VALUE CREATION CONTEXT AN ENABLING VALUE CREATION STRATEGY THE RESULTS OF VALUE CREATION PROTECTING VALUE CREATION REWARDING VALUE CREATION		
Component	 » Basic salary » Defined contribution pension plan » Medical aid benefits Key changes in 2018 Deferred compensation incorporated into guaranteed pay. 	 » Discretionary bonus scheme (DB scheme) Key changes in 2018 Staff » Deferred compensation incorporated into guaranteed pay CEO » CEO's contractual bonus and discretionary bonus combined into a single, fully-discretionary cash award. This resulted in 	 Performance share schemes LTIS 2010: Scheme closed with final allocation awarded in 2017. Remaining allocations will vest over time until 2021 LTIS 2018: First allocation awarded in 2018 and will vest from 2021 Critical skills cash scheme Key changes in 2018 » LTIS 2010 scheme closed after eight years in accordance with scheme rules » LTIS 2018 approved by shareholders at the May 2018 AGM 	53		
Purpose	 Compensate employees for work performed Attraction and retention 	 Reward employees for the specific financial year's corporate financial performance, delivery of strategic priorities and personal performance Attraction and retention 	 » LTIS 2010/2018: Incentivise corporate performance and long-term shareholder value creation » Critical skills cash scheme: Retention of senior employees with scarce or critical skills 			
Eligibility	» All employees	» All employees	 » LTIS 2010/2018: Senior leadership Group involved in strategic decision-making » Critical skills cash scheme: Key employees with scarce or critical skills (that do not participate in LTIS 2010/2018) 			

_	FIXED PAY	VARIABLE PAY			
Element	Guaranteed pay and benefits	Annual incentives	Long-term incentives		
How the pay is set	 » Structured on a total cost to-company basis » Benchmarked against independent market data » Reflects scope and depth of role, experience required, level of responsibility and individual performance 	 » GHRC determines the DB pool based on its assessment of annual corporate performance » Individual DB awards are linked to seniority, individual performance and contribution to corporate performance Performance is rewarded as follows: » CEO receives a DB cash award of up to 200% of guaranteed pay based on GHRC performance assessment » Exco members receive DB cash awards of up to 150% of 	 » LTIS 2010/2018 are annual awards of JSE ordinary shares, linked to corporate performance measured over three and four years. » Critical skills cash scheme is an annual cash award up to 25% of the participant's annual salary linked to continued employment and performance 		
	Benchmarks Financial services industry and general corporate benchmarks are used to determine competitive guaranteed pay levels for all roles. The PwC Remchannel database is used with input from independent specialists to ensure all roles are correctly sized and graded as part of the salary benchmarking process. The policy aims to move base salaries towards median, although cost considerations sometimes do not allow this. In certain instances – either for historical reasons or to retain scarce skills – salaries above median are paid.	 guaranteed pay based on performance as assessed by the CEO and subject to GHRC oversight Employees rated as 'top performers' receive DB cash awards of between 16% and 50% of guaranteed pay Employees rated as 'meeting expectations' receive a DB cash award of up to one month's guaranteed pay All permanent employees can receive an award of JSE Limited ordinary shares (known as Bonus Shares) based on GHRC discretion (historically, no more than 6% in total of the DB pool) 			
Performance hurdle	Not applicable	 Fully discretionary based on GHRC assessment of annual corporate performance DB pool is only awarded if pre-set financial and strategic targets are achieved 	 » LTIS 2010/2018: continued employment and achievement of corporate performance targets » Critical skills cash scheme: continued employment, JSE's overall corporate performance and individual performance 		
Deferral	Not applicable	 No deferral of DB cash awards When a portion of the DB pool is paid in JSE Limited ordinary shares, the shares vest within 12 months of year-end 	 » LTIS 2010/2018: shares vest over three and four years » Critical skills cash scheme: cash awards vest over two years 		
Link between remuneration and Group performance	Not applicable	Deliver on the financial, operational and strategic targets as set out in the corporate scorecard (refer page 17). Targets are not weighted, although the GHRC places greater emphasis on financial performance.	 LTIS 2018 » ROE » Compound growth in earnings (EBIT) » Relative total shareholder return (TSR) against a peer group » Strategic metrics 		

The role of a non-executive director extends substantially beyond attending meetings and they are accountable for decisions taken, regardless of meeting attendance. Emoluments are therefore related to membership rather than number of meetings attended.

A single annual retainer, reflective of the role and responsibilities being discharged by a non-executive director, is the most appropriate way to remunerate non-executives. It is also administratively simpler, easy to understand and allows for clear comparisons by shareholders from year to year.

BOARD COMMITTEE CHAIRMEN

Paid a premium set at twice the fee for a committee member, as compensation for the additional responsibilities and time commitment expected of their roles. The premium for the Group Audit Committee chairman is up to 2.5 times.

LEAD INDEPENDENT DIRECTOR

Paid a premium of 30% of the annual non-executive director retainer.

Non-executive directors do not receive short-term incentives or participate in the JSE's LTI schemes. There are no provisions for emoluments or other payments in respect of loss of office. The JSE has an elective policy relating to non-executive director shareholdings, in terms of which Board members are encouraged to hold JSE Limited ordinary shares to the value of their annual Board retainer. However, there is no mandatory minimum shareholder requirement for non-executives.

Out-of-pocket expenses, such as travel and accommodation costs, incurred by non-executive directors in the execution of their responsibilities are reimbursed on request.

Recommendations regarding non-executive director emoluments are informed by independent market data provided by the JSE's independent remuneration advisors, PwC. The GHRC also takes into account the complexity, responsibility, time commitment and risk inherent in membership of the JSE Board and the various Board committees when preparing a recommendation for Board consideration and shareholder approval. The GHRC is satisfied that the fee structure for the JSE's non-executive directors remains appropriate.

NON-EXECUTIVE DIRECTOR FEE BENCHMARKS

The GHRC has selected the FTSE/JSE Financials Index as an appropriate industry index. It benchmarks the emoluments against those of the constituent companies in the index after excluding investment holding companies, property companies and dual-listed companies from the comparator group, given their very different business models from that of the JSE.

Although the JSE is a medium-sized financial services organisation, it fulfils a unique role in the economy as a self-regulatory organisation and as a market place for capital formation. The JSE competes for the same non-executive talent with other regulated financial services companies. In the view of the GHRC, it is therefore

appropriate and necessary that the JSE should use a comparator group comprising major South African financial services groups.

PwC provides the GHRC with detailed market data, based on the latest publicly available information disclosed by the companies in the selected comparator group.

Voting

The JSE's non-executive director emoluments is subject to a vote by shareholders at the AGM (special resolution number three).

Constituent companies of non-executive director fee proposal comparator group

- » Alexander Forbes Group Holdings Limited
- » ABSA Group Limited
- » Capitec Bank Holdings Limited
- » Coronation Fund Managers Limited
- » Discovery Limited
- » Liberty Holdings Limited
- » MMI Holdings Limited
- » Nedbank Group Limited
- » PSG Group Limited
- » Sanlam Limited
- » Santam Limited
- » Standard Bank Group Limited
- » Transaction Capital Limited
- » FirstRand Limited

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The JSE seeks to appoint and retain non-executive directors that are able to contribute in a meaningful way to the direction and oversight of the Group's affairs.

DIRECTORS' AND EXECUTIVES' REMUNERATION⁴

		Basic ^{1,2} salary R'000	Defined ^{1,2} contribution pension plan R'000	Medical aid ¹ , UIF and other R'000	
Executive directors 2018	s – Current year remuneration				
NF Newton-King A Takoordeen	Chief Executive Officer Chief Financial Officer	5 059 2 729	374 159	161 2	
		7 788	533	163	
2017					
NF Newton-King A Takoordeen	Chief Executive Officer Chief Financial Officer	3 832 2 306	317 126	149 2	
		6 138	443	151	
Other key executiv 2018	es – Current year remuneration				
JH Burke	Director of Issuer Regulation	2 684	250	195	
LM De Villiers	Interim Chief Information Officer	2 856	-	1	
A Greenwood	Director of Post Trade Services	2 867	217	2	
Z Jacobs D Khumalo	Director of Marketing and Corporate Affairs Director of Human Resources	2 538 2 117	162 131	213 35	
H Kotze ¹³	Chief Information Officer	2 117	131	35 19	
TJ Matsena ⁹	Chief Information Officer	1 666	14	278	
D Nemer	Director of Capital Markets	3 077	247	195	
LV Parsons ¹⁰	Director of Information Services	1 213	119	58	
MH Randall ¹²	Director of Information Services	1 227	70	44	
		20 483	1 354	1 040	
2017					
GA Brookes ⁸	Director of Governance, Risk and Compliance	966	-	63	
JH Burke	Director of Issuer Regulation	2 265	199	180	
A Greenwood	Director of Post-Trade Services	2 422	173	2	ł
Z Jacobs	Director of Marketing and Corporate Affairs	2 140	129	57	
D Khumalo	Director of Human Resources	1 789	100	933	
TJ Matsena ⁹ D Nemer	Director of Trading and Market Services Director of Capital Markets	2 038 2 584	156 197	56 180	
IV Parsons	Director of Information Services	2 584 2 214	214	158	
R Van Wamelen ¹¹	Chief Information Officer	2 214 2 257	105	96	
		18 675	1 273	1 725	

Footnotes 1-12 below are applicable to notes 26.1-26.3

¹ Represents short-term employee benefits. From 1 August 2018, the contractual bonus was collapsed into salaries

² Contractual bonuses were subject to personal performance and are calculated according to a fixed percentage of basic salary (which percentage varied on a sliding scale based on grade). Refer to footnote 1 ³ Discretionary bonuses are subject to both personal performance and the achievement of specific corporate deliverables (per the annual corporate scorecard approved by the Board at the beginning of each financial year). These awards are not subject to deferral, unless otherwise so determined by the Board in any particular year. A potion of the discretionary bonus may be paid in equity, at the discretion of the Group Human Resources Committee. ⁴ All executive directors and other key executives are full-time employees of JSE Limited.

⁵ CEO's discretionary bonus - cash only

⁶ Represents the net value (after forfeiture for corporate performance) of share awards granted under provisions of the LTIS 2010 Long Term Incentive Scheme in 2012 and 2013 that vested during the current financial year. ⁷ Represents shares granted in the year under the provisions of the JSE's Long Term Incentive Schemes.

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Total guaranteed pay R'000	Contractual bonus ^{1, 2} (includes deferral) R'000	Discretionary bonus ^{1, 3, 5} R'000	Total annual incentives R'000	Total current year remuneration R'000	Total long-term and other benefits ⁶ R'000	Total number of shares granted in the LTIS schemes ⁷
5 594 2 890	_ 458	9 167 2 500	9 167 2 958	14 761 5 848	5 596 2 049	52 040 16 680
8 484	458	11 667	12 125	20 609	7 645	68 720
4 298 2 434 6 732	4 339 769 5 108	1 835 985 2 820	6 174 1 754 7 928	10 472 4 188 14 660	5 691 2 114 7 805	33 020 12 010 45 030
3 129 2 857 3 086 2 913 2 283	505 - 488 437 362	2 400 2 600 1 700 1 850	2 905 3 088 2 137 2 212	6 034 2 857 6 174 5 050 4 495	2 306 1 966	18 390 17 750 15 920 13 170
271 2088 3519 1390 1341	476 556 543 241	2 850 2 750 1 100	476 3 406 3 293 1 341	271 2 564 6 925 4 683 2 682	- 755 2 474 181	20 240 19 780 13 900
22 877	3 608	15 250	18 858	41 735	7 682	119 150
1 029 2 644 2 597 2 326 2 822 2 250 2 961 2 586 2 458	310 848 818 734 607 799 933 911 621	- 1 015 860 885 820 840 1 195 1 165 -	310 1 863 1 678 1 619 1 427 1 639 2 128 2 076 621	1 339 4 507 4 275 3 945 4 249 3 889 5 089 4 662 3 079	1 797 2 449 2 075 2 635 3 734	9 920 13 240 12 780 11 460 9 480 9 650 14 570 14 240 13 260
21 673	6 581	6 780	13 361	35 034	12 690	108 600

⁸ Stepped down from the Executive Committee effective 1 July 2017.
⁹ Appointed Chief Information Officer effective 8 October 2017; Resigned effective 31 August 2018.

¹⁰ Stepped down from the Executive Committee on 1 July 2018.

¹¹ Stepped down from the Executive Committee on 7 October 2017.

¹² Appointed Director of Information Services effective 1 July 2018.

¹³ Appointed Chief Information Officer effective 1 December 2018.

PROPOSED NON-EXECUTIVE DIRECTORS' EMOLUMENTS FOR 2019

For the year ended 31 December 2018	Total R'000	Board member fees R'000	Committee member fees R'000
2018			
AD Botha ¹	361	170	191
ZBM Bassa ⁶	128	58	70
F Daniels ⁷	215	86	129
VN Fakude	822	345	477
M Jordaan	495	345	150
SP Kana	1 243	345	898
FN Khanyile ⁸	100	100	-
BJ Kruger ²	367	201	166
DM Lawrence	805	345	460
MA Matooane	861	345	516
AM Mazwai ³	340	125	215
NP Mnxasana ⁴	298	125	173
NMC Nyembezi	2 150	2 150	_
NG Payne⁵	575	204	371
	8 760	4 944	3 816
2017			
AD Botha	893	325	568
VN Fakude	99	-	99
M Jordaan	465	325	140
SP Kana	950	325	625
DM Lawrence	750	325	425
MA Matooane	646	325	321
AM Mazwai	840	325	515
NP Mnxasana	735	325	410
NMC Nyembezi	2 000	2 000	-
NG Payne	933	325	608

8 311

4 600

3 711

¹ Resigned 18 May 2018 ² Appointed 1 June 2018 ³ Resigned 18 May 2018 ⁴ Resigned 18 May 2018 ⁵ Stepped down 3 August 2018 ⁶ Appointed 1 November 2018 ⁷ Appointed 1 October 2018 ⁸ Appointed 1 November 2018

⁸ Appointed 1 November 2018

	Existing fees 2018 ZAR	Proposed new fee for 2019 ZAR
Board Chairman	2 150 000	2 300 000
Non-executive director	345 000	370 000
Lead independent director	103 500	111 000
Group Audit Committee		
Committee Chairman	360 000	400 000
Member	170 000	190 000
Group Risk Management Committee		
Committee Chairman	300 000	330 000
Member	150 000	165 000
Group Human Resources Committee		
Committee Chairman	270 000	300 000
Member	135 000	150 000
Group Social and Ethics Committee		
Committee Chairman	220 000	240 000
Member	110 000	120 000
Group SRO Oversight Committee		
Committee Chairman	270 000	300 000
Member	135 000	150 000
Group Nominations Committee		
Member	65 000	65 000
Ad hoc (per meeting)	25 000	25 000

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The table below sets out the audited single-figure remuneration for executive directors and other executives. These executives are prescribed officers within the meaning of the Companies Act.

(R'000)

		Guaranteed	Annual	Long-term	Total
Name	Year	рау	incentives	incentives	remuneration
Executive directors					
NF Newton-King	2018	5 594	9 167	5 596	14 761
	2017	4 298	6 174	5 691	10 472
A Takoordeen	2018	2 890	2 958	2 049	5 848
	2017	2 434	1 754	2 114	4 188
Other key executives					
JH Burke	2018	3 129	2 905	2 306	6 034
	2017	2 644	1 863	2 449	4 507
LM De Villiers	2018	2 857	_	-	2 857
	2017	-	-	-	-
A Greenwood	2018	3 086	3 088	-	6 174
	2017	2 597	1 678	-	4 275
Z Jacobs	2018	2 913	2 137	1 966	5 050
	2017	2 326	1 619	2 075	3 945
D Khumalo	2018	2 283	2 212	_	4 495
	2017	2 822	1 427	-	4 249
H Kotze	2018	271	_	-	271
	2017	-	-	-	_
TJ Matsena	2018	2 088	476	-	2 564
	2017	2 250	1 639	-	3 889
D Nemer	2018	3 519	3 406	755	6 925
	2017	2 961	2 128	-	5 089
LV Parsons	2018	1 390	3 293	2 474	4 683
	2017	2 586	2 076	2 635	4 662
VH Randall	2018	1 341	1 341	181	2 682
	2017	_	_		
Total	2018	31 361	30 983	15 327	62 344
Total	2017	24 918	20 358	14 964	45 276

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Further reading

» Note 26 in Annual Financial Statements

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SHAREHOLDER INFORMATION

SHAREHOLDER DIARY

Events or reports in relation to the 2018/2019 financial year:

Release of summarised annual financial statements with the declaration of a dividend	28 February 2019
Annual results presentation	1 March 2019
Record date to determine which shareholders are entitled to receive the AGM notice	15 March 2019
Publication of 2018 integrated annual report	25 March 2019
Record date for annual general meeting	17 May 2019
Annual general meeting	22 May 2019
Release of summarised interim report for the six months ended 30 June 2019	30 July 2019

ORDINARY AND SPECIAL DIVIDEND

A gross ordinary and special dividend ("dividend") of 655 cents and 185 cents per share, respectively, was declared and approved by the Board on 28 February 2019. Refer to the annual financial statements available online at ir.jse.co.za/results/annual-reports.

Dividend declaration date	28 February 2019
Last day to trade JSE shares cum dividend	18 March 2019
JSE share commence trading ex-dividend	19 March 2019
Record date to participate in the dividend	22 March 2019
Payment date of dividend	25 March 2019

Share certificates may not be dematerialised or rematerialised from Tuesday, 19 March 2019, to Friday, 22 March 2019, both days inclusive.

SHARE INFORMATION

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

Share code:	JSE
ISIN:	ZAE000079711
Sector:	Financial Services
Subsector:	Investment Services

	Shares in issue	Closing price (R)	Market capitalisation (R)
31 December 2017	86 877 600	153,84	13.4 billion
30 June 2018	86 877 600	162,11	14.0 billion
31 December 2018	86 877 600	165,56	13.1 billion

SHAREHOLDER SPREAD AS AT 31 DECEMBER 2018

	Number of		
	shareholders	Shares held	%
Public			
Institutional shareholders		69 896 955	80.5
Non-institutional shareholders		6 849 104	7.9
Total	5 456	76 746 059	88.4
Non-public			
JSE Empowerment Fund Trust	43	2 170 299	2.5
JSE LTIS Trusts	44	1 862 560	1.6
JSE Bonus Share holdings	368	95 926	0.1
Directors and Company Secretary	8	110 901	0.1
Total	463	4 239 686	4.3
Total identified shares		80 985 745	92.7
Miscellaneous (below threshold)		5 891 855	7.3
Total share capital	5 919	86 877 600	100.0
Geographic ownership			
South Africa		28 447 645	32.8
United States		20 797 100	24.0
United Kingdom		17 742 514	20.4
Sweden		1 590 052	1.8
Finland		331 368	0.4
Rest of Europe		455 692	0.5
Rest of world		532 584	0.6
Total		69 896 955	80.5

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

Beneficial shareholdings

Pursuant to the Companies Act the following beneficial shareholdings equal to or exceeding 4% as at 31 December 2018 were disclosed or established from enquiries:

		% of total
	Number of ordinary	issued ordinary
Names	shares held	shares
Public Investment Corporation (SOC) Limited	9 363 989	10.8
Investec Asset Management (Pty) Ltd.	6 053 447	7.0
Somerset Capital Management, L.L.P.	4 808 192	5.5
Neuberger Berman, LLC	4 087 718	4.7

No individual shareholder's beneficial shareholding in any 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 2018, the following fund managers were responsible for managing investments of 2.5% or more of the share capital of the JSE:

	Number of ordinary	% of total
Names	shares held	issued
Public Investment Corporation (SOC) Limited	9 363 989	10.8
Investec Asset Management (Pty) Ltd.	6 053 447	7.0
Somerset Capital Management, L.L.P.	4 808 192	5.5
Neuberger Berman, LLC	4 087 718	4.7
Abax Investments (Pty) Limited	3 527 648	4.1
Capital International, Inc.	3 112 721	3.6
The Vanguard Group, Inc.	3 056 514	3.5
Dimensional Fund Advisors, L.P.	2 513 094	2.9
Oldfield Partners LLP	2 344 405	2.7
PSG Asset Management (Pty) Ltd	2 229 316	2.6

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CORPORATE INFORMATION AND DIRECTORATE

JSE Limited

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

Registered office

One Exchange Square 2 Gwen Lane Sandown, 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 2018

NMC Nyembezi¹ (Chairman) ZMB Bassa¹ F Daniels¹ VN Fakude¹ M Jordaan¹ Dr SP Kana¹ FN Khanyile¹ BJ Kruger² DM Lawrence² MA Matooane¹ NF Newton-King (CEO)³ A Takoordeen (CFO)³

¹ Independent non-executive director

- ² Non-executive director
- ³ Executive director

Alternate director

JH Burke

Transfer secretary

Computershare Investor Services (Pty) Ltd Rosebank Towers 15 Biermann Avenue Rosebank, 2196

Sponsor

RAND MERCHANT BANK (A division of FirstRand Bank Limited) 1 Merchant Place Corner Fredman and Rivonia Road Sandton, 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

Group company secretary

GA Brookes

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