

**JSE LIMITED INTEGRATED  
ANNUAL REPORT**

FOR THE YEAR ENDED 31 DECEMBER 2019

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The JSE Limited (the Group or the JSE) presents its 2019 integrated annual report. Refer to page 106 for information regarding the scope and compilation of this report.

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## REFLECTIONS FROM OUR CHAIRMAN

We seek to deliver, on a sustainable basis, financial performance that generates competitive returns and creates long-term value for shareholders.

2019 was another challenging year for both the global and local capital markets, with political and macro-economic tensions weighing on sentiment. During the year, rising trade disputes between the USA and China heightened policy uncertainty and weighed on international trade, confidence and investment. The economic impact of the trade war had a wide impact with global growth weakening to an estimated 2.4%. According to the World Bank this was, at the time, the lowest rate of expansion since the global financial crisis.

The trade tensions between the USA and China provide a catalyst for African nations to strive for a more self-reliant continent by taking it upon themselves to grow their trade with each other. Africa, as a whole, must continue to develop its internal links, embrace digital technology, and ensure that its people have the necessary skills and resources to participate in and benefit from the increasingly rapid changes in the global economy.

However, the global political and macro-economic environment is complex and volatile and the risks to growth and pressure on emerging markets keep rising. In South Africa, policy uncertainty and recessionary conditions continue to prevail. At the end of 2019, only Moody's had not reduced South Africa's rating to

sub-investment grade. However, the Moody's outlook for the country's rating was negative at the time and the threatened downgrade came to fruition after the end of the JSE's financial year. Moody's noted that South Africa's continued deterioration in fiscal strength and structurally weak economic growth supported its decision to downgrade. The agency expects government's gross debt ratios to climb to 91% of gross domestic product (GDP) and the government deficit to widen to 8.5% of GDP in the near term. South Africa's debt rating is now rated below investment grade by all major ratings agencies.

The biggest impact of the downgrade is seen in the bond market with South African government bonds having fallen out of the World Government Bond Index (WGBI), during the April 2020 rebalancing. According to National Treasury data, foreign investors own 37%, which is approximately R780 billion, of South Africa's local currency bonds.

The continued lack of confidence in governance in South Africa has undermined the investment case for the country. It has become very clear that investment and sound governance go hand in hand. State-owned entities (SOEs) play a pivotal role in the economic advancement, growth and development of South Africa.



Page reference for additional reading in this report.



Reference to online data at [www.jse.co.za](http://www.jse.co.za).



Indicates the relevant King IV principle, which is summarised on page 108.



It is therefore imperative that SOEs are well governed and perform efficiently. However, over the years, ineffective governance of SOEs such as Eskom has led to maladministration, allegations of state capture, corruption and financial crises. This has harmed the economy and undermined the public good. Strengthening governance and institutional frameworks is an important start towards addressing the crisis of confidence we currently face.

The increased scrutiny applied to the regulatory and governance role of the JSE prompted us to re-examine our role, particularly in the context of our Listings Requirements. During September 2018 we issued a consultation paper with a view of clarifying our regulatory role and enhancing the JSE Listings Requirements. Flowing from this consultation we implemented enhancements to the JSE Listings Requirements effective 2 December 2019. To strengthen investor protection mechanisms we also proposed amendments to the debt listings requirements, with another round of public consultations taking place in January 2020. The proposed amendments aim to align the sound and tested mandatory corporate governance provisions of the equity listings requirements with the debt listings requirements as well as incorporating the King IV principles by the adoption of the “apply and explain” principle. A summary of salient initiatives to improve the perception and the quality of our regulation is set out on  pages 66 to 69.

Over time, we have witnessed repeated announcements of proposed reforms and action plans aimed at restructuring and rescuing SOEs. However, these plans have been debated for too long. If we are to have any hope of attracting substantial new investment into the country, the time has come for these plans to be backed by speedy implementation.

Furthermore, in order to achieve the urgent structural reforms required to provide a sustainable improvement in the living standards of all South Africans, it is time for government to partner with the private sector to drive the developmental agenda. The private sector has the incentive, skills and resources to build businesses that employ people and build the wealth of the country. However, it cannot do this on its own; it needs policy certainty from government. A reform programme centred on a public-private, partnership-driven developmental agenda has the best chance of delivering the necessary economic reforms to address the challenges of low growth and high unemployment. We are alive to our responsibilities as a corporate citizen and committed to making a constructive contribution to this country. To this end, the work we do, whether on the SA Tomorrow Investor Conference or with Business Leadership South Africa, remains a privilege. We continue to work intensively with key ministers, regulators and clients to position South Africa favourably with local and foreign investors and agencies.

### GROWING SHARED PROSPERITY

The JSE is uniquely positioned as a critical product and service provider to South Africa’s financial markets; a connector between those who provide capital, those who need capital to fund their businesses, those who rely on returns for short, medium or long-term purposes and as a frontline regulator of the financial markets that it operates. We believe our role as a connector enables us to promote inclusive and sustainable economic growth.

It is with this in mind that we reviewed our strategy and focused our vision on growing shared prosperity to the benefit of all. Our aim is to focus more actively on diversifying revenues, particularly from inorganic opportunities, and with an emphasis on annuity



“2019 was another challenging year for both the global and local capital markets, with political and macro-economic tensions weighing on sentiment.”

rather than transactional revenues. This is in line with global trends as exchange groups worldwide continue to look for ways to diversify revenue. This ranges from focusing on new revenue sources, such as data and issuer services, to exploring emerging product opportunities, such as crypto-currency derivatives. Regulatory changes, such as those associated with the post-crisis shift to central clearing, have also created new opportunities to bring more activity on-market.

## SUSTAINABILITY

There can be no denying that climate change is one of the most profound risks facing the world. The most recent World Economic Forum (WEF) Global Risks Report illustrates that, on a global scale, the focus on risks related to the environment and natural disasters has been sharpened. Boards need to think about how they can make their organisations and related governance structures more responsive to the broader societal and environmental context.

Investors are increasingly considering environmental, social and governance (ESG) performance in their investment decision making and, as the world shifts to more sustainable practices, a number of sectors (such as agriculture and mining) could be affected. Although the JSE cannot itself address these structural economic challenges, we can pre-empt the possible impact on our business by developing products that are tailored to the direction the world and the markets are taking. In line with our commitment to sustainable and responsible ESG practices, we are expanding our offering for the listing and trading of sustainability-focused products, such as our green bonds and social impact products. A summary of salient developments in this area is set out on [pages 15 to 19](#) of our online *social value report*.

## OUR COMMITMENT TO TRANSFORMATION

At the JSE we recognise that transformation starts from within and that by becoming demographically representative in terms of knowledge, skills, experience, race, gender and disabilities, we

create a diverse workforce from different cultures, backgrounds and communities. We are committed to making a difference in the lives of South Africans by investing time, effort and money in addressing inequality and transformation in our society. We focus our transformational activities on areas believed to be relevant to the South African context (youth and community development, poverty alleviation and job creation) and relevant to the business activities of the JSE (such as enterprise development and financial literacy). We are pleased to have achieved our target level 3 Broad-Based Black Economic Empowerment (BBBEE) status for 2019. More detail is available under *transformation and socio-economic advancement* on [pages 51 to 54](#).

## TECHNOLOGY

The investor of tomorrow is a non-traditional player who is increasingly exploring new opportunities. This poses a challenge to businesses to continually change the way in which they provide services. Although the fourth industrial revolution (4IR) brings disruption, it also provides opportunities to innovate.

The exploitation of new technology has always been central to the evolution of the exchange business. Currently, this includes ongoing experimentation with blockchain (decentralised ledger technology (DLT)), digital money and the cloud. Singapore Exchange, Hong Kong Exchanges and Clearing, and the Australian Stock Exchange already have post-trade DLT initiatives. It is too early to say whether these technologies are merely enablers or will fundamentally reshape the issuing, trading, clearing and settlement of securities. We continue to watch this space closely.

In response to the technological changes taking place, we restructured our information technology (IT) division during the course of 2019 to align with the IT4IT™ operating model. The objective of this reorganisation was to create a fit-for-purpose IT division that can operate in an agile fashion, according to agile principles; is aligned with the JSE business strategy and can address the critical risks facing the JSE. As we move forward, we are aware that no organisation can digitise overnight; the intricate interdependencies between people, processes, technology and

data must be carefully considered. We need to ensure that our processes are integrated, comprehensive and involve all our stakeholders. More detail is available under *technology and information* on [pages 41 to 43](#).

## CULTURE OF TRANSPARENCY AND ACCOUNTABILITY

At the JSE, governance is more than mere compliance with relevant legislation and best-practice principles. It involves a deep-rooted culture of accountability, transparency, respect, efficiency, ethical thought and action, as well as a values-driven approach to everything we do. The Board and I aim to ensure that our governance structures are responsive to the broader environmental context, because this is important if we are to truly deliver on our vision of growing shared prosperity for our staff, clients, shareholders, regulators and society.

In the execution of its governance role and responsibilities, the Board has adopted a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders over time. Putting our stakeholders at the centre of what we do is central to our strategy, as is aligning business initiatives to expedite those that provide the most value in enhancing the stakeholder experience. We look forward to sharpening our focus by using the results from our client satisfaction survey and the contributions of our new leadership team as a springboard to refine our service offering and our commitment to sound governance. The fine points on how we actively engage with our stakeholders are set out on [pages 99 to 102](#) of this report and pages 35 to 42 of our online *social value report*.

## LOOKING AHEAD

The tragedy of the COVID-19 pandemic is having a profound effect on the lives of millions of people around the world. The threat of the disease and increasing casualties are destabilising communities, cities and countries. Recently imposed restrictions

to daily life have forced us to quickly adopt different ways of working, learning and connecting with each other. While this crisis has brought unprecedented challenges both for people and society, South Africans have demonstrated their determination, their sense of purpose, their sense of community with all sectors of our society stepping forward to confront this challenge.

On 23 March 2020, President Cyril Ramaphosa announced the Solidarity Fund, a government-led initiative aimed to unite and mobilise the nation in action to fight the pandemic and manage its impact on households and communities. The Fund is a rapid-response vehicle designed to fund impactful initiatives that will enhance the national health contributions to national humanitarian efforts. The JSE's Board and the Group chief executive officer have pledged at least 30% of their emoluments and salaries to the Solidarity Fund for a period of three months from April 2020 to June 2020.

Since the outbreak of COVID-19 the JSE has been playing its part to minimise the economic and social impact of the pandemic. The JSE has donated fees derived across all asset classes traded on 15 and 16 April 2020 as part of a campaign called the Trade4Solidarity to the Solidarity Fund. From this initiative an amount of R34.4 million was raised and pledged by the trading community. As a private commitment to heed the president's call and play our part, the JSE has committed to continue supporting its suppliers, service providers and contractors during this crucial time.

As the country continues to battle the impact of the COVID-19 pandemic, the JSE applauds President Ramaphosa's efforts to balance South Africa's fiscal challenges with the need for stimulation and growth in the economy. The government's R500 billion stimulus package, which aims to enhance both consumer and business confidence through economic and structural mechanisms, is a clear indication of government's commitment to stimulate the economy while prioritising the fight against the pandemic.

The challenges experienced during 2019 and the hardships posed by the impact of the COVID-19 pandemic in 2020 require us to achieve greater cooperation between social partners, because the challenges before us are too great for business, government or labour to deal with alone. Although the breakdown in governance and rampant corruption may have weakened the trust between social partners in South Africa and undermined our confidence in one another, we now need to work together productively to restore trust and confidence.

The years ahead must be years of steady, disciplined work, accurately measured and properly accounted for. To take our country forward, patience and urgency must be combined, as must idealism and pragmatism. South Africa's trade and investment links to the increasingly dynamic and sophisticated economies of the continent must continue to develop, and we must be at the forefront of regional integration. It is with this in mind that we, at the JSE, will execute our strategy with speed and discipline and continue to rapidly improve our service offerings and technology to serve our clients with consistent excellence.

## APPRECIATION

I wish to convey my heartfelt appreciation at how our market participants rallied together to join forces, as the capital market ecosystem, and contribute towards the Solidarity Fund. The money raised will no doubt touch many lives that have been impacted by the coronavirus. Indeed we are stronger together.

2019 was in many ways a year of transition for the JSE – from older technology to the new ITaC platform, from an organic focus to the proposed acquisition of Link Market Services SA Proprietary Limited (subject to Competition Tribunal hearings), as well as a transition at the executive leadership level.

Passing of the executive leadership baton often poses a challenge for organisations. I am pleased to welcome our new Group chief executive, Dr Leila Fourie, and to acknowledge the smooth and effective handover of executive responsibility.

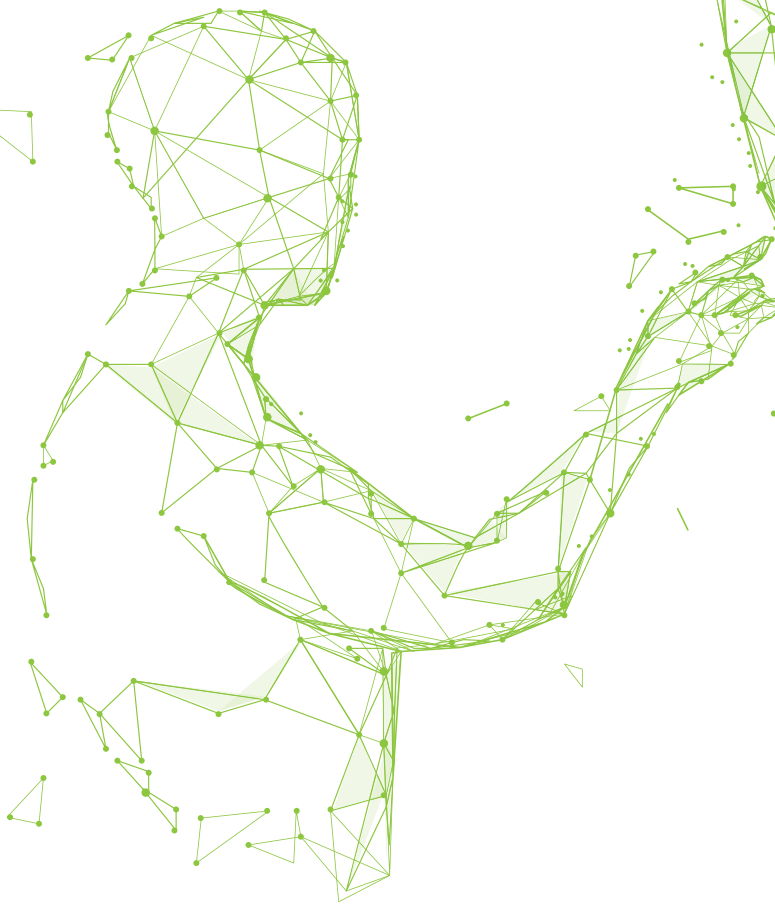
I would also like to take this opportunity to thank our former Group CEO, Nicky Newton-King, for her dedication. We are grateful to her for her energy, skills and deep commitment over 23 years in building the JSE into the successful business it is today.

To my fellow Board members, I wish to express my deep gratitude for your support and wise counsel. I wish to thank the executive team, under the leadership of Leila Fourie, for its continued commitment and ethical leadership in pursuing our Group strategy. I particularly want to thank David Lawrence, a non-executive director since 2008, for his commitment and contribution to the Board over many years. David retires as a director at our upcoming AGM. Similarly I offer my thanks to Michael Jordaan for his insights and support as a non-executive director since 2014. Michael also steps down at the AGM. Siobhan Cleary has been appointed as an independent non-executive director effective 1 February 2020, and we look forward to her contribution in the years ahead.

As we reflect on last year and look forward to the second half of 2020, I would like to thank all of my colleagues at the JSE for their energy, resilience and dedication. I am confident that the JSE is well positioned to continue delivering value to all its stakeholders, and contributing to our vision of growing shared prosperity in a way that changes lives – one day at a time.



**Nonkululeko Nyembezi**  
Chairman



**BOARD APPROVAL**



The directors of the JSE acknowledge responsibility for the integrity of this integrated annual report. The Board, supported by the Group Audit Committee (GAC), endorsed the reporting frameworks used 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*

**Dr Suresh Kana**

*Lead independent non-executive director*

**Zarina Bassa**

*Independent non-executive director*

**Fatima Daniels**

*Independent non-executive director*

**Nolitha Fakude**

*Independent non-executive director*

**Dr Michael Jordaan**

*Independent non-executive director*

**Faith Khanyile**

*Independent non-executive director*

**Ben Kruger**

*Non-executive director*

**David Lawrence**

*Non-executive director*

**Dr Mantsika Matookane**

*Independent non-executive director*

**Dr Leila Fourie**

*Group Chief Executive Officer (CEO)*

**Aarti Takoordeen**

*Chief Financial Officer (CFO)*

# HOW THE JSE CREATES VALUE

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The JSE is a self-regulatory<sup>1</sup> multi-asset class stock exchange that offers listings, trading, clearing and settlement (post-trade), and information services, as well as company 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 marketplace for the trading of financial products for 133 years.

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 (SARB) and is responsible for the prudential supervision of banks, insurance companies and market infrastructures (such as exchanges and clearing houses). The FSCA is responsible for the supervision of the conduct of financial institutions, including market infrastructures, and replaced the Financial Services Board.

The JSE is a member of the World Federation of Exchanges (WFE), the Committee of SADC Stock Exchanges (CoSSE) and the African Securities Exchanges Association (ASEA). We are also a founding member of the Sustainable Stock Exchanges Initiative (SSEI).

**The JSE is uniquely positioned as a**

- » critical product and service provider to South Africa's financial market;
- » 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; and
- » frontline regulator of the financial markets that it operates.

**Market capitalisation**  
**R10.4 bn**  
(JSE Limited)

**Average liquidity<sup>2</sup>**  
**54%**  
(JSE Limited)

**Securities available on the JSE**  
**946**

**Companies listed on the Main Board**  
**312**

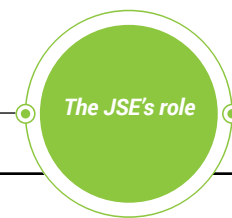
**Foreign domiciled companies**  
**71**

<sup>1</sup> The JSE is a self-regulatory organisation, licensed in terms of section 8 of the Financial Markets Act, 2012 and responsible for regulating the financial markets that it operates.

<sup>2</sup> Liquidity is the ratio between total value traded and market capitalisation annualised.

# AN OVERVIEW OF VALUE CREATION AT THE JSE

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.



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 marketplaces for raising capital and connecting buyers and sellers.

### The South African context

South Africa is a developing country with a number of social and economic challenges:

- » Low growth, high unemployment and high levels of inequality
- » High and increasing dependence on social welfare payments for income
- » Increasing government debt and a growing current account deficit
- » Low levels of domestic savings

*The solution to all of these challenges lies directly or indirectly in financing.*

**As a critical service provider to South Africa's financial markets**, the JSE provides a cost-effective, efficient, well-regulated, transparent and trusted platform for financial transactions to take place. These contributions are among the tools needed to spur growth and deal with the challenges South Africa faces, as well as to enable value creation.

As a multi-asset class exchange, the JSE enables investors, companies and governments to transact in equities, bonds and derivatives. See [pages 45 to 50](#) for our products and services.





*The JSE's role*

**As an interface between those who provide capital and those who need capital**, 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.

*The JSE's key differentiating factors*

- » Largest stock exchange by market capitalisation in Africa
- » Robust regulation
- » Market quality (liquidity, price and speed)
- » Highly cash generative
- » Growing diversified revenue stream
- » Thought leader in the economic, social and governance space

*Value created*

**The JSE's role helps South Africa to do three things**

1. Raise capital efficiently: Raise finance for companies and government from both domestic and international pools of capital
2. Manage risk
3. Create wealth: Gain access to a mechanism for sustainable wealth creation

**Potential outcomes and impacts**


- » Economy: Finance to help balance the current account deficit and less reliance on public debt to balance national accounts
- » Government: Finance for development
- » Companies: Finance for growth and risk management
- » Investors: Opportunities for wealth creation
- » More stable economy and sustainable economic growth
- » More public spending on South Africans


**Value created for ordinary South Africans**

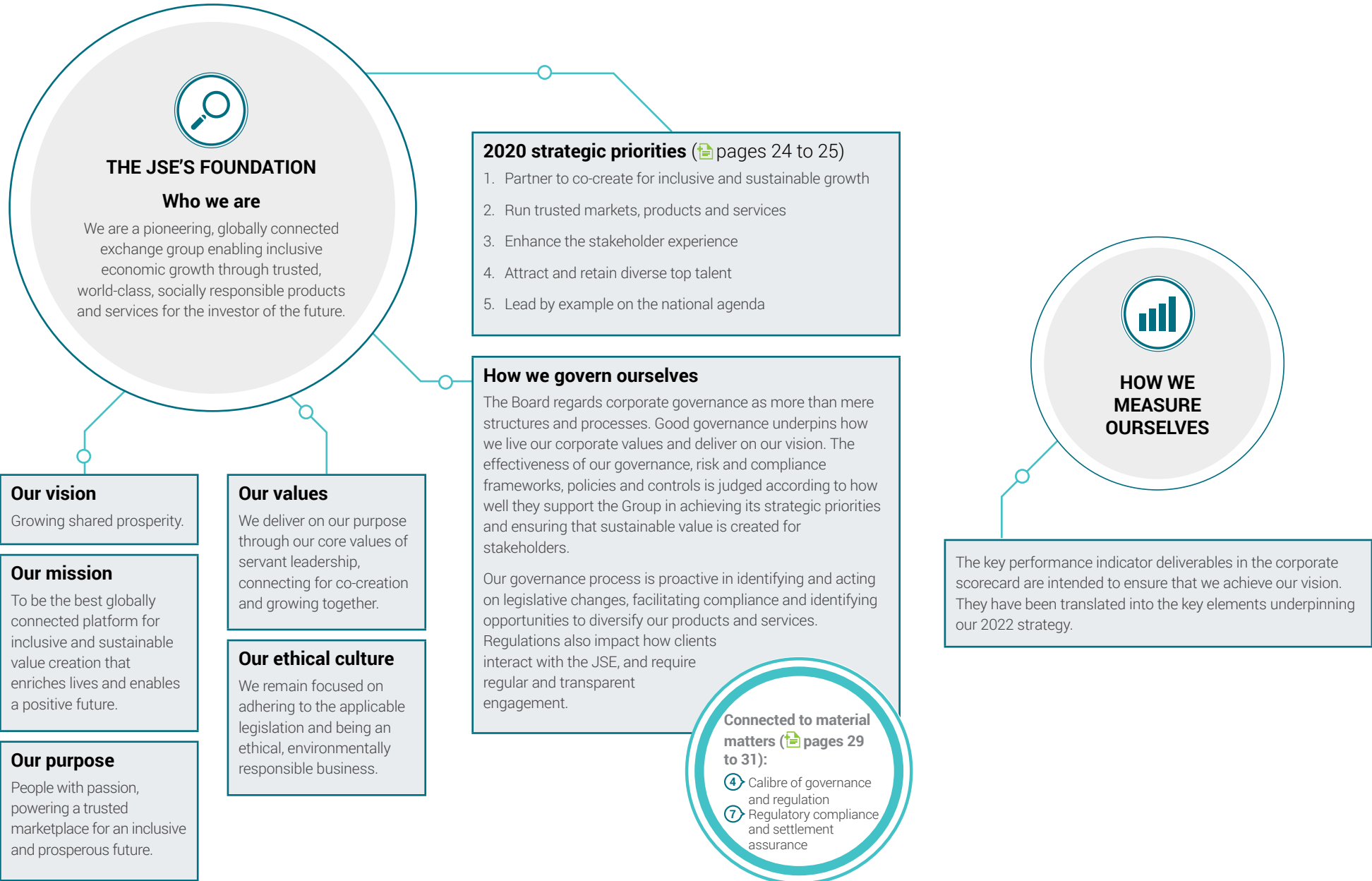
Many South Africans invest directly on the JSE. Millions also invest indirectly through their pension funds, insurance policies and unit trusts. This provides South Africans with savings and security in retirement.

# BUSINESS MODEL



 The **foundation** for how we do business is built on our vision, values and ethical culture, and on how we approach governance.

 We **measure** ourselves through our corporate scorecard.



### THE JSE'S FOUNDATION

#### Who we are

We are a pioneering, globally connected exchange group enabling inclusive economic growth through trusted, world-class, socially responsible products and services for the investor of the future.

### 2020 strategic priorities (pages 24 to 25)

1. Partner to co-create for inclusive and sustainable growth
2. Run trusted markets, products and services
3. Enhance the stakeholder experience
4. Attract and retain diverse top talent
5. Lead by example on the national agenda

### How we govern ourselves

The Board regards corporate governance as more than mere structures and processes. Good governance underpins how we live our corporate values and deliver on our vision. The effectiveness of our governance, risk and compliance frameworks, policies and controls is judged according to how well they support the Group in achieving its strategic priorities and ensuring that sustainable value is created for stakeholders.

Our governance process is proactive in identifying and acting on legislative changes, facilitating compliance and identifying opportunities to diversify our products and services. Regulations also impact how clients interact with the JSE, and require regular and transparent engagement.

#### Connected to material matters (pages 29 to 31):

- 4 Calibre of governance and regulation
- 7 Regulatory compliance and settlement assurance

### HOW WE MEASURE OURSELVES

The key performance indicator deliverables in the corporate scorecard are intended to ensure that we achieve our vision. They have been translated into the key elements underpinning our 2022 strategy.

#### Our vision

Growing shared prosperity.

#### Our mission

To be the best globally connected platform for inclusive and sustainable value creation that enriches lives and enables a positive future.

#### Our purpose

People with passion, powering a trusted marketplace for an inclusive and prosperous future.

#### Our values

We deliver on our purpose through our core values of servant leadership, connecting for co-creation and growing together.

#### Our ethical culture

We remain focused on adhering to the applicable legislation and being an ethical, environmentally responsible business.



Capital Markets is responsible for operating the markets under the JSE's exchange licence.

**Primary Market**

Seeks new equity and debt listings on the JSE's Equity and Interest Rate markets.

**Secondary Market**

Provides trading, colocation and client support services in the Equity, Bonds, Financial Derivatives and Commodity Derivatives markets.

- » *The 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 (exchange-traded funds (ETFs) and exchange-traded notes (ETNs)).
- » *The Equity Derivatives Market* includes index and single-stock futures and options, can-do futures and options, exchange-traded contracts for difference (CFDs) and other sophisticated derivative instruments.
- » *The Commodity Derivatives Market* offers a range of cash-settled and denominated derivatives on various local and international benchmark commodities, including softs, energy and various metals, as well as beef carcass, Mexican white maize, lamb carcass and wool futures contracts.
- » *The Currency Derivatives Market* offers derivative instruments on a range of currencies.
- » *The Interest Rate Market* provides cash bonds, floating rate notes, commercial paper and hybrid instruments, interest rate derivatives and a green bond segment.



Post-Trade Services is responsible for the risk management, clearing and settlement assurance of markets operated by the JSE. The JSE acts as the settlement authority for the exchange-traded Equity Market and as the clearing house for the exchange-traded Derivatives Market (via the central counterparty (CCP), JSE Clear Proprietary Limited (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 managing the broker dealer accounting (BDA) Back-Office Services for the Equity 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 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 and statistics. Information Services is responsible for the promotion, licensing and sale of all JSE information products and services across all JSE markets, currently weighted towards the Equity Market.

**Company Services**

Company Services provides the following services for our listed companies:

- » Venue hire for results presentations and investor engagements;
- » The JSE Training Academy to assist stakeholders on their JSE journey, including corporate governance training; and
- » Annual general meeting (AGM) facilitation, which includes proxy solicitation, electronic voting and minute taking services.

**Technology**

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

**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.

**WHAT WE REQUIRE TO DELIVER OUR PRODUCTS AND SERVICES (MATERIAL INPUTS)**

**Financial resources to operate the business and support growth, expansion and innovation** (📄 pages 32 to 40)

Our financial resources are deployed in a variety of ways, including paying the required operational and capital expenses to operate the business effectively and efficiently. This includes, for example, the required investment in our technology platforms, appropriately remunerating employees and attracting and retaining the skills we need, as well as adequately capitalising our derivatives clearing house (JSE Clear) and our Equity Market.

**Skilled employees who can deliver on the JSE's strategy** (📄 pages 55 to 59)

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.

**Clients who view the JSE and South Africa as an investment destination of choice** (📄 pages 16 and 17)

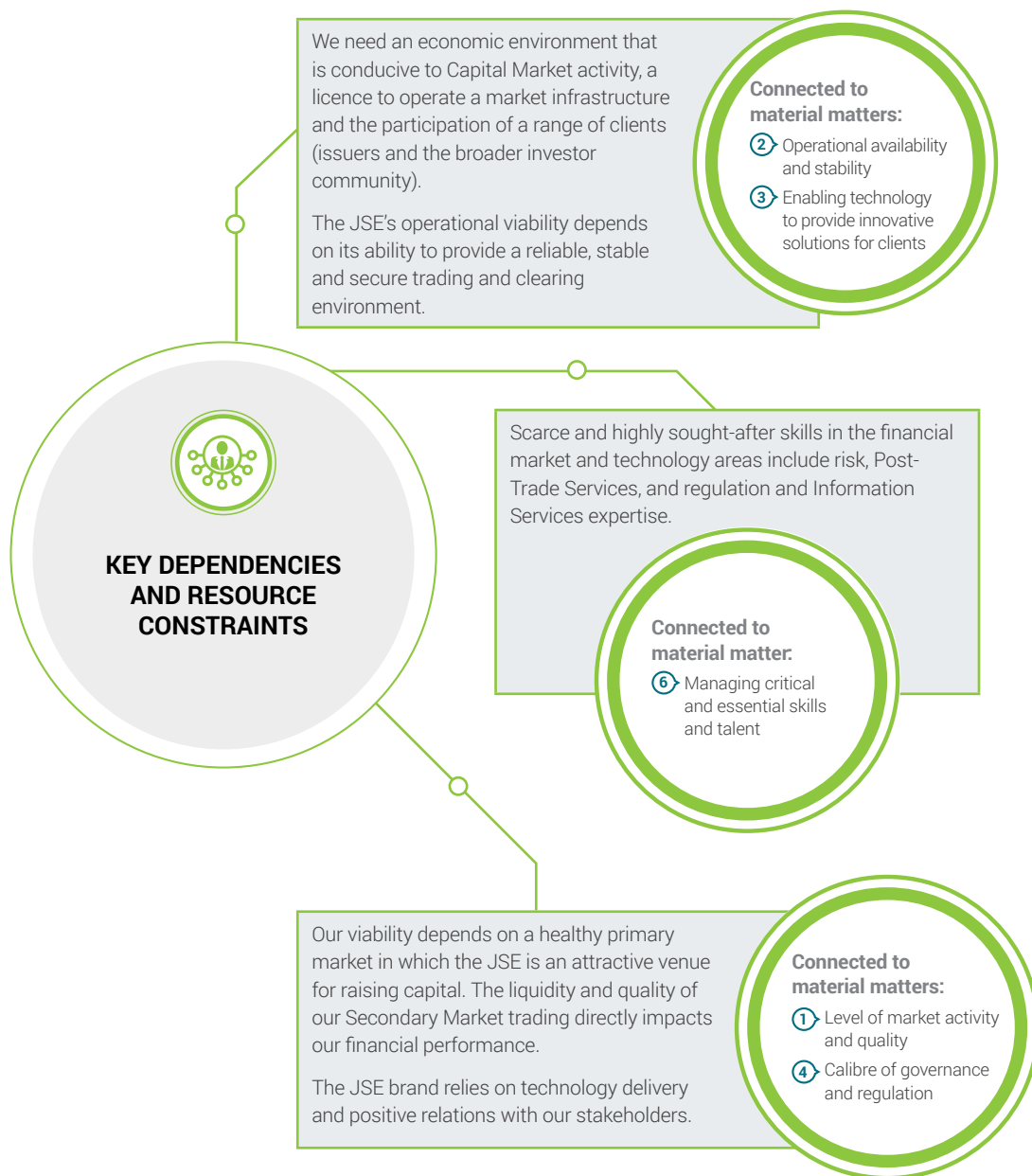
We need foreign and local clients to raise capital through the Exchange, invest in our products and use our services.

**Connected to material matter:**

- 8 Concentration and interdependency of the Capital Market ecosystem

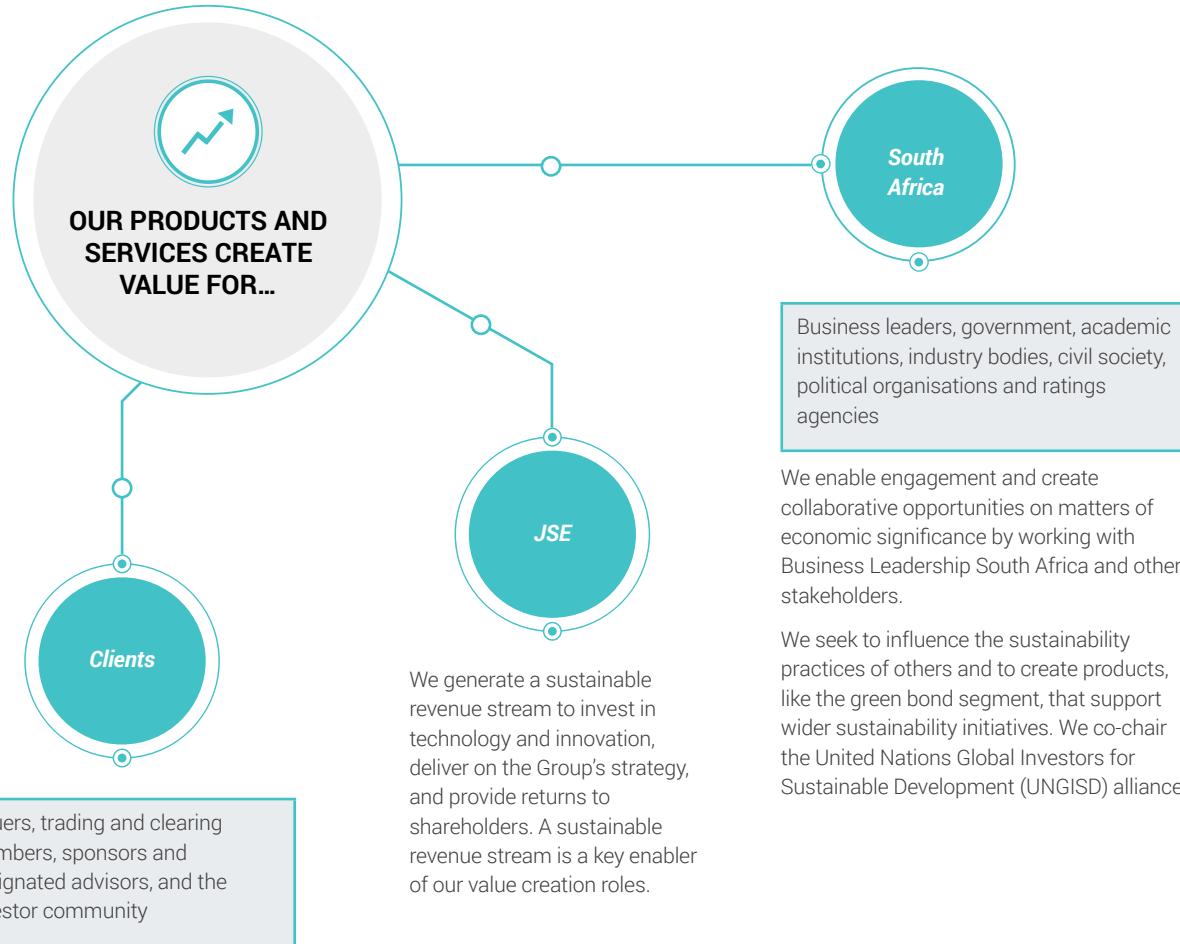
**Technology that enables the delivery of products and services in a secure, stable environment** (📄 pages 41 to 43)

We need the necessary IT systems and infrastructure to securely process transactions between buyers and sellers, and process analytical data to support our Information Services, as well as to regulate our Primary and Secondary markets.

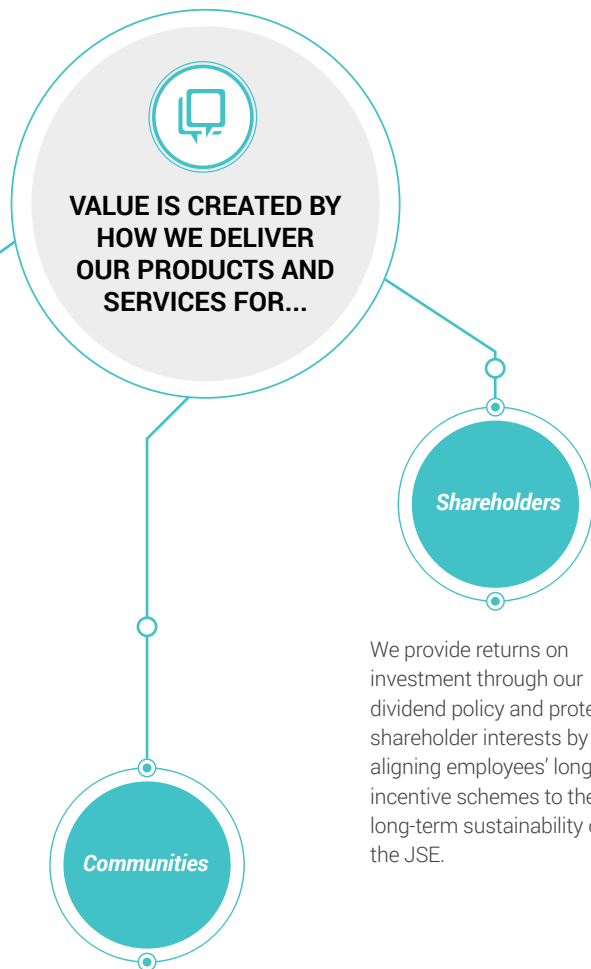




## VALUE CREATED FOR OUR STAKEHOLDERS



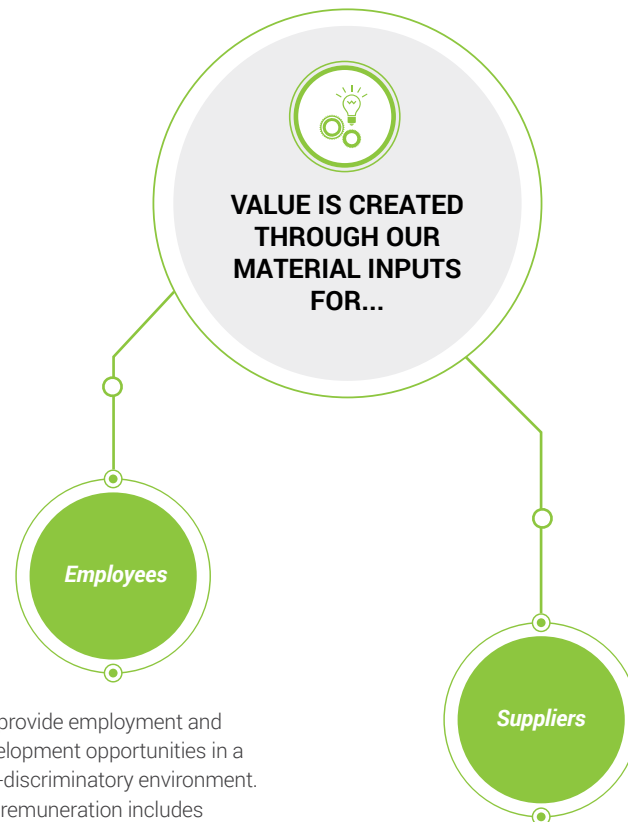
We provide a trusted and well-regulated platform to raise finance and provide access to investment products as well as information and issuer services. We provide minimum entry and disclosure requirements for listed companies to assist investors to make informed decisions.



We are fully supportive of a robust regulatory environment, and we engage with international and local standard setting bodies, policy makers and regulators, providing our unique insights to policy or regulatory initiatives that may affect the efficiency and integrity of the South African financial markets.

We provide financial literacy programmes and various training initiatives in disadvantaged communities to enable upliftment and development.

We provide returns on investment through our dividend policy and protect shareholder interests by aligning employees' long-term incentive schemes to the long-term sustainability of the JSE.



We provide employment and development opportunities in a non-discriminatory environment. Our remuneration includes various benefits and incentive schemes to enhance value to employees.

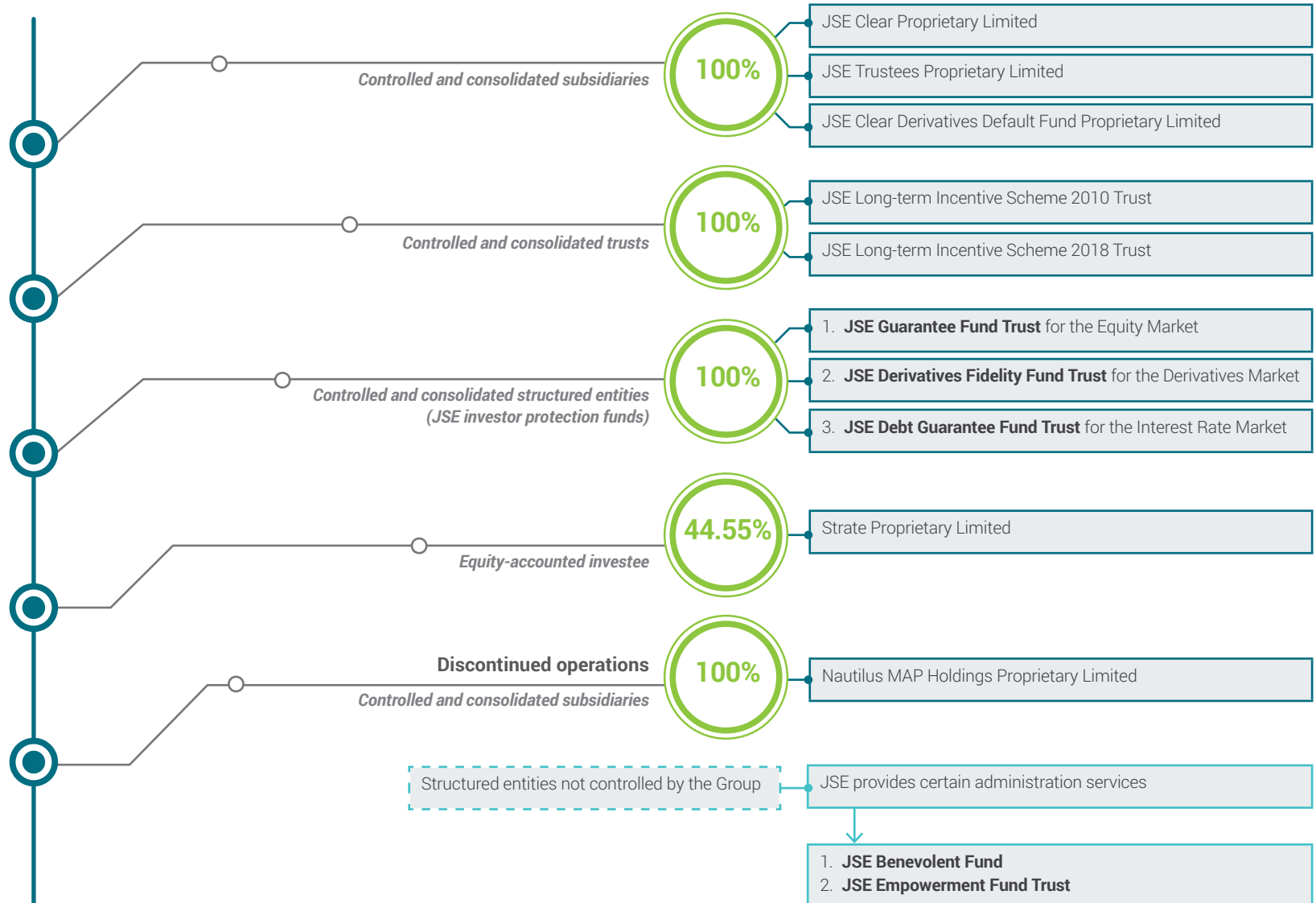
Payment for products and services leads to business growth and wealth creation for suppliers. The JSE's supplier development initiative helps small and medium enterprises (SMEs) to expand their customer base, increase turnover and profitability, and scale their operations to be more sustainable. These SMEs should then be able to participate in the corporate supply chain.





# GROUP STRUCTURE

JSE LIMITED





## THE VALUE WE CREATED IN 2019 AND WHERE WE ARE GOING

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## GROUP CEO'S REVIEW

Even though 2019 was a demanding year of transition, it saw the successful delivery of our multi-year Integrated Trading and Clearing (ITaC) technology project.

Over the course of 2019, we navigated choppy trading conditions in several of our markets, delivered our ITaC project and announced our intention to acquire Link Market Services South Africa Proprietary Limited (Link SA). In addition to this, we managed an executive leadership transition. 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.

During 2020 thus far, I have spent much of my time reflecting on the long-term impact of the COVID-19 pandemic and the associated lockdown on our already struggling economy. It is with this in mind that I have contemplated the role of the JSE and, by association, the broader financial markets ecosystem in rebuilding our country's economy. In its 133-year history, the JSE has demonstrated resilience through two world wars, the Great Depression and many global and local economic crises. The South African capital markets are deep and liquid, supported by a sophisticated and significant institutional client base with 75% of assets held onshore, thus forming a natural bedrock to our liquidity. For many years, we have punched well above our weight in relation to the emerging market economy in which we operate. The JSE has proven to be operationally and financially resilient during the COVID-19 pandemic. We are privileged to be participants in this industry, and privilege confers an obligation.

### 2019 COUNTRY AND MARKETS OVERVIEW

Local and international political and macro-economic factors made the 2019 operating environment challenging. Political uncertainty was the order of the day in the run up to the elections in May, followed by a subsequent lack of clear policy and execution on the part of government.

Concerns about a lack of economic growth, fiscal consolidation and increasing levels of government indebtedness reduced investors' appetite for South African exposure. This manifested in a sell down in South African assets and muted market activity.

The inclusion of Argentina and Saudi Arabia and the increased weighting of China in the MSCI and FTSE indices resulted in a down weighting of South Africa in these indices.

During the first half of 2019, there was a drop off in capital-raising activity on exchanges, with a decline in global initial public offerings (IPOs). In developed markets with tech-related listings, this rebounded somewhat in the second half. Although the JSE's five listings were largely the result of unbundlings, substantial value was unlocked for investors and overall market capitalisation of all entities listed on the exchange increased by 38%.

The Equity Market's value traded was lower overall than in 2018 (-2%), although we did see renewed activity in the second half of 2019. The increased number of transactions (+10%) reflects smaller trades, typical of low-latency business. Activity, mainly on the part of internationals, picked up in the second half of the year. However, this activity reflected a drive by foreigners to reduce country exposure to South Africa. Local participants remained underweight in equities and foreigners sold down, resulting in a total net outflow of R114 billion, more than double that of 2018 (-R52 billion).

Equity Derivatives' value traded increased by 2%. Activity remained muted, although hedge activity increased, as did the level of the index, which supported higher value traded.

There was sustained activity on the Bond Market during 2019, despite the threat of a ratings downgrade, with inflows underpinned by a relatively appealing interest rate carry. Bond

activity increased nominally, while net foreign sales reduced, with a moderate outflow of R22 billion versus the prior year net outflow of R109 billion. Nominal value grew on the back of global uncertainty and foreign activity in emerging market assets, and we also saw an increase in activity in the repo market. Geopolitical factors had a significant impact on the global yield outlook, resulting in increased volatility and volumes. We did, however, see a deleveraging in risk, with a concomitant decrease in the trading of interest rate derivatives contracts.

The rand remains one of the most volatile currencies globally. Despite this, FX value traded was down (-7%), but open interest was up (7%), compared with last year. This decline in activity was partly attributable to uncertain political and poor macro-economic environments, and partly to a competing USD/ZAR product from the CME Group (a global derivatives exchange group), which saw an uptick in volumes. The majority of local trade activity was confined to increased hedging and reduced speculation.

The Commodity Derivatives Market experienced a pick up in value (+19%) and contracts (+2%) off a lower base, although open interest was lower (13%). The market was characterised by volatility in the local grains market, created by weather uncertainty as well as heightened activity in international grains products owing to floods in the USA in the first and second quarters. There was also noticeable speculative activity in local grains.

## DURING THE COURSE OF 2020

As President Cyril Ramaphosa noted in his address to the nation on 23 March 2020, the JSE is an essential service providing critical market infrastructure and maintaining economic momentum. The depth and liquidity of capital markets ensure the financial sector can support the real economy during times of crisis, which is vitally important in the current situation, where the level of volatility has been comparable to that caused by the global financial crisis of 2008, with one-day losses approaching levels last seen during the Asian crisis of 1997.

South Africa is feeling the real impact of the rising infection and mortality numbers as a result of the COVID-19 pandemic, both in its communities and in its economy. During this time, the Exchange will play an essential role, enabling price transparency and trading out of positions, and providing access to capital. As a destination for international investment, the JSE must ensure that

the channels remain open and integrated into major global exchanges and over the counter (OTC) markets.

Since the COVID-19 outbreak started in South Africa, the JSE has been #PlayingItsPart in contributing socially to help minimise the economic and social impact of the pandemic on communities, the JSE's stakeholders and the youth. The COVID-19 crisis has highlighted the already high and mounting unemployment and inequality in South Africa. This led to the creation of the #Trade4Solidarity initiative. We put out a call to our market participants and I am humbled by the way everyone has rallied together, as the capital markets ecosystem, in a joint effort to donate to the Solidarity Fund. To all who participated, and to those who have contributed in their personal capacities, I salute you and thank you for your support.

The Exchange has made changes to its circuit breakers, which trigger temporary halts in securities trading during market volatility, providing investors with a breathing space in which to gain a better understanding of market conditions. These have proven to be valuable mechanisms and will continue to be monitored and further reviewed, if the situation warrants this.

The decision by Moody's in March 2020 to downgrade South Africa's long-term foreign and local currency debt ratings to Ba1 from Baa3 and maintain its negative outlook was unfortunate, although not unexpected. The impact to the market was, however, muted as the information value of COVID-19 exceeded that of the ratings agencies. The fiscal stimulus and monetary policy response is welcomed and the COVID-19 pandemic provides an important catalyst for policy and macro-economic reform – a vital component to enable economic growth in the country.

## FINANCIAL PERFORMANCE

Despite the constrained operating environment in 2019, the Group continues to be strongly cash generative. The implementation of ITaC, the streamlined employee complement and the proposed Link SA acquisition have created a strong base on which to build and grow the business.

We will focus on driving revenues, particularly from new lines of business beyond equity market trading, with an emphasis on annuity revenues. Capex will be directed towards revenue-generating and growth initiatives. Cost control to maintain operating margins will remain a key focus.




- » CFO's financial review on pages 32 to 40
- » Our operating environment and operational performance on pages 44 to 50
- » Regulation and policy on pages 66 to 68
- » Material matters impacting value creation on pages 29 to 31





## JSE REGULATORY HIGHLIGHTS

In response to the various corporate scandals in 2018, we have engaged extensively with parliament and other public forums on our regulatory responsibilities. This engagement continued throughout 2019 and we will continue engaging to raise market perceptions and regulatory quality. A summary of salient developments is set out on  pages 66 to 68.

### JSE Listings Requirements consultation paper

In September 2018, the JSE released a consultation paper for public comment. It was aimed at addressing the concerns of the South African investment community and also sought to challenge all participants in the broader financial market ecosystem to consider their part in ensuring the integrity of South African financial markets. In particular, these role-players were challenged to consider roles that fall outside of the JSE's regulatory ambit, including the disclosure of short sales; the disclosure of progress on market abuse investigations; and the responsibilities of other guardians of governance, such as boards of directors, audit firms, analysts, large asset managers and shareholders.

We have implemented changes to the JSE Listings Requirements flowing from this consultation paper and they came into effect on 2 December 2019.

## PUTTING CLIENTS AT THE CENTRE OF WHAT WE DO

Our stakeholder engagement remains strong and active. Engaging with clients has taken priority during this time. We are keeping our clients' needs and the concerns raised in their dealings with us front and centre as we sharpen our strategic focus. In addition to this, we chalked up a number of achievements during the year that will enable us to serve our clients better.

### ITaC project

Our standout technology delivery was the successful implementation of the ITaC project for the Equity Derivatives and Currency Derivatives markets in April 2019. This project required a significant investment in capital, corporate energy and commitment, as well as the support of our member firms. Although we had to devote time and attention to addressing

post-implementation issues, the overall conclusion is that ITaC represents a significant milestone on our technology journey and has created a foundation on which to build and grow our markets.

### Improve quality and client support for valuations

The new valuations input system (VIS) delivered through ITaC has brought significant automation to equity and currency derivative valuation processes. Valuations errors which resulted in sub-standard service was a material concern highlighted by our key constituents during my engagements with the market – automation and improved service delivery was therefore a major priority for the exchange. Certain manual processes are now fully automated and certain legacy systems have been decommissioned. These transformations have improved our ability to deliver services within service level agreements thus translating into more efficient markets and improved customer satisfaction.

### Equity trading safe haven functionality

Enhanced and new functionality was delivered in September and November 2019, in central order book cross trade enhancement (XT) and iceberg orders. The new functionality provides a safe haven to execute large orders in a non-visible, yet regulated environment. This new functionality will improve the ability of our market participants to execute larger deals without distorting market prices.

### Disruptors and competitors

We successfully navigated the complex unbundling of Naspers and the listing of Prosus in Amsterdam. Since the unbundling, trading in Naspers and Prosus is up 4% on trading in Naspers in the prior year.

While we retain 99.32% of the market share in counters dual listed on the JSE and other local exchanges, we expect the competitive attention to continue. To ensure we remain competitive, we must deliver products and services that clients want at a price that offers them value. To this end, we introduced the tiered billing model in our Equity Market in August 2018. The new billing model offered a discount of between 9% and 30%, depending on the tier of value traded, and has provided our members with an aggregate discount of 12% in the trading fee line in 2019. The change in the billing model has lowered the cost to clients by R31 million.

## NEW PRODUCTS AND SERVICES

### Link SA

In August 2019, we announced our intention to acquire 74.85% of Link SA for a cash consideration of R224.5 million. Link SA is a share registry, custody and investor services business operating in South Africa. Its core business includes the secure maintenance of the ownership records of clients' securities, as well as supporting these asset owners with the day-to-day administration of their holdings.

The intention is to extend our reach across the value chain to improve the quality of earnings through annuity revenue, which also offers the opportunity for new revenue synergies in the medium term. The proposed acquisition will be reviewed by the Competition Tribunal in 2020.

### Virtual AGMs

In March 2020, the JSE in association with The Meeting Specialist (TMS) launched the first virtual AGMs in South Africa to enable clients to engage with shareholders while the country is faced with tackling the COVID-19 pandemic. The platform caters for virtual AGMs and electronic voting, and also allows participants to connect from any location in the world using smart devices.

### Information Services progress

Information Services launched a new tick-data-in-the-cloud solution in June 2019. The JSE has partnered with the CME Group, a global derivatives marketplace, to house its first cloud solution offering using the CME Datamine platform. Providing historical equity, equity derivatives and currency derivatives, tick-data-in-the-cloud enables clients, data vendors, investors and traders to access historical data more swiftly. This modernises the JSE's market data offering and strengthens our position as a global market player.

In March 2020, we launched the FTSE/JSE Fixed Income Indices. The new benchmark index is an enhancement of the features and benefits of the previous JSE Fixed Income Indices (JSE ALBI and JSE CILI), which provided both local and international investors access to SA listed bonds.

## Monthly expiries

We launched monthly expiries in our derivatives markets in July 2019 to stimulate liquidity. Our clients can now trade 27 of the most liquid JSE Top 40 stocks and the following FTSE/JSE indices as standard contracts, every third Thursday of the month: the Top 40 Index (ALSI), the FTSE/JSE Shareholder Weighted Top 40 Index and the FTSE/JSE Capped SWIX Top 40 Index.

## COMING SOON

### New debt listings requirements

Changes to the debt listings requirements have progressed further. The revisions involved a new set of rules to bring the debt listings requirements more in line with equity listings requirements. Major changes involve an explicit section dealing with disclosure and corporate governance; a move to King IV principles, involving an apply-and-explain basis and the introduction by the issuer of a debt officer role to guard against potential conflicts of interest. We also proposed new controls applicable to SOEs, including disclosure requirements around material suppliers, procurement policies, and loans to material parties and politically connected parties.

### Data link to Shanghai

As part of our plan to increase our footprint and become part of the Asia growth story, we are partnering with a service provider in mainland China to assist us in our data distribution. Our partner will provide access to a data distributor network in the region and enable clients to trial our data for an extended period at no cost.

### Smart regulation

We are developing a solution for smart regulation. The purpose of Smartreg, an internally developed system, is to provide the JSE's Issuer Regulation team with a single view of issuer clients based on internal and external data, as well as market and social sentiment. The solution will be implemented in 2020.

### Analytics

We have embarked on an analytics proof-of-concept project with global analytics providers to increase our Equity Market analytics capability. We plan to discuss the offering with clients in early 2020.

### Upgrade to new MillenniumIT (MIT) platform

The upgrade of our equities trading engine MIT has been initiated and is targeted to go live in 2020. This upgrade will enable the JSE to introduce functionality and trade enhancements to strengthen and build our markets. These new features include the ability to introduce multiple or varied auctions; extended trade operations, with 24/5 trading possibilities and functionality enhancements such as internalities and self-execution prevention.

### Sustainability segment

During the course of 2020, the JSE aims to expand its current green bond segment by introducing a social and sustainability bond segment. In February 2020, the JSE released the proposed amendments to its debt listings requirements for the new sustainability segment for public comment. These amendments will include sustainability instruments under the International Capital Market Association (ICMA) green bond principles, social bond principles and sustainability guidelines. The new segment aims to make it easier to list and trade sustainability-linked instruments, and provides a platform for companies and other institutions to raise funds for sustainable projects. We continuously strive to create an enabling environment for our issuers and investors. This expansion will build on the success of the green bonds' use-of-proceeds model. The expansion will follow established frameworks for sustainability bonds and social bonds, in addition to the current green bonds. These instruments will broaden the options available to our investors and offer applicant issuers the ability to increase their participation in the broader impact and sustainability markets.

## REFINING OUR STRATEGY

In defining our corporate strategy, we have closely examined the matters that are material to our value creation, the critical challenges facing the business as well as the key risks identified through our enterprise risk processes. Our strategy is also, importantly, informed by our clients' needs, our assessment of the global macro-economic context, broad financial market services as well as more specific market infrastructure trends and developments, and the global and local competitive context. I touch on this in more detail on [pages 23 to 25](#).

### MATERIAL MATTERS

This report focuses on those matters that impact materially on the JSE's ability to be a sustainable business. Our *material matters* ([page 29](#)) influence our Group's strategy. The following material matters were identified:

- ① Level of market activity and quality
- ② Operational availability and stability
- ③ Enabling technology to provide innovative solutions for clients
- ④ Calibre of governance and regulation
- ⑤ Transformation and socio-economic advancement
- ⑥ Managing critical and essential skills and talent
- ⑦ Regulatory compliance and settlement assurance
- ⑧ Concentration and interdependency of the capital market ecosystem
- ⑨ Competition and disruptors

## TECHNOLOGY

We have increased our focus on information security, access control and cybersecurity readiness, to rapidly bring us up to the cyberstandard we believe to be appropriate for our business. All of this puts us on the path to achieving a robust and credible cyberstandard.

We continue to strengthen our operational resilience, building on the significant work undertaken in 2019 to ensure a more robust operating culture. As a result, our priority-one incidents (P1s) in IT and business are down compared with 2018. We have restructured our IT division to align it to the OpenGroup IT4IT™ IT operating model framework.

The upgrade of our equities trading engine, MIT, has been initiated and is targeted to go live in 2020.

More detail is available under *technology and information* on [pages 41 to 43](#).

## OUR PEOPLE

How we deliver on our strategic priorities, not just what we deliver, is fundamental to building a future-fit JSE. Through our new ways of work, we intend to build a culture of collaboration and interdepartmental alignment that enables us to better serve our clients.

In August, the JSE benchmarked itself against a global business agility framework, and the results indicated a steady improvement in our agile maturity. A key technique in unlocking efficiencies through agile is lean portfolio management (LPM). A disciplined application of LPM helps to ensure that we can make well-considered strategy and investment decisions that can be backed by agile execution excellence within a robust, fit-for-purpose governance framework.

To date, each JSE division has been enabled in the new ways of work through departmental coaching, tools, training and other support mechanisms. Our commitment to delivering our new ways of work will set the foundation for higher revenue growth, lower costs, and a more collaborative and engaged workforce.

It remains a priority to train and develop our people, with a specific focus on agile disciplines, new ways of work and ethics training. The JSE spent R13 million on training its employees in 2019 and we anticipate spending about R15 million in 2020. We have also focused on addressing the issues raised in the employee engagement survey.

During the course of 2020, we have applied measures to ensure the safety of our employees and the continued operation of our markets. We put a number of initiatives in place to improve the wellbeing of employees during the lockdown period.

More detail is available under *managing and rewarding our people* on [pages 55 to 64](#).



## PROMOTING THE NATIONAL AGENDA #SAInc.

Together with Standard Bank, Old Mutual and UBS, we hosted the 7th Annual SA Tomorrow Conference on 14 and 15 November 2019 in New York City. This conference showcases the South African government and institutions, as well as listed companies, to investors in the USA, with the aim of retaining investors and attracting investors to South Africa to grow the economy. This event is unique in that it gives government and the private sector an opportunity to come together in an effort to boost international confidence and reassure investors that South Africa remains a compelling emerging market investment destination and the gateway to the rest of the African continent. Investors raised concerns around three areas: fiscal debt, SOEs and low growth prospects.

We intend to expand our SA Tomorrow roadshow to London and South East Asia. This outward promotion is only viable if there is a sense that the necessary policy clarity, political alignment and political will to address South Africa's growth challenges are present. We will therefore continue to engage with government on the importance of these points and the need to address issues of fiscal debt, SOEs and low growth prospects.

## Transformation


We are pleased to have achieved our targeted level 3 BBBEE status for 2019.

Management's focus has been on:

- » strong recruitment disciplines, resulting in 89% of all hires being from previously disadvantaged backgrounds;
- » continuing to support the Black Brokers Forum. This year, we have returned R6.3 million in rebates to the 15 Black stockbroking firms participating in the programme;
- » maintaining our supplier development initiative;
- » continuing to prioritise our education-focused activities, such as the successful Schools Investment Challenge, which reached 19 000 high school learners. We also undertook extensive training and development to improve financial literacy, including SHE Invests, the delivery of 13 Power Hour events and the launch of our Trade Connect event. In the retail sector, 17 833 (2018: 14 460) individuals actively participated in the JSE's virtual trading game and modules;

- » our learnership programme for people with disabilities continued throughout 2019. We launched a 12-month learnership for 21 people living with disabilities in July 2019. All participants are Black women with disabilities; and
- » examining the structure of the JSE Empowerment Fund (JEF) Trust. A solution will be presented to our Group Social and Ethics Committee (GSEC) for endorsement in 2020. The JEF Trust provides academically deserving Black students with the finance and support to acquire appropriate qualifications and the opportunity to enter the financial services sector on completion of their university training.

We have increased our attention to employment equity (EE) at senior and middle management levels and this priority will continue to be a focus area for the business.

More detail is available under *transformation and socio-economic advancement* on  pages 51 to 54.

## EXTERNAL POLICY AND REGULATORY DEVELOPMENTS

The PA and the FSCA were established on 1 April 2018 and have since primarily focused on the transition to a twin peaks regulatory framework.

Throughout 2019, the JSE continued to monitor and respond to international and local policy and regulatory changes that may have impacted the JSE, its participants or the South African financial markets in general. The JSE's engagement with international standard-setting bodies and regulators in 2019 related mostly to policy and regulatory developments in respect of central counterparties.

A substantial number of draft legislative or regulatory instruments and consultation papers are expected to be published by the National Treasury and the regulatory authorities in final form or for comment in 2020.

During 2020 we have been in constant consultation with National Treasury, the PA and the FSCA to fully interpret and communicate what the lockdown means for us as a market infrastructure and for our clients.

## INDEPENDENT CLEARING HOUSE (ICH)

JSE Clear, which is currently licensed as an associated clearing house, will transition to become an ICH and a CCP by 1 January 2022, in accordance with the transitional arrangements specified in section 110 of the Financial Markets Act, 2012 (FMA).

JSE Clear will submit its formal licence application in 2020.

## ESG LEADERSHIP

We continue to enjoy global recognition as an ESG thought leader and are a founding member of the SSEI. The JSE is currently a constituent of the FTSE/JSE RI Top 30 Index and is the top-rated exchange in the FTSE4Good Index.

The ESG initiatives we have undertaken in 2019 include:

- » partnering with the United Nations (UN) Global Compact (UNGC) and the Principles for Responsible Investment (PRI) initiative to present an investor briefing session focused on the UN's Sustainable Development Goals (SDGs) in 2019; working with the market to increase the sustainable product offering available on our markets for ESG investors. For example, we offer a suite of green bonds, with Nedbank's third green bond issuance having taken place during 2019;
- » working with our ecosystem to facilitate peer-to-peer learning sessions;
- » participation in the National Task Force on Impact Investing (we are part of the impact measurement working group); and
- » serving as co-chair of the UNGISD, a new alliance of CEOs coordinated by the UN Conference on Trade and Development (UNCTAD) and the UN's Department of Economic and Social Affairs, which is aimed at scaling up and speeding up investment in the SDGs.

More detail is available on  pages 15 to 19 of our online *social value report*.

## UNGISD

UN Secretary General (SG) Antonio Guterres has formed the GISD alliance to help scale up investment for sustainable development. The launch and the first meeting with the SG took place on 16 October 2019.

I partnered with Fani Titi from Investec to represent the interests of South Africa. It was a privilege to serve as co-chair alongside Oliver Bäte, the CEO of Allianz.

Membership is by invitation only and comprises 30 top CEOs of financial institutions, manufacturing corporations and technology service providers. These institutions include asset owners, asset managers and non-financial corporations from both developed and developing countries. The CEOs in the group include the group CEOs of ICBC, Citi, Standard Chartered, Bank of America and the largest global asset managers and pension fund managers.

This is the first time such a high-powered international business group has come together under the auspices of the SG. The committee will use its convening power, influence and experience to find ways to rapidly and significantly increase the private sector's contribution to achieving the SDGs.

## APPRECIATION

Nicky Newton-King retired from the JSE in September 2019, and has left a strong legacy for the future. We are grateful to her for building the JSE into the successful business it is today.

I thank our Chairman, Nonkululeko Nyembezi, the Board and my executive team for their supportive involvement and invaluable counsel during my first few months at the JSE. I also express my appreciation to our regulators and policy makers for their collaboration, partnership and support.

The past year was a demanding one for the JSE. As I reflect on the year, I thank all my colleagues at the JSE for their energy, resilience and dedication. I am particularly grateful to my executive team for the unconditional support I have received since I joined.

We aim to build partnerships to co-create growth, rebuild the trust in our country's capital markets and make our own contribution to building the kind of nation in which we all want to live.

We are clear about our 2020 priorities and hence the issues that we need to tackle to improve our operational resilience, to achieve our 2022 strategy and to grow this business sustainably.

My thanks also go to our clients and stakeholders for supporting the JSE. We look forward to continuing our collaboration in the year ahead.



**Leila Fourie**

*Group CEO*



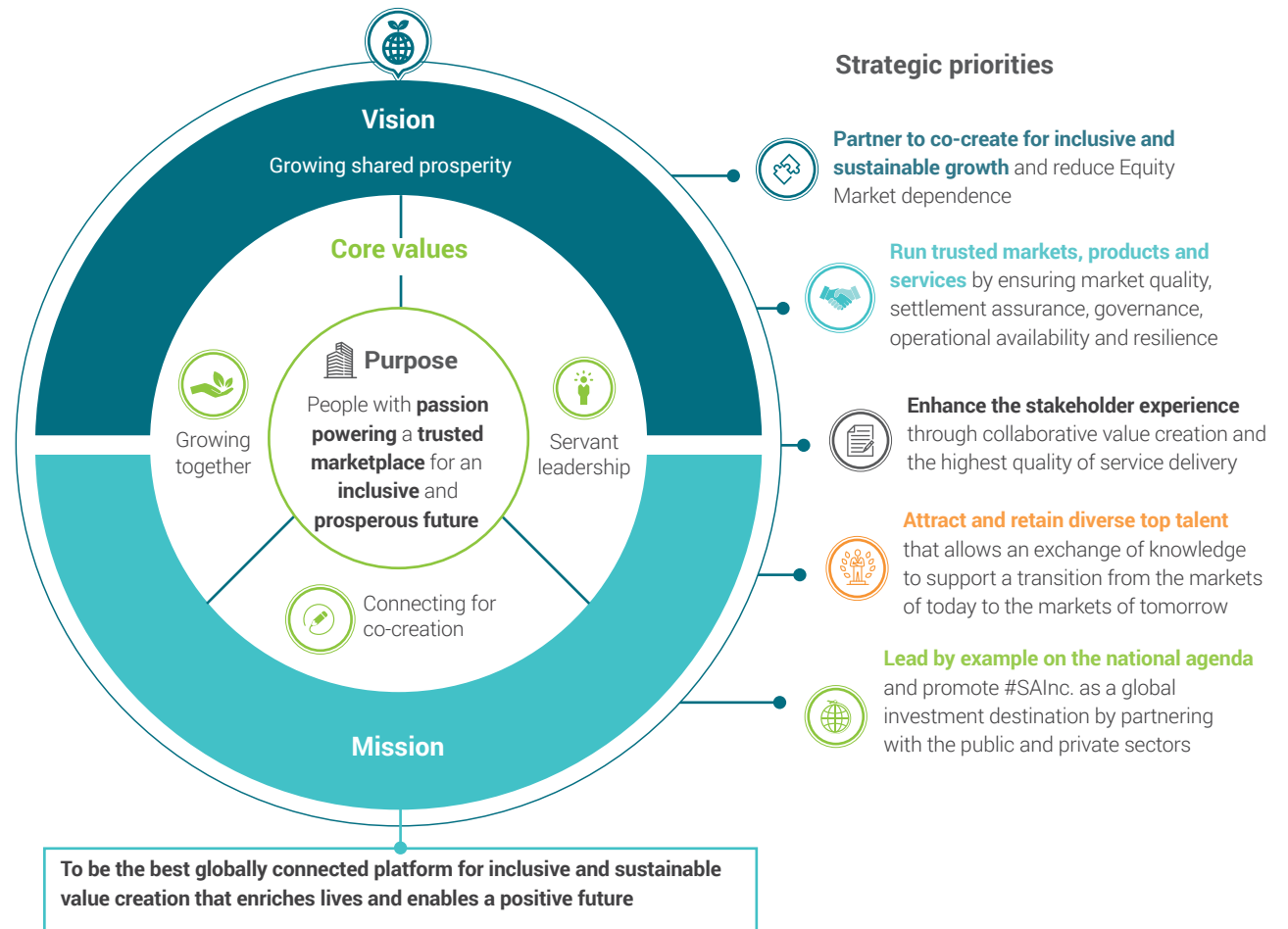


# OUR 2022 STRATEGY

We operate in a dynamic and fast-moving industry; strategic planning is an ongoing process.

Our strategy focuses actively on driving revenues, particularly from new lines of business beyond equity market trading, including inorganic opportunities, and with an emphasis on annuity revenues. Cost control remains a key focus area to maintain operating margins. We recognise the limitations on pricing power and are mindful of client feedback regarding the overall cost of trading and the need for value-for-money services. Our strategy addresses our material matters (📄 pages 29 to 31).

We provide a stable, high-availability environment for trading and clearing which requires the right hardware, software and operating processes. This means the JSE needs to continuously invest in systems and capabilities.

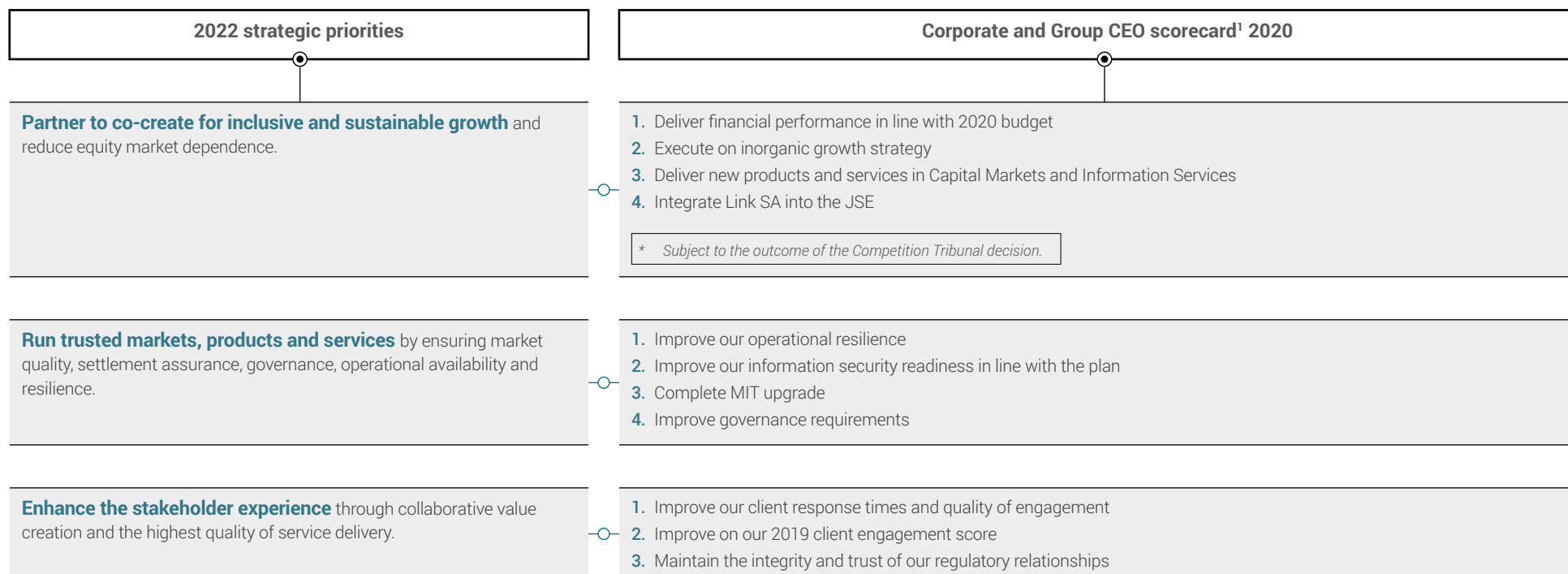


## UNPACKING THE STRATEGY

Our scorecard for 2020 includes initiatives that address all our material matters. Of these, our focus on the top three matters is critical:

1. Level of market activity and quality
2. Operational availability and stability
3. Enabling technology to provide innovative solutions for clients

Our 2022 strategic priorities are firmly tied in with our corporate and Group CEO scorecards for 2020.



<sup>1</sup> The Group CEO is assessed by the Group Human Resources Committee based on both the performance of the JSE against the 2020 corporate scorecard and on the impact of the Group CEO's leadership on the JSE.



### 2022 strategic priorities

**Attract and retain diverse top talent** that allows an exchange of knowledge to support a transition from the markets of today to the markets of tomorrow.

**Lead by example on the national agenda** and promote #SAInc. as a global investment destination by partnering with the public and the private sector.

### Corporate and CEO scorecard 2020

1. Revise and launch our vision, values and JSE Way
2. Deliver efficiencies through new ways of work and agile capability
3. Improve on our 2018 employee engagement score

1. Deliver impactful corporate social investment, and financial literacy education, to enable future inclusion
2. Lead on the sustainability agenda
3. Partner with government on #SAInc. and promote South Africa as an attractive investment destination
4. Maintain our BBBEE level 3 score and improve our BBBEE internal transformation



# PERFORMANCE AGAINST THE 2019 SCORECARD

The Board assessed the overall corporate performance of 2019 as fair in the context of the JSE’s operating environment. It noted the poor financial performance and the frank feedback from clients on service delivery, but acknowledged the successful delivery of the multi-year ITaC project.

Our 2019 corporate scorecard was approved by the Board in November 2018 and was designed around five strategic elements of value creation and 15 specific priority deliverables. Traditionally, we do not assign specific weightings to these deliverables, although financial performance (metric 9) does contribute

materially to the scorecard assessment. The approved 2019 scorecard appears below, with a snapshot comment on the status of each deliverable. This self-assessment was undertaken by Exco and interrogated by the Group Human Resources Committee (GHRC). The GHRC considered the evidence supporting Exco’s

self-assessment and determined a corporate performance score for 2019, which was reviewed and ratified by the Board. This directly informs the size of the discretionary bonus pool for 2019. For further information refer to the online remuneration report.

## Strategy element: Put our clients at the centre of what we do

### Strategic intent

Align business initiatives to expedite those that provide the most value to enhance the client’s experience.

### What we decided to do in 2019: Top priorities

1. Launch non-cash collateral.
2. NPS survey post-ITaC to demonstrate improvement over previous NPS survey.
3. Improve quality and client support for valuations.

### Summary self-assessment and comment

1. Prework for this initiative was undertaken, but subsequently placed on hold owing to the need for changes to the Insolvency Act, 24 of 1936.
2. Survey completed in 2019 and client satisfaction declined in some areas compared with the prior survey.
3. Following ITaC implementation, legacy valuation systems were decommissioned and manual processes fully automated. This delivered faster valuation processing and fewer end-of-day valuation errors.



Achieved    Partially achieved    Limited progress


**Strategy element: Operate, to global standards, South Africa's most trusted, stable, robust and competitive market infrastructure**
**Strategic intent**

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

**What we decided to do in 2019: Top priorities**

4. Implement ITaC by April 2019.
5. Complete IT refresh and upgrades.
6. Complete agreed ITaC 1 spill-over and progress interest rate derivatives and commodity derivatives trading platforms transition in line with Board-approved budget.
7. Implement cash bonds on new reference data system.
8. Implement automation initiatives for smart regulation.

**Summary self-assessment and comment**

4. Successfully delivered in April 2019.
5. MIT upgrade deferred to 2020. However, progress was made on information and cybersecurity readiness.
6. Progress was made on some ITaC post-implementation enhancements, but the transition of IRC trading platforms was deferred.
7. Bonds reference data is being ported to a new platform, with a successful initial implementation in November 2019 and incremental deliveries planned for the first half of 2020.
8. Proof of concept delivered of an artificial intelligence-driven smart regulatory tool and a technical solution for SENS announcements.


**Strategy element: Grow sustainably across the value chain**
**Strategic intent**

Extend JSE offering into new parts of the value chain to:

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

**What we decided to do in 2019: Top priorities**

9. Meet 2019 budget.
10. Submit complete ICH licence application and accelerate strategy for clearing of bonds and equities.
11. Deliver Group operating revenue through business lines that do not currently contribute substantially to the JSE's financial performance.

**Summary self-assessment and comment**

9. The 2019 budget was not met, with net profit after tax (NPAT) down with 23%.
10. Deferred to 2020 to align with the application process specified by the PA.
11. Several initiatives launched by the Information Services division, which will accrete revenue in 2020. The intended Link SA acquisition also provides a platform for additional revenue in 2020 (subject to Competition Tribunal review).



**Strategy element: Invest in and retain world-class talent**

**Strategic intent**

Nurture a world-class staff complement who is inspired, motivated and supported to deliver.

**What we decided to do in 2019: Top priorities**

- 12. Complete agile training for all employees.
- 13. Implement action plan to address all issues raised in 2018 employee satisfaction survey.
- 14. Implement coaching and mentoring programmes for high-potential leaders across the JSE.

**Summary self-assessment and comment**

- 12. 90% of employees successfully completed the training.
- 13. All divisions made significant progress in executing their customised action plans to address the cultural, behavioural and leadership issues raised in the survey.
- 14. The programmes were implemented for Exco and senior management, with benefits already visible.



**Strategy element: Lead by example on the national agenda**

**Strategic intent**

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

**What we decided to do in 2019: Top priorities**

- 15. Achieve a revised Financial Sector Charter (RFSC) level 3 BBBEE status.

**Summary self-assessment and comment**

- 15. BBBEE level 3 was confirmed by the verification agency.



# MATERIAL MATTERS

*impacting value  
creation* <sup>5</sup>

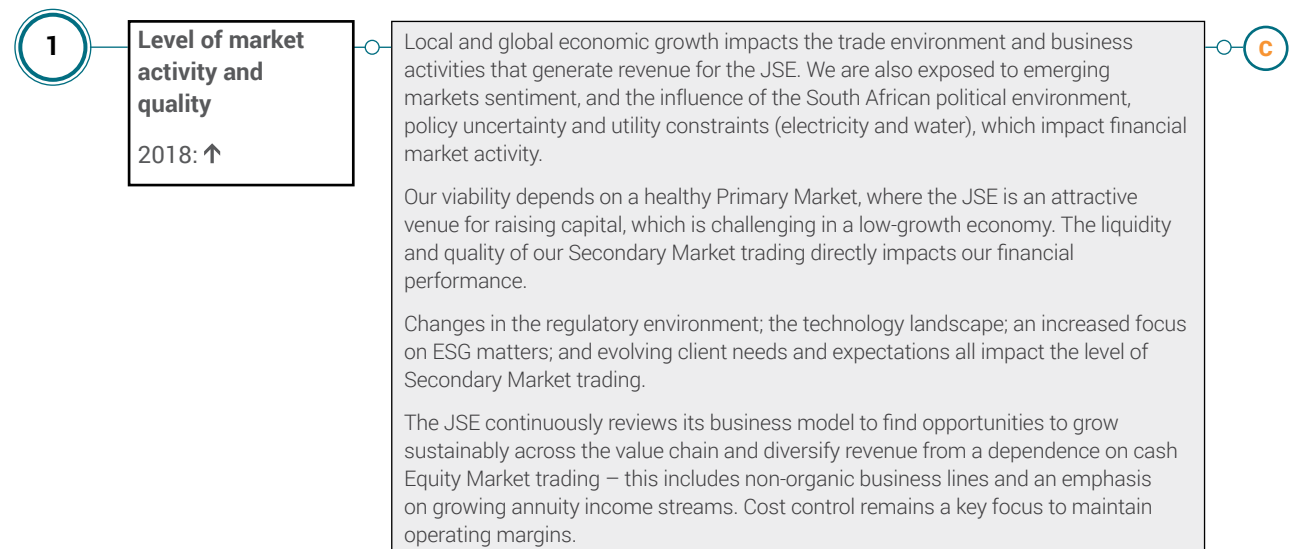
In the material matters determination process, the JSE assessed its environment, developments within capital markets, the role of exchanges, and the JSE's business model and performance.

Identifying and determining matters that are material to the Group and our stakeholders is an ongoing process, as new developments shape the macro-environment and the needs of our stakeholders change. The material matters for reporting were workshopped by JSE senior management and ultimately approved by the Board. 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 approve our material matters for this report. There are nine material matters, all of which were reported in 2018 and continue to be relevant.

Names and descriptions have been updated to ensure they reflect the JSE's current environment, risks and opportunities, and to enhance the quality of our disclosure. The impact of material matters one, three, four, five and nine has increased over the past year.

Our material matters influence our Group strategy and assist the Board in accessing the material information to be included in the integrated annual report. Each material matter listed below has a high impact on the JSE's ability to create value over time. We indicate the level of the JSE's control over each matter and reflect where the level of impact has changed, compared with 2018.

Level of our control     High     Medium     Low









6

### Managing critical and essential skills and talent

2018: →

The JSE needs to attract, retain and develop a motivated, skilled and diverse workforce that is suited to current and future needs.

Our ability to maintain operational availability and stability, and to effectively and efficiently use technology to provide innovative solutions for clients, depends on our people. Scarce and highly sought-after skills in the financial markets and technology areas include risk, Post-Trade Services, regulation and Information Services expertise.

We continue offering training and mentoring programmes for employees as we seek to invest in and retain world-class talent. We also manage executive and senior leadership transitions, and retaining critical institutional knowledge remains a focus area. We use cross-skilling and upskilling to proactively manage key person dependencies.

C

7

### Regulatory compliance and settlement assurance

2018: →

The fast-evolving regulatory environment impacts how the JSE operates and has a related financial and opportunity cost, for the JSE and its clients. We strive to comply with all relevant laws and regulations, and our governance process is proactive in identifying and acting on legislative changes. These changes may also afford us the opportunity to diversify our products and services.

Regulation requires the JSE to provide settlement assurance for trades executed on the central order book, creating the risk of having to settle large amounts in the event of default. To mitigate this risk, we monitor the risk taken by each member and the adequacy of each member's capital daily, and we ensure that the member's main business activity is that of securities broking. We maintain sufficient capital on our own balance sheet to protect against a default event, and we perform default simulations.

C

8

### Concentration and interdependency of the Capital Market ecosystem

2018: →

By its nature, the local capital market creates interdependency with key stakeholders and a concentration in clients, products and service providers. Together with this interdependency and concentration, the JSE's complex operating environment can impact strategy execution, or the speed thereof.

It is therefore important to maintain collaborative stakeholder relationships, including with market infrastructures (for example Strate), regulators and clients, so that we can maintain an enhanced market infrastructure. We need buy-in from stakeholders to effect significant changes to technology and/or processes. The JSE continuously reviews its business model to find opportunities to grow sustainability across the value chain and to diversify revenue streams to lessen its concentration risk.

C

9

### Competition and disruptors

2018: ↑

The JSE is subject to competition and business disruptions in the same way as other companies are. We compete as an investment destination, and against organisations that provide alternative capital raising, trading, clearing or settlement platforms and data functions. Known business disruptors include blockchain and fintech companies.

The JSE needs to be innovative in its offerings and to seek opportunities that ensure its products and services are reliable, stable, secure and of the highest quality at competitive prices. We continue to evolve our business model to better serve the market and remain competitive.

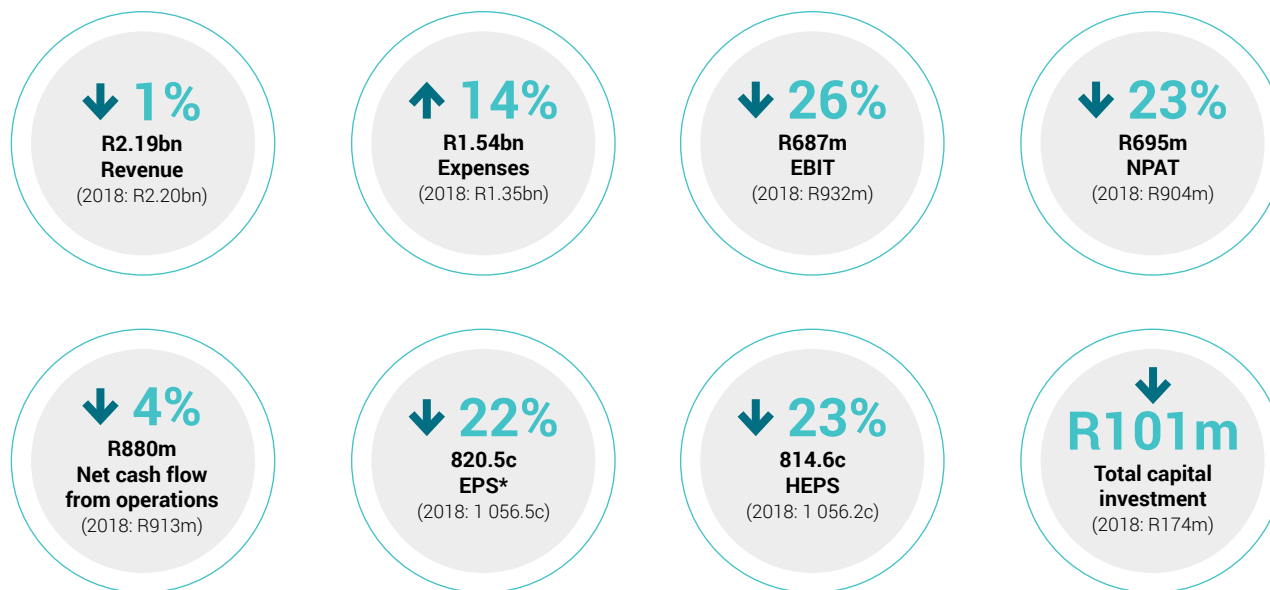
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# 2019 PERFORMANCE

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## CFO'S FINANCIAL REVIEW

The diversification of the JSE's revenue streams ensured that the decline in revenue was limited to 1% at R2.19 billion (2018: R2.20 billion), given the mixed performance across asset classes.



\* For continuing operations.

## FINANCIAL OVERVIEW

The JSE, along with other global markets, has experienced a difficult operating environment, which has impacted performance. Despite the constrained operating environment in 2019, the Group continues to be strongly cash generative, with net cash from operations of R880 million (2018: R913 million). Cash generated decreased by 4% compared with a decline in earnings of 23%.

The decline in earnings is largely attributable to a planned increase in staff costs off an abnormally low base, the costs associated with the implementation of the new ITaC system, and once-off costs.

The strong cash balance and the cash generated from operations has enabled the JSE to progressively grow the ordinary dividend. Accordingly, the Board has declared an ordinary dividend of 690 cents per share, an increase of 5% over the 2018 ordinary dividend of 655 cents per share. The Board has also declared a special cash dividend of 150 cents per share (2018: 185 cents per share), thereby maintaining the total dividend pay-out at R730 million (2018: 730 million).

The diversification of the JSE's revenue streams ensured that the decline in revenues was limited to 1%, at R2.19 billion (2018: R2.20 billion), given the mixed performance across asset classes.

The JSE has experienced a reduction in the level of activity in primary markets, with fewer new equity listings than in 2018 (largely the result of corporate actions), which has impacted revenue. The Equity Market has seen net foreign outflows of R114 billion and muted local investor activity. The decrease in value traded, coupled with the pricing impact of the new tiered billing model for equities trading, has translated into lower revenue. We saw increased activity in the second half of 2019, with an uptick in value traded in the Equity Market. The Equity Derivatives Market also registered an increase in value traded, for the first time in three years, and the Bond Market also recorded increased activity.

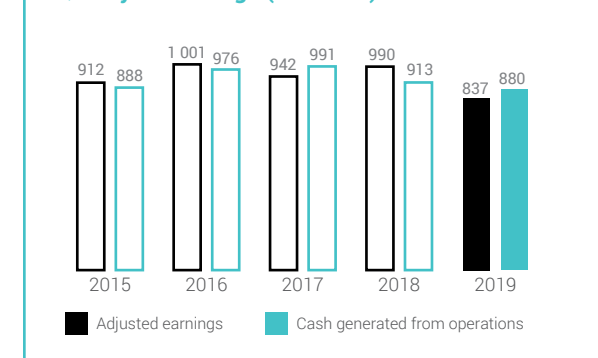
Expenses increased off a low base, by 14% to R1.54 billion (2018: R1.35 billion), largely in four areas:

- » technology costs and related depreciation increased following the implementation of the ITaC system in April 2019;
- » the JSE recruited additional personnel to reach planned headcount levels (compared with the low base headcount throughout 2018) to ensure the JSE is appropriately resourced to deliver on its key business initiatives;
- » the cost base includes once-off expenditures of R37 million relating to the JSE's executive leadership transition; and
- » the transaction expenses of R6 million related to the proposed acquisition of Link SA.

As a result of the relative increase in operating costs, Group earnings before interest and tax (EBIT) decreased by 26% to R687 million (2018: R932 million) and net profit after tax (NPAT) declined to R695 million (2018: R904 million).

Similarly, basic earnings per share (earnings per share (EPS) for continuing operations) decreased by 22%, to 820.5 cents (2018: 1 056.5 cents) and headline earnings per share (HEPS) decreased by 23% to 814.6 cents (2018: 1 055.4 cents) respectively.

### Quality of earnings (R million)



Earnings have been adjusted for non-cash items (depreciation, amortisation, forex profit/loss, impairments and goodwill write-down).



"The JSE remains in a healthy position with regard to cash and capital."

**INCOME STATEMENT PERFORMANCE**

**Summarised consolidated income statement**

R million	2019	2018
<b>Continuing operations</b>		
<b>Revenue</b>	<b>2 187</b>	2 199
Other income	41	82
Total revenue	<b>2 229</b>	2 281
Personnel expenses	(580)	(506)
Other expenses	(961)	(843)
Total expenses	<b>(1 541)</b>	(1 349)
EBIT	<b>687</b>	932
EBIT (%)	<b>31</b>	41
<b>Net finance income</b>	<b>213</b>	239
Share of profit from associate (net of income tax)	48	56
<b>Profit before income tax</b>	<b>948</b>	1 228
Income tax expense	(248)	(323)
Profit for the year from continuing operations	<b>700</b>	904
Loss after tax for the year from discontinued operations	(5)	(1)
<b>NPAT</b>	<b>695</b>	904
NPAT (%)	<b>31</b>	40 <sup>1</sup>
EPS (cents)	<b>820.5</b>	1 056.5
HEPS (cents)	<b>814.6</b>	1 056.2

Contains rounding differences.

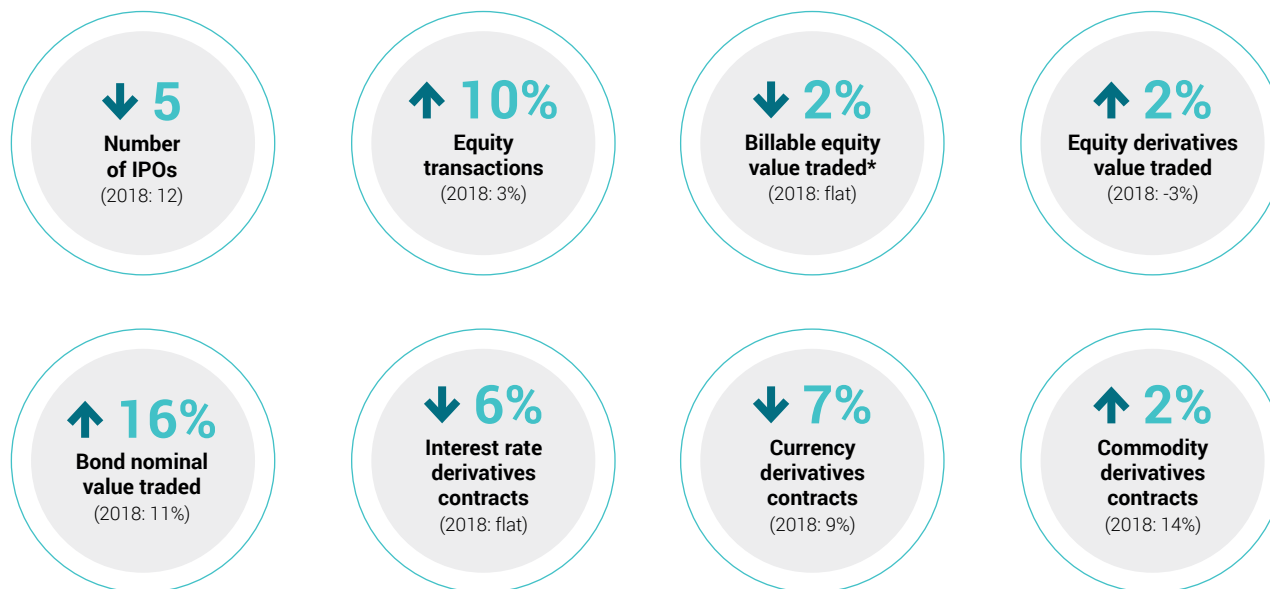
<sup>1</sup> Normalised view of 2018 NPAT % (excluding one-off tax credit); 38%.

**Revenue**

Market activity in the JSE's asset classes was impacted as follows:

**Primary Markets**

Revenue decreased by 5% to R147 million (2018: R155 million) owing to significantly fewer IPOs for the year (five IPOs versus 12 IPOs in 2018) and the impact of the accounting treatment which defers listings revenue over a multi-year period. Globally, IPOs have decreased by



\* Central order book published statistics ↓ 7% to R5.2 trillion (2018: R5.6 trillion); average daily value (ADV) traded ↓ 7% to R21 billion (2018: R22 billion). Billable value traded half-year growth rates : H1 ↓ 8% (2018: ↑ 11%); H2 ↑ 5% (2018: ↓ 10%).

19% in 2019. Although the number of listed entities declined, market capitalisation of all entities listed on the JSE increased by 38% during 2019 and there was also a material increase in structured listings, such as warrants, as well as an uptick in the number of bond listings.



## Capital Markets

<b>Equity Market</b>	Revenue decreased by 13% to R433 million (2018: R499 million). Revenue declined as a result of two items: first, a decrease in billable value traded of 2% for the full year; and second, the implementation of the tiered billing model in August 2018, which introduced an aggregate discount of 12% to the trading fee line. Colocation activity contributed 42% (2018: 37%) of overall value traded.
<b>Equity Derivatives Market</b>	Revenue was flat at R143 million (2018: R143 million), however, value traded increased by 2%. Activity remained muted but hedge activity moderately increased in the second half, as did the level of the index, which supported higher value traded.
<b>Currency Derivatives Market</b>	Revenue declined by 2% to R47 million (2018: R48 million). Long-term global risk events contributed to uncertainty in the market, which resulted in increased hedging and reduced speculation, with an increase of 7% in open interest. The number of contracts traded declined by 7%.
<b>Commodity Derivatives Market</b>	Revenue increased by 5% to R82 million (2018: R78 million) on the back of volatility in the local grains market created by weather uncertainty, as well as heightened activity in international grains products. There was also noticeable speculative activity in local grains.
<b>Bond and Interest Rate Market</b>	Revenue increased by 21% to R68 million (2018: R56 million) as nominal bond value grew by 16% on the back of global uncertainty and foreign sales of emerging market assets, as well as an increase in activity in the repo market. Geopolitical factors have had a material impact on the global yield outlook and have resulted in increased volatility and volumes. However, the JSE has seen a decrease in the trading of interest rate derivative contracts, which were down 6% year on year. Revenue from the bond electronic trading platform (ETP) contributed R7 million.
<b>Company Services</b>	Revenue increased by 16% to R11.9 million (2018: R10.3 million), on the back of solid growth in our AGM, training and event services.

## Post-Trade Services

BDA revenue increased by 10% to R333 million (2018: R303 million), following a 10% increase in the number of transactions and smaller transaction sizes.

Clearing and settlement revenue decreased by 5% to R385 million (2018: R404 million) owing to the lower billable value traded in the Equity Market.

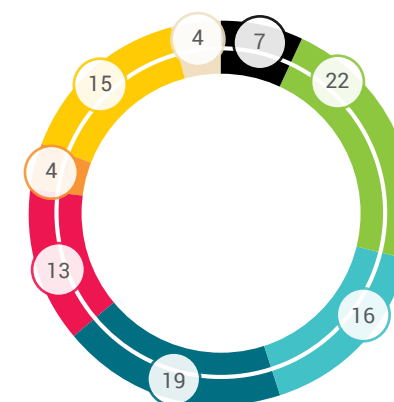
## Information Services

Revenue increased by 16% to R310 million (2018: R267 million) largely owing to annual price increases, foreign exchange gains on USD-denominated revenue and a prior-year adjustment in 2018.

## Other income

Other income declined by 50% to R41 million (2018: R82 million), mainly owing to lower forex gains. The JSE held USD9.4 million in cash (2018: USD12 million), at year-end.

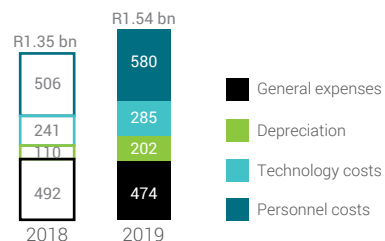
Revenue as a % of total



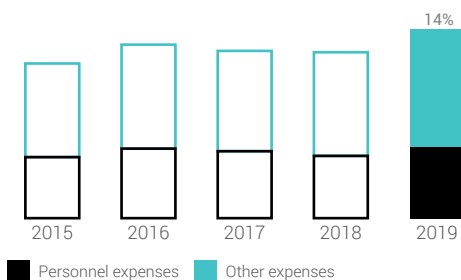
## OPERATING EXPENDITURE

Management achieved the R170 million in cost savings (base year 2016) to which it committed in 2017.

### Operating expenditure (R million)



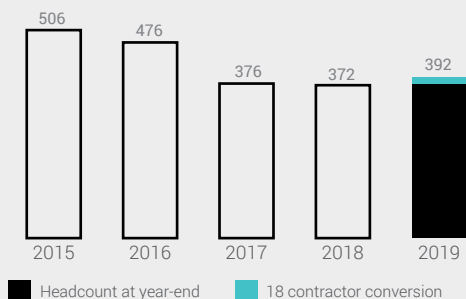
### Expenses



The major contributors to the increase in operating expenses in this period were as follows:

### Personnel costs

#### Headcount



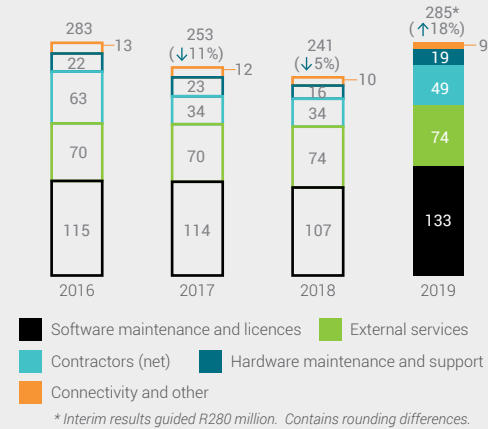
The JSE recruited additional personnel to reach planned headcount levels (compared with the low base headcount throughout 2018) to ensure the JSE is appropriately resourced to deliver on its key business initiatives. We also converted 18 IT contractor roles that were of a permanent nature to headcount as guided in February 2018. The headcount as at year end 2019 was 392 (2018: 372), while the average headcount for 2019 increased by 9% to 395 (2018: 362).

Personnel costs increased by 15% to R580 million (2018: R506 million), owing to the following:

- » gross remuneration, which increased by 14% to R418 million (2018: R368 million) owing to a planned normalisation of headcount from a low prior-year base. The headcount increase contributes 10 percentage points. The headcount as at 31 December 2019 was 392 (2018: 372). The average headcount increased by 9% to 395 (2018: 362);
- » the discretionary bonus of R64 million (2018: R82.7 million) or 9.2% of NPAT. This contributes -4 percentage points; and
- » once-off costs of R37 million relating to the executive transition. This contributes 7 percentage points.

**Technology costs**

**Four-year growth trend (R million)**



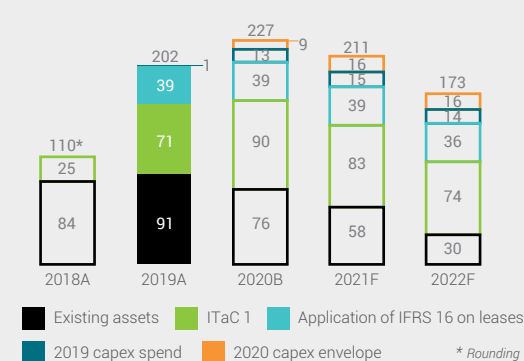
A four-year growth trend for technology costs has been provide showing that technology costs were rebased to 2016 levels.

Technology costs increased by 18% to R285 million (2018: R241 million). This was largely owing to the following:

- » post-ITaC go-live costs of R28 million, which include resources expensed, and software maintenance and support. This contributes 12 percentage points;
- » the new master reference data system licenses and support of R6 million. This contributes 3 percentage points;
- » infrastructure support and risk landscape spend of R6 million contributing 2 percentage points; and
- » equity clearing system support of R4 million. This contributes 1 percentage point.

**Depreciation**

**Multi-year depreciation profile (R million)**



A multi-year depreciation profile has been provided at half year results 2019 (calculated from known capex).

Depreciation and amortisation increased by 84% to R202 million (2018: R110 million). The increased depreciation and amortisation can be attributed largely to the ITaC project implementation costs from the April go-live. The ITaC project costs are offset by fully depreciated assets of R14 million. There was also the application of IFRS 16 on leases, which included a reclassification between amortisation and rental expenses of R39 million.

General expenses decreased by 4% to R474 million (2018: R492 million). The application of IFRS 16 resulted in the reclassification of rental expenses of R56 million. This is partially offset by:

- » non-recurring costs of R36 million for work related to progressing the ICH frameworks, the executive transition and transformation to agile ways of work; and
- » R6 million in transaction costs for Link SA.

## ROBUST BALANCE SHEET

### Summarised consolidated statement of financial position

R million	2019	2018
<b>Assets</b>		
<b>Non-current assets</b>	<b>1 716</b>	1 403
Property and equipment	184	220
Intangible assets	593	518
Other investments	339	303
Investment in associate	293	270
Other non-current assets	307	92
<b>Current assets</b>	<b>38 512</b>	40 522
Margin deposits	34 850	36 767
JSE Clear Derivatives Default		
Fund deposit	500	500
Trade and other receivables	520	490
Cash and cash equivalents	2 577	2 574
Other current assets	65	191
<b>Total assets</b>	<b>40 227</b>	41 925
<b>Equity and liabilities</b>		
<b>Total equity</b>	<b>3 969</b>	3 968
Stated capital	(18)	(18)
Reserves	548	512
Retained earnings	3 439	3 475
<b>Non-current liabilities</b>	<b>318</b>	133
<b>Current liabilities</b>	<b>35 940</b>	37 824
Margin deposits	34 850	36 767
JSE Clear Derivatives Default		
Fund contribution	400	400
Other current liabilities	690	657
<b>Total equity and liabilities</b>	<b>40 227</b>	41 925

Contains rounding differences.

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

## Equity and 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%, with an average ROE of 23% over the past four years.

### Fixed assets

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

Total capital expenditure decreased to R101 million (2018: R174 million) owing to our focus on finalising the ITaC project before embarking on new initiatives.

All currently planned investments and 2020 capital requirements can be funded from the Group's own resources.

## Total capital expenditure

Total capital expenditure of R140 million is forecast for 2020. We have categorised the expenditure since 2017 to 2020 as follows:

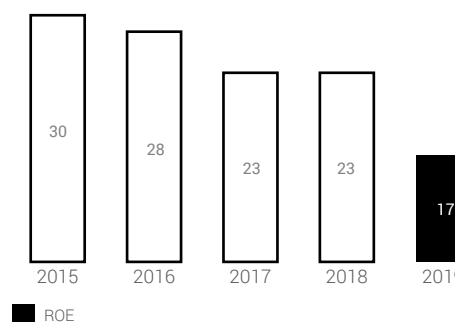
### Resilience and growth enablement

- » Business as usual (BAU) (largely infrastructure including revenue generating kit) – 2017, 2018, 2019, 2020
- » Issuer smart regulation – 2019, 2020
- » New master reference data – 2019, 2020
- » MIT upgrade – 2019, 2020
- » Market regulation consisting of client member data and regulation technology – 2019, 2020

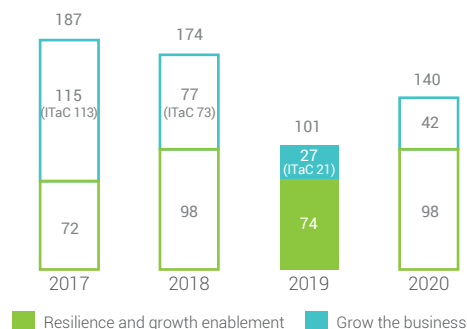
### Grow the business

- » ITaC – 2017, 2018, 2019
- » ETP for government bonds – 2017, 2018
- » Colocation – 2018
- » Equity Market trading engine (MIT) dark trading functionality – 2019
- » Tick-data-in-the-cloud solution – 2019
- » Commodity Derivatives new diesel contract – 2019, 2020
- » New initiatives – 2020\*

## Ratios (%)



## Total capital expenditure (R million)



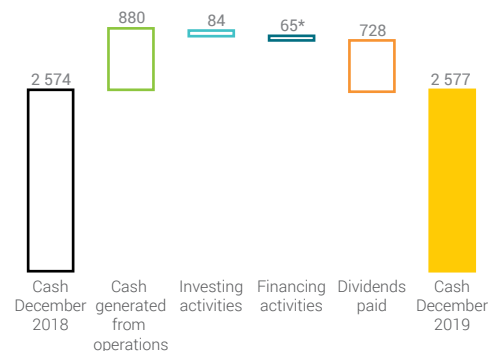
\* Bond repo's migration to new technology, investigating an over-the-counter surveillance and clearing market offering, various Information Services growth initiatives.



## STRONGLY CASH GENERATIVE

The Group continues to be strongly cash generative, with net cash from operations of R880 million (2018: R913 million). Cash and cash equivalents on hand at 31 December amounted to R2.6 billion (2018: R2.6 billion).

### Cash flow view (R million)



\* Includes the effect of exchange rate fluctuations on cash held.

## ANALYSING OUR SHAREHOLDING AND RETURNS TO SHAREHOLDERS

The JSE's shareholder base consists primarily of large institutional shareholders, with varying investment styles, split between South Africa and abroad by 59% and 41% respectively.

The Board has declared an ordinary and a special cash dividend for the year ended 31 December 2019:

- » Ordinary dividend of 690 cents per share (2018: 655 cents)
- » Special dividend of 150 cents per share (2018: 185 cents)

The JSE's existing dividend policy:

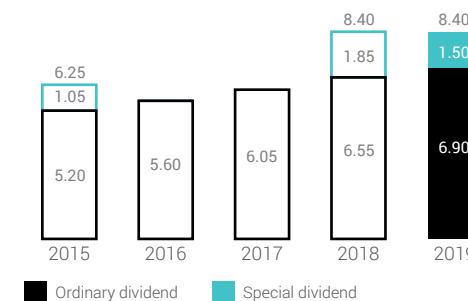
- » aims to pay a single annual ordinary dividend;
- » seeks to grow the nominal value of the ordinary dividend over time;
- » provides for a pay-out ratio of between 40% and 67% of earnings in respect of the annual ordinary dividend; and
- » allows for the payment of a special dividend in years where there is surplus cash on hand.

In accordance with this policy the JSE's practice has been to return distributable cash to shareholders after ring-fencing cash for regulatory capital requirements and investment (capital expenditure and inorganic opportunities). During 2019, the JSE concluded an exercise to determine the optimal regulatory capital and has been reporting to the PA as per the FMA since April 2019.

The ordinary dividend of 690 cents per share for 2019 represents a progressive 5% in nominal terms although this translates into a pay-out ratio of 87%. The Board notes this exception to the current dividend policy pay-out range and will determine in the year ahead whether a formal change to the dividend policy is required.

The dividends have been declared from retained earnings, and the Group remains sufficiently capitalised. A dividend withholding tax of 20% will be applicable to all shareholders who are not exempt. The dividends are payable to shareholders recorded in the register of members of the JSE at the close of business on Friday, 27 March 2020.

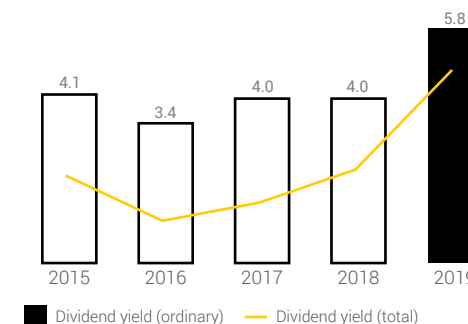
### Growth in ordinary dividend



	2015	2016	2017	2018	2019
Total dividend (R million)	543	487	526	728	<b>730</b>
Total dividend cover	(1.61)	(1.90)	(1.55)	(1.25)	<b>(0.95)</b>

Declared ordinary dividend increased by 5% (2018: 655 cents) to 690 cents at a cover of 1.15 (2018: 1.61) and a declared special dividend of 150 cents (2018: 185 cents).

### Dividend yield (%)



## REGULATORY CAPITAL

The JSE remains the sole shareholder of JSE Clear.

In compliance with the FMA, the JSE (the Exchange) and JSE Clear are required to hold regulatory capital. Accordingly, the JSE subscribed for one ordinary share (par value of 12.5 cents) in JSE Clear for a consideration of R100 million on 26 June 2019.

At the reporting date, the Board believes that both the JSE and JSE Clear are sufficiently capitalised.

## OUTLOOK FOR 2020

These results are in line with expectations. Despite the challenging economic environment in South Africa, which impacts investor appetite and activity, we remain confident in the JSE's targeted, strategic plans to grow and diversify revenues, and to invest in key technologies. These actions are necessary to maintain the long-term sustainability and competitiveness of the JSE as a critical component of the South African financial markets ecosystem.

We are excited by our strategic agenda: our focus and investments are aimed at ensuring the long-term growth and sustainability of the JSE.


The JSE's cash and capital reserves remain healthy and the JSE is well positioned to execute on its various strategic endeavours.

## APPRECIATION

This year marks our seamless transition to the leadership of our new Group CEO. I look forward to the year ahead and the new energy she has injected into our business.

I thank my colleagues on the Board and the Executive Committee for their support and ongoing counsel during this challenging year. I also express my appreciation for the dedication and hard work of our finance team. Thank you, too, to our shareholders and the broader investment community, both locally and internationally, for your continued investment and interest in our Group.

### Note

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, which are available  online at <https://web.jse.co.za/ar2019>.

The 2019 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.



**Aarti Takoordeen**  
Chief Financial Officer

# TECHNOLOGY AND INFORMATION <sup>12</sup>

## OUR APPROACH TO TECHNOLOGY AND INFORMATION GOVERNANCE

Technology is at the centre of the JSE's business. As a licensed financial market infrastructure provider, we operate in a high-availability environment, so the choices we make regarding our technology architecture, the reliability of our technology platforms on which market participants depend, and the efficiency of our operating processes all have a direct impact on our earnings, reputation and ongoing sustainability.

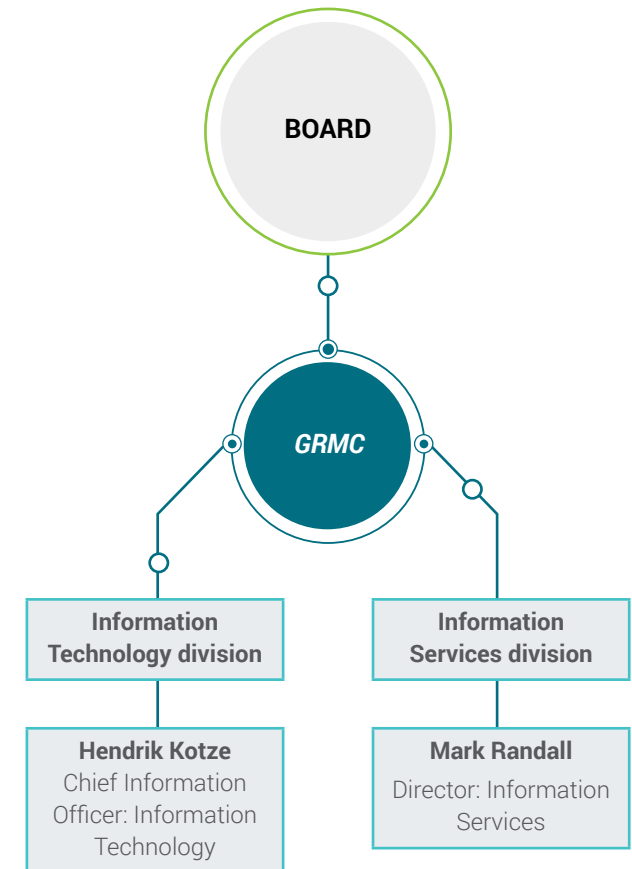
The Board, working through the Group Risk Management Committee (GRMC), has overall responsibility for the strategic governance of both technology and information across the Group. During 2019, this oversight by both the Board and the GRMC encompassed the following critical matters:

- » Exercised active oversight of the ITaC implementation. This large-scale, multi-year technology project was successfully delivered in April 2019 and provides ITaC platforms for our Equity and key Derivatives markets;
- » Reviewed and endorsed an updated technology strategy for the Group, prepared by the IT division;
- » Reviewed the technology control environment, and the assessments by both management and an independent service provider of the JSE's information security and cybersecurity readiness. This remains a work in progress, and the Board approved additional funding for enhancements to the JSE's technology security;
- » Engaged directly with the PA on the JSE's technology risk and information security readiness, as part of the ongoing supervisory programme for market infrastructures undertaken by the PA;
- » Considered quarterly updates from the chief information officer (CIO) on the status and stability of technology services and operations, including details of specific priority 1 outages and the impacts on market participants;

- » Reviewed progress on the implementation of a new reference data system for the Information Services division, with final go-live for bonds data planned for mid-2020;
- » Examined the quality of the disaster recovery and business continuity tests and programmes, and the steps being taken to enhance the JSE's disaster readiness; and
- » Interrogated reports from Group internal audit on the ITaC implementation, the technology control environment, the disaster recovery and resilience status, and the progress by management with implementing the new reference data system. Audit findings raised during these and other internal audits are being addressed actively by the IT division.

The JSE Exco exercises day-to-day oversight of the JSE's technology and information services operations, which are delivered through the IT division, headed by the CIO, Hendrik Kotze, and through the Information Services division, headed by the director: information services, Mark Randall. During 2019, the IT division was restructured to align with the OpenGroup IT4IT™ IT operating model framework. IT4IT™ provides the structure and tools for organisations to manage their IT function as if IT were a business in its own right, to promote business discipline, predictability and efficiency. This reorganisation enabled us to create a fit-for-purpose IT division able to operate in an agile fashion, according to agile principles, aligned with the JSE business strategy, and able to address the critical risks facing the JSE.

The JSE has also adopted a scaled agile framework (SAFe®) to embed agile and new ways of work across the broader business and foster enterprise agility and visibility of the completion of work. Our technology teams are partnering with the change management teams to drive these new ways of work throughout the business.



In order to create the necessary discipline and focus for both our technology and information operations, executive management has established key internal governance structures, including:

- » the Architecture Review Board (ARB), established in 2019, with a mandate to ensure all IT infrastructure, projects and activities are aligned with the JSE's chosen IT architecture;
- » the Information Security Steering Committee (ISSC), established in 2016, to oversee the implementation of the information security strategy, and to monitor and guide the operational IT security performance of the JSE;
- » the Enterprise Information Governance Council (EIGC), established in 2018, to oversee data management policies and minimum standards, drive the execution of the JSE's data management strategy, and ensure internal compliance with applicable legislation and best practice data privacy and protection principles; and
- » the IT governance and compliance function, established in 2019, to co-ordinate the development and evolution of IT policies, and to monitor and guide compliance with these policies and the relevant regulations

For more information about the top risks that relate to IT, refer to *our top risks* on 📄 pages 94 to 98.

### Highlights from 2019

The ARB has developed an architecture framework for the JSE.

Detailed self-assessments by the IT team and an independent review of the JSE's information security and cyberreadiness were reviewed by ISSC, and action plans approved to address findings raised in these assessments.

The EIGC has prioritised data privacy and has made significant advances in ensuring compliance with the Protection of Personal Information Act (PoPIA).

IT governance and compliance aligned key IT policies with IT4IT™ and the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions (CPMI-IOSCO) guidance, and progressed the policy approval through the GRMC.

## TECHNOLOGY AND INFORMATION STRATEGY – PREPARING FOR THE FUTURE

We anticipate material changes to the IT landscape over the next five to 10 years, and these changes will undoubtedly impact the technology services we provide to the South African capital markets.

- » New market participants are unconstrained by legacy. A flexible and open architecture will enable the JSE to offer the required technology capabilities for the new generation of traders, clearers and information users in an agile and expedient manner.
- » We expect that the 4IR will vest rapidly. Hence the JSE is pursuing an open application programming interface (API) ecosystem and solutions marketplace.
- » Elastic business models will demand flexible mindsets. Our IT operating model will accommodate loose coupling on demand and controlled third-party access to information, underpinned by a standards-based and open integration platform.
- » Scarcity of skills, particularly in new technologies, will remain a pressure point. This is likely to feed increasing levels of “anything as a service” (XaaS). We plan to leverage this phenomenon to maintain the pace and shorten the time-to-market of our technology offerings, while sustaining intellectual property (IP) continuity and dynamic service management.
- » Artificial intelligence will continue to feature extensively in capital markets. Security processing, attacks and defence will all be conducted by robots; and the JSE will use multi-purpose robots to boost and safeguard our business.
- » DLTs will form the basis on which many transactions are conducted in future. Where appropriate, we will explore the feasibility of secure, reliable and scalable private blockchains, integrated with the relevant public blockchains, to enable and operate a trusted marketplace for our clients.

Our clients and markets are interconnected by trusted, high performance and differentiated proprietary networks. To continue providing globally acceptable capabilities and performance, the JSE's technologies require substantial investment to maintain the pace set by client needs, financial markets evolution and technology changes.

Our new technology vision and strategy takes into account our members, global participants, partners and suppliers, and provides a framework for strategic IT decision making for the foreseeable future, with the aim of ensuring the JSE remains relevant in the emerging 4IR world.

### Strategy, architecture and emerging technologies

Our new technology vision and strategy is tightly aligned with our business strategy, and seeks to employ new ways of work to put the JSE on a journey to a scaled agile framework for the Group. We have adopted cloud-first architecture and are actively focused on maintaining and enhancing our information security readiness.

Our technology architecture philosophy is intended to enable a flexible and open market integration platform, a fit-for-purpose and cost-effective application architecture, a data lake to act as a basis for its information architecture, and a risk-based security architecture supplemented by global partners.

Emerging technologies such as artificial intelligence, machine learning and DLTs, as well as the cloud, will be leveraged to achieve our vision.



## TECHNOLOGY AND INFORMATION SERVICES PRIORITIES DELIVERED IN 2019

### Implementing ITaC

The ITaC programme was an initiative to migrate trading and clearing in our derivatives markets to the same technology used for our Equity Market. This complex, multi-year programme successfully went live on 29 April 2019. In addition to the core trading platform and clearing system implementations, we updated or redeveloped a number of other downstream systems. This required significant JSE integration effort.

The ITaC spill-over items not addressed in the initial implementation have been absorbed into normal business priorities through the new ways of work and are being prioritised.

### Commencing with IT refreshes and upgrades

The upgrade of the core trading engine to current software levels was initiated during 2019. This ensures our core platform remains current and allows us to make functional and product enhancements available to our clients.

This is a significant project, requiring substantial market coordination and participation. This upgrade will also enable more flexible upgrades in future. The introduction of versioned APIs will reduce the need for synchronisation across all market participants for trading platform changes, thereby reducing the overall risk to the capital markets of large-scale trading platform changes. The upgrade is planned to go live in 2020.

### Focusing on information security, access control and cybersecurity readiness

Providing a safe, secure and trusted marketplace is a fundamental feature of our business.

We are therefore using the CPMI-IOSCO Guidance on Cyber Resilience for Financial Market Infrastructures as a basic framework, supplemented by the National Institute of Standards and Technology (NIST), International Organization for Standardization (ISO) and Center for Internet Security (CIS) standards and practices.

Chief information security officer (CISO)-as-a-service has been secured from a reputable global provider, and the security function streamlined to ensure appropriate focus and integration between security and technology operations. Various assessments were conducted to calibrate the maturity and strength of the JSE's security capability, immediate corrective actions were taken on critical findings, and a three-year journey was defined to ensure continuous improvement of our security posture.

### Implementing cash bonds on the new reference data system

In 2018, we initiated a project to consolidate several of our existing reference data systems into a centralised platform for reference data. We selected a global enterprise data management (EDM) vendor to provide the software. This technology refresh is intended to enhance the management of reference data across the JSE.

Bonds reference data was chosen as the first asset class to be ported to the new technology, using agile and new ways of work based on SAFe®. The first implementation into production took place in the fourth quarter of 2019. Incremental deliveries will follow in the first and second quarters of 2020.

### Implementing automation for smarter regulation

Issuer and Market Regulation continue to evolve, requiring new solutions that provide enhanced insights for our regulatory teams.

A prototype market insight tool has been developed, based on new-generation technologies, which enables our Issuer Regulation team to more easily gain an automated perspective on the market relationships between entities and individuals. This improves issuer oversight and expedites assessments when new requests for listings are received.

Issuers have raised concerns regarding the need to submit SENS announcements in more than one format, given the time and cost involved in converting PDF files into TXT files that our SENS system requires. A solution was implemented in July 2019. Only the short-form announcement is now published on SENS. The long-form announcement is published to a JSE hosted cloud address. This provides time and cost savings for issuers while maintaining full disclosure of information to the market.

### Supporting the BaNCS project with Strate

For the past five years, Strate has executed a strategic initiative to replace and consolidate its core custody and settlement systems on a single platform. The migration of cash equities from Strate's old SAFIRES platform to the new TCS BaNCS solution was the final phase. The JSE was a critical component of this transition, given its overall impact on the capital markets. TCS BaNCS successfully went live in October 2019, without any disruption to the market.

### Driving compliance with PoPIA

Our Enterprise Information Governance team has updated the JSE's data privacy framework, reviewed and updated existing policies and implemented new policies to support data protection across the Group. The team has also focused on improving our business process remediation and data management capabilities to ensure compliance with PoPIA.

# OUR OPERATING ENVIRONMENT AND OPERATIONAL PERFORMANCE

## 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. Refer to *Group CEO's review* on pages 16 to 22 for more information.

### Macro-economic context in 2019



<sup>1</sup> Source: WFE.

<sup>2</sup> Source: EY Global IPO trends 2019.

## 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 annual report and in the Group CEO's review.

### Capital Markets

#### How money is made

##### Primary Market

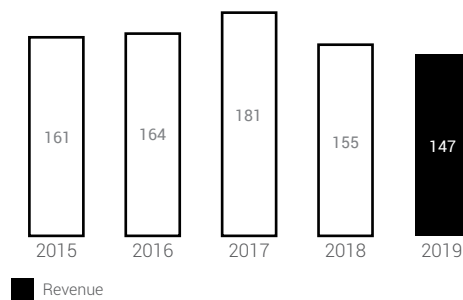
Fees for new issuances, annual listing fees for existing issuers, and documentation fees for dealing with specific corporate actions that companies undertake.

Represents **7%** of total Group revenue  
(2018: 8%)

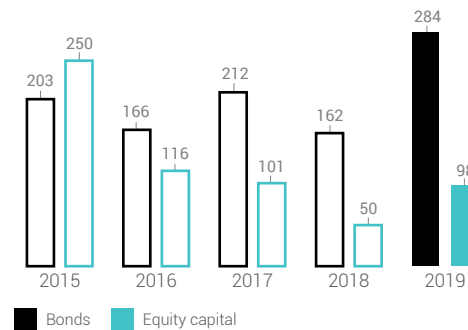
#### 2019 performance

- » Revenue decreased by 5% to R147 million (2018: R155 million), owing to significantly lower IPOs for the year (five IPOs versus 12 IPOs in 2018).
- » IPOs worldwide decreased by 19% in 2019
  - five new company listings, six new ETFs, five new ETNs, 293 new warrants and structured products (2018: 12 company listings; 12 ETFs; 12 ETNs; 236 warrants and structured products). Delistings: 24 (2018: 16).
- » Unlike the Equity Market, the Bond Market saw an uptick in activity
  - 710 new bonds listed (2018: 539). Total nominal value of listed bonds was R3.1 trillion (2018: R2.7 trillion)
  - Third commercial bank issuance of green bonds by Nedbank.
- » Implemented changes to JSE Equity Listings Requirements flowing from issuer regulation consultation paper which came into effect on 2 December 2019.
- » Successfully navigated unbundling of Naspers and the listing of Prosus in Amsterdam.
- » 12J's framework approved for listings. This allows flexibility for a venture capital company (VCC) listing on AltX to appoint either a designated advisor (DA) or a VCC advisor.

Capital Markets: Primary Market (R million)



Capital Markets: Additional capital raised (R billion)



How money is made

Equity Market

The tiered billing model was implemented effective from 30 July 2018. Trading fees are charged for value traded on a tiered basis:

- » Six tiers with a trade cap of R420.40 for central order book trades (range: 0.37 to 0.48 bps)
- » Complex order suite: 0.53 bps with a R3 153 cap

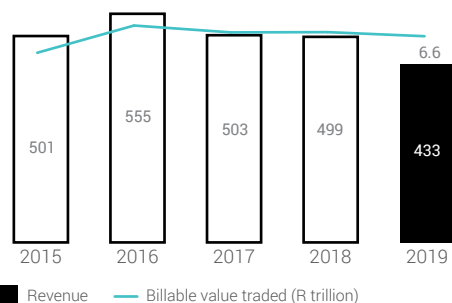
Rental charged for colocation racks across all markets, not just the Equity Market.

Represents **22%** of total Group revenue  
(2018: 25%)

2019 performance

- » Revenue decreased by 13% to R433 million (2018: R499 million). This follows a decrease in billable value traded for the full year and the implementation of the tiered billing model in 2018, which introduced an aggregate discount of 12% to the trading fee line.
- » Billable value traded decreased by 2% to R6.6 trillion (2018: R6.7 trillion).
- » Foreign investment net outflows of R114 billion.
- » Tiered billing model provided our members with an aggregate discount of 12% in the trading fee.
- » Colocation activity contributed 42% of overall value traded (2018: 37%) with 32 racks (2018: 32 racks).
- » Auction enhancements implemented to improve auction mechanics by creating deeper liquidity during auction sessions.
- » Reduced block trade sizes.
- » Enhanced and new functionality was delivered in September and November 2019, in the form of central order book XT enhancement and iceberg orders. XT functionality enables clients to execute prenegotiated trades on the central order book without interception by any other orders. The enhancement provides the option to match at the prevailing midpoint, should the price not be within the best bid or offer range at the time of entry. Iceberg orders enable clients to submit orders and display only a small portion of the total order. This enables the order to reside on the central order book without its full size being revealed. Thus, the complex order suite allows an alternative execution with limited or minimal price impact.

Capital Markets: Equity Market (R million)





## How money is made

**Bonds and Financial Derivatives Market**

Revenue is generated through a range of fee models based either on the number of contracts traded, the market value of transactions or the value of the applicable index.

In order to promote on-screen trading, the fee associated with on-screen trading is normally lower than that for reported trades.

Represents **13%** of total Group revenue  
(2018: 12%)

## 2019 performance

**Division**

Total divisional revenue decreased by 1% to R258 million (2018: R261 million).

**Equity Derivatives Market**

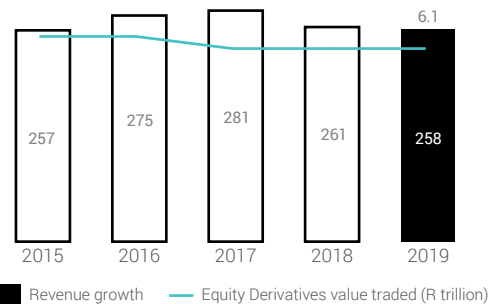
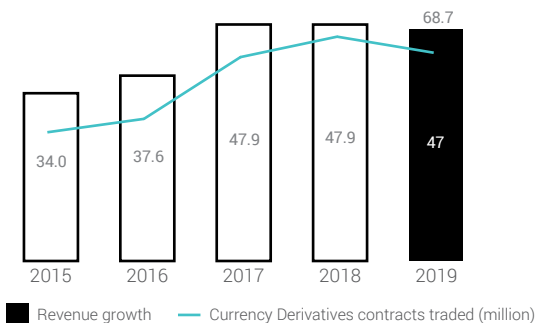
- » Revenue was flat at R143 million (2018: R143 million). Activity remained muted, but hedge activity moderately increased in H2, as did the level of the index, which supported higher value traded.
- » Value traded increased by 2% to R6.1 trillion (2018: R5.9 trillion).
- » The ITaC project for the Equity Derivatives Market was completed in April 2019.
- » Improvements made in valuations.
- » Launched monthly expiries. This introduced trade in the most liquid JSE Top 40 stocks and the ALSI, DTOP and DCAP FTSE/JSE indices as standard future and options contracts every third Thursday of the month.

**Currency Derivatives Market**

- » Revenue declined by 2% to R47 million (2018: R48 million). Uncertainty in the market resulted in increased hedging and reduced speculation.
- » Contracts traded decreased by 7% to 68.7 million (2018: 74.2 million), however, open interest increased by 7%.
- » The ITaC project for the Currency Derivatives Market was completed in April 2019.

**Interest Rate Market**

- » Revenue increased by 21% to R68 million (2018: R56 million), as bond nominal value grew by 16% on the back of global uncertainty and foreign sales of emerging market assets, as well as an increase in activity in the repo market. Global yields outlook has resulted in increased volatility and volumes. However, we have seen a decrease in the trading of interest rate derivative contracts, which were down 6% year on year.
- » Bond Market volumes increased to a nominal value of R36 trillion (2018: R31 trillion).
- » The number of interest rate derivatives contracts traded decreased to 11.4 million (2018: 12.2 million).
- » Open interest in the Interest Rate Derivatives Market as at 31 December 2019 decreased by 6% to 11.4 million contracts (2018: 12.12 million contracts).
- » The bond ETP went live in August 2018 and traded R442 billion (2018: R192 billion). Revenue from the bond ETP contributed R7 million.
- » Improvements made in valuations methodologies and processes.
- » Significant progress has been made towards migrating bond repos to MTS, which is on target for delivery in 2020.

**Equity Derivatives value traded (R million)****Currency Derivatives contracts traded (R million)**

**How money is made**

**Commodity Derivatives Market**

A fee per contract traded, based on the underlying instrument.

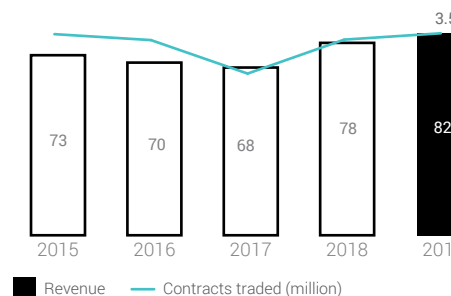
A fee per ton of grain physically delivered.

Represents **4%** of total Group revenue  
(2018: 4%)

**2019 performance**

- » Revenue increased by 5% to R82 million (2018: R78 million) on the back of volatility in the local grains market, as well as heightened activity in international grains products.
- » Contracts traded increased by 2% to an all-time record of 3.5 million (2018: 3.4 million).
- » Value traded increased by 19% to R810 billion (2018: R678 billion).
- » Monthly stock levels of grain on JSE silo certificates now published on our website.
- » Enhanced margining methodology for grains calendar spreads.
- » Special dispensation granted by SARB to trade and clear Zambian grains in USD, now extended for an additional two years.

**Capital Markets: Commodity Derivatives (R million)**



**How money is made**

**Company Services**

Company Services provides the following services for our listed companies and charges a fee for these services:

- » Venue hire for results presentations and investor engagements;
- » JSE Training Academy to assist stakeholders on their JSE journey, including Board training; and
- » AGM facilitation, which includes proxy solicitation, electronic voting and minute taking services.

**2019 performance**

- » Revenue increased by 16% to R11.9 million (2018: R10.3 million), owing to growth on the back of solid growth in our AGM, training and event services.
- » Announced our intention to acquire 74.85% of Link SA. This is subject to approval by the Competition Tribunal in 2020.

## 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 R183.

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 transactions and is calculated as a percentage of the interest earned on the investment of the margin.

**Represents 19% of total Group revenue**

(2018: 19%)

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.

**Represents 16% of total Group revenue**

(2018: 15%)

### 2019 highlights

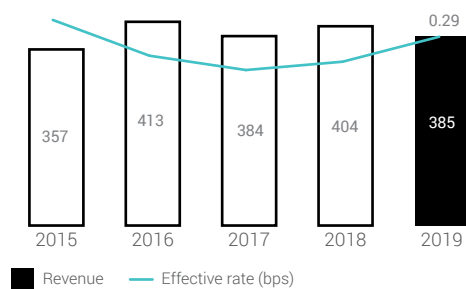
#### Equity clearing and settlement

- » Revenue decreased by 5% to R385 million (2018: R404 million), owing to the lower billable value traded in the Equity Market. Reflects only Equity Market clearing fees.
- » Delivered ITaC: New clearing functionality for Equity and Currency Derivatives.
- » Successfully deployed Strate's equity settlement system.
- » Successfully concluded a full default simulation in October 2019.
- » Improved automation in bonds operations.
- » Progressed the application for an ICH license.

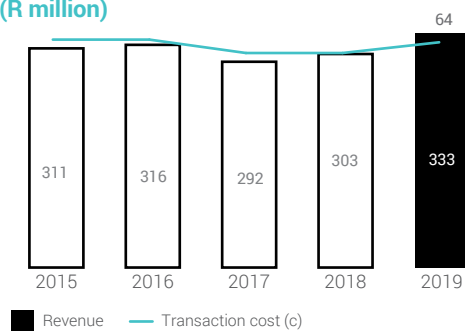
#### Back-Office Services (BDA)

- » Revenue increased by 10% to R333 million (2018: R303 million), following a 10% increase in the number of transactions and smaller transaction sizes.
- » Trades increased to 77 million (2018: 70 million).

Post-Trade Services: Clearing and Settlement (R million)



Post-Trade Services: Back-Office Services (BDA) (R million)



### Information Services

#### How money is made

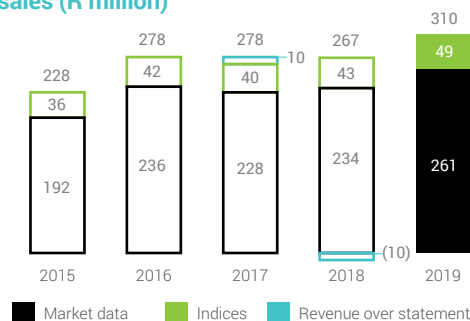
Revenue is generated by selling data products across all of the JSE's markets and licensing the distribution and use of these data products. Licensing fees include end-user terminal fees, non-display use fees and fees for passively tracking products on indices.

Represents **15%** of total Group revenue  
(2018: 13%)

#### 2019 highlights

- » Revenue increased by 16% to R310 million (2018: R267 million), largely owing to annual price increases, foreign exchange gains on USD denominated revenue, a prior year adjustment.
- » 24 new clients have signed up for market data products: (nine local clients and 15 international clients).
- » Net new passive tracking mandates increased by nine (2018: eight). Index-tracking assets under management increased by 11% to R573 billion (2018: -17%).
- » Launched a new tick-data-in-the-cloud solution.
- » Incorporated all ITaC market data in JSE Data Agreement licensing framework for Equity Derivatives and Currency Derivatives markets.

#### Information Services: Includes Market Data sales (R million)





# TRANSFORMATION AND SOCIO-ECONOMIC ADVANCEMENT

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

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.

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** in driving 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.

The JSE focuses its development activities on areas believed to be relevant to South Africa (for example, poverty alleviation, job creation and youth and community development) and the business activities of the JSE (such as enterprise development (ED) and financial literacy).

We are measured under the RFSC and have maintained our level 3 rating, thus reaching our 2019 target.

## Focus area | Enterprise and supplier development

### Our objectives

- » Supplier development (SD): Identify fit-for-purpose SD opportunities.
- » ED: Maintain current ED initiatives.

### What we are doing and progress to date

The JSE's Black stockbroker ED programme provides financial assistance to emerging Black stockbroking firms to support them in the sustainable growth of their businesses. It continued in 2019. Qualifying participants receive 33% of their equity trading fees as well as 33% of their membership/new application programme interface connectivity fees back in cash, quarterly in arrears. Participants are expected to use the funds for the purposes of developing their businesses, whether by employing more resources or by acquiring technological tools that will enable the firms to enhance their service offering and ultimately their business activity and growth.

The JSE continued with its SD initiative and identified two organisations to assist. This programme helps SMEs to expand their customer base, increase their turnover and profitability, and scale their operations to be more sustainable. These SMEs should then be able to participate in the corporate supply chain. Further detail is available online in our *social value report*.

**R6.3 million** spent, equating to **0.5%** of NPAT  
(2018: R7.6 million; 0.5% of NPAT)

14 members out of **54** equity trading members  
(2018: 15 out of 60) receive financial support, which  
equates to **R7.2 million** in financial support provided  
(2018: R7.6 million)

SD incubation programme: **R6.6 million** (40% of 2% of  
FY20171 NPAT).

SD financial support to two organisations: **R7.2 million**  
(40% of 2% of FY2018 NPAT).

**Focus area | Preferential procurement**

**Our objective**

Embed preferential procurement practices.

**What we are doing and progress to date**

Our amended procurement policy promotes preferential procurement practices that consider the BBBEE levels of potential suppliers. Only suppliers that meet the BBBEE, Black and/or Black woman ownership, or exempt micro-enterprise (EME) and qualifying small enterprise (QSE) targets are placed on the preferred supplier list. Black-owned EMEs and QSEs are further supported by being placed on a 15-day payment period to minimise cash flow issues.

Procurement spend in the supply chain is **75%** of total measured procurement spend (TMPS), **R620 million** (2018: R614 million; 75% of TMPS)

**Focus area | Consumer education and socio-economic development**

**Our objective**

Retain the JSE Investment Challenge as our flagship consumer education (CE) initiative.

**What we are doing and progress to date**

The JSE continues to prioritise its education-focused activities, such as operating the JSE Investment Challenge. The challenge has run over the past 40 years. It involves participation in a fun, interactive, online trading game and is a focused and far-reaching educational programme. It is aimed at introducing South African high school learners and university students to the world of finance and investments in JSE-listed shares, helping to demystify the stock exchange.

The number of high school participants increased from **18 391** to **19 024** and the number of university participants decreased from **4 083** to **4 038**  
Spend: R4.2 million (2018: R3.5 million)

**Focus area | Socio-economic development**

**Our objective**

The JSE's socio-economic development initiatives focus on education, healthcare and skills and development for disadvantaged communities and are executed through registered not-for-profit organisations. The JSE invests by providing time, effort and money and believes that individuals should benefit directly through positive and meaningful contributions that are sustainable.

**What we are doing and progress to date**

The JSE enabled 25 chartered financial analyst (CFA) (level 1) students to attend extra classes through Novia One Group. Fundisa funding was provided to learners from low-income families to pay for quality accredited qualifications at a public college or university.

Spend: **R5.4** million (2018: R5.3 million)



### Focus area | Skills development

#### Our objective

Implement strategic talent management initiatives.

#### What we are doing and progress to date

Our learnership programme for people with disabilities continued throughout 2019. We launched a 12-month learnership for 21 people living with disabilities in July 2019. All participants are Black South African females with disabilities.

The JSE absorbed a large percentage of its learners from the 2018 learnership programme.

**25** Black individuals participated in learnership programmes

Of those, **96%** were females and **4%** were males

**80%** of our training spend for 2019 was allocated to Black employees

Total skills development spend: **R11.8 million**, and **R630 000** is disabled learner salaries

### Focus area | EE

#### Our objective

Drive progressive and integrated people plans.

#### What we are doing and progress to date

Our compulsory diversity training workshops for all employees serve as a building block for an inclusive culture. The workshops support robust conversations and provide an opportunity to gain a shared understanding of key transformation priorities.

Achieving EE at senior and middle management levels remains a challenge and continues to be a focus area.

**74%** Black employee complement

**42%** at senior management

**71%** at middle management

**35%** of employees attended the workshops

### Focus area | Management control

#### Our objective

Continue building a transformed Board and Exco over time.

#### What we are doing and progress to date

We will continue to focus on EE appointments at Exco level.

The JSE Board consists of **67%** Black and **67%** female members

Black representation at Exco level increased from **29%** to **33%**

**Focus area | Ownership**

**Our objective**

Increase Black ownership of the JSE sustainably and economically viably over time.

**What we are doing and progress to date**

The JEF Trust provides academically deserving Black South African students with the finance and support to acquire appropriate qualifications and the opportunity to enter the financial services sector on completion of their university training.

Since the inception of the trust in 2009, it supported 579 students with total disbursements of R63 million.

Spend: **R9.4 million** (2018: R12.1 million)

Beneficiaries: **64** (2018: 60)

**Black ownership statistics**

	2019	2018
Voting rights of Black people	<b>18.74%</b>	16.64%
Voting rights of Black women	<b>7.12%</b>	6.35%
Economic interest of Black people	<b>12.49%</b>	12.53%
Economic interest of Black women	<b>4.90%</b>	4.79%

**Independent verification of the BBBEE status of the JSE**

AQRate Proprietary Limited (AQRate), an independent South African National Accreditation System (SANAS) accredited verifier, conducted a review of the JSE scorecard and related supporting documents in accordance with the requirements of SANAS R47-02 and the gazetted verification manual. These standards require that AQRate plans and performs the verification process and procedures to obtain reasonable assurance about the BBBEE status of the JSE under the RFSC. Summary scorecard: Period from 1 January 2019 to 31 December 2019. Valid until 20 February 2021.

Scorecard element	2019	2018
Equity ownership	<b>15.41</b>	15.37
Management control	<b>17.32</b>	15.77
Skills development	<b>9.78</b>	15.52
Preferential procurement	<b>22.97</b>	20.95
Enterprise/supplier development	<b>13.20</b>	13.01
Socio-economic development and consumer education	<b>8.00</b>	7.99
<b>Total</b>	<b>86.68</b>	88.60

Result: Level 3





# MANAGING AND REWARDING OUR PEOPLE

The JSE depends on expertise in capital markets, technology, governance and risk. Our employee value proposition is designed to attract, develop and retain top talent to drive our sustainability.

The JSE needs to have the correct skills and technological expertise for our increasingly digital and interconnected markets. We focus on our current and future talent requirements and diversity goals, and on how our culture and ethical conduct can support our strategic objectives. We develop, remunerate and engage our people to ensure we attract and retain diverse top talent.

The leadership transition during the year was also a priority, in addition to the emphasis on succession planning and the personal development plans of high-potential talent, critical employees and senior leaders.

## HIGHLIGHTS AND STATISTICS

Permanent employees	<b>389</b> total permanent employees (2018: 369) <b>3</b> fixed-term contract employees (2018: 3)	<b>52%</b> female (2018: 51%) <b>48%</b> male (2018: 49%)	<b>74%</b> Black, Coloured and Indian (2018: 70%) <b>25%</b> White (2018: 30%) <b>1%</b> foreign national	<b>1</b> employee with a disability (2018: 1)
	<b>13.72%</b> employee turnover (2018: 29.56%)	The average age of JSE employees is <b>40</b> (2018: 39)	<b>0</b> fines, accidents or other health and safety incidents reported (2018: nil) The average length of service across all categories is <b>7</b> years (2018: 8)	
Learners	<b>4</b> learners (2018: 17) and <b>21</b> people with disabilities (2018: 21)	<b>96%</b> female (2018: 71%) <b>4%</b> male (2018: 4%)	<b>100%</b> Black (2018: 100%)	<b>100%</b> external learners (2018: 100%)
	Skills and development spend <b>R11.8 million</b> (2018: R5.4 million)	<b>1 805</b> training days (2018: 1 711) at an average of <b>1.2</b> days per employee trained (2018: 1.2)		

### Focus areas

- » Leadership transition
- » Developing our people
- » Adapting our culture
- » Reinforcing our ethics
- » Strengthening diversity
- » Rewarding performance
- » Employee engagement

The following are some of the key actions taken to support the JSE's strategy priority of attracting and retaining diverse top talent:

- » 90% of employees completed the agile training course to promote our business transformation and ensure we adopt new ways of work;
- » Launched our digital learning platform called J LX to assist in building an action learning culture in a fast-changing environment. Refer to *adapting our culture* on page 57;
- » Implemented coaching and mentoring programmes for high-potential leaders. The benefits are already evident in the rising confidence and engagement levels of the senior team; and
- » Implemented action plans to address the concerns raised in the 2018 employee satisfaction survey. Refer to *employee engagement* on pages 36 to 39 of the online *social value report*.

### LEADERSHIP TRANSITION

The Board managed the leadership changes seamlessly to maintain strategic and operational focus.

- » Nicky Newton-King resigned from the JSE on 30 September 2019 after 23 years at the JSE, including eight as CEO. Under the Board's guidance, her responsibilities were smoothly transferred to Leila Fourie. The Board's immediate focus was on reviewing the JSE's strategic direction, setting the 2020 budget, and engaging with employees, clients and regulators.

### DEVELOPING OUR PEOPLE

We aim to align our talent management programmes to the most critical business initiatives that drive our strategy and business growth.

The JSE needs to evolve its workforce to maintain pace with the rapidly changing technological and financial market environment. The critical skills we target include expertise in capital markets, risk, post-trade services, regulation, company services and information services. To this end, we conduct talent reviews twice a year with the objective of building a strong talent pipeline and ensuring leadership continuity.

Our focus is on:

- » letting our business strategy guide our talent requirements;
- » achieving the transition to new ways of work to sustain and embed an agile culture;
- » building sustainable leadership by continuing with the coaching programme implemented in 2019 and rolling out a mentorship programme;
- » using our culture programme to refine employee engagement action plans;
- » continuing with the JSE Way awards programme to foster a culture of recognition; and
- » developing employees by sharing knowledge and talent, enabling collaboration, and fostering internal growth. We aim to segment talent to better address pivotal roles, success profiles, and to find ways to attract the best talent.

We have enhanced our skills development programmes, which include:

- » leadership development programmes (senior, middle and new managers programmes);
- » a JSE-specific programme leveraging J LX (our digital learning platform);
- » South African Institute of Financial Markets (SAIFM) programmes, which we offer in partnership with SAIFM; and
- » sponsorship of 30 employees to study towards bachelor's degrees.

The JSE spent R11.8 million on learning and development in 2019 (2018: R9.3 million), with 80% beneficiaries being previously disadvantaged. We offer a blended training approach, which allows employees to address individual skills needs and team development imperatives.

We held a talent review during the year, which confirmed that our bench strength has improved and that we are creating the right platform to develop future talent. We tailor our succession planning to have the right number of quality people to meet our current and future needs. We mitigate our current risk through (i) robust succession plans for all critical roles, (ii) knowledge management and collaborative platforms, and (iii) mapping critical roles to the available talent in the market for proactive acquisition.



The director: human resources supports the Group CEO in hiring the executive team and shaping the senior talent pool. The GHRC annually interrogates the detailed talent maps and development plans for each senior manager. It also reviews progress on managers' development and sets race and gender targets to incorporate into management's talent planning. All Exco appointments are discussed with the Board Chairman before finalisation. This year, we started personal development plans and assigned coaches for all successors to Exco, and we continued programmes such as those in agile fundamentals and dealing with managing everyday discipline.

### ADAPTING OUR CULTURE

Our commitment to new ways of work will improve revenue, lower costs and more closely align our workforce.

We launched the JSE Way in 2018 to align our culture and behaviours to our 2020 vision and incorporated it into performance management and our leaders' capability enhancement programmes.

The JSE benchmarked itself against a global business agility framework. This confirmed that we are steadily maturing our agility, but have room to improve. We need to entrench agile new ways of work to align our culture, business agility and operating models to continue delivering results and achieve our strategy.

Our new ways of work enable the JSE Way by fostering an interdepartmentally collaborative culture to better serve clients and break down internal silos. As part of our new ways of work, we use LPM to unlock efficiencies. It assists in our strategy and investment decisions, ensuring that they can be backed by agile portfolio operations within an appropriate governance framework, while properly managing the workforce. Each of the divisions has

enabled the new ways of work through departmental coaching, tools, and training.

We have established a lean agile centre of excellence (LACE) to guide, support and enable the initiative. Each division has established a sustainable network of employees to lead the agile changes across the business. J LX hosts six mandatory agile fundamental modules that employees have to complete. Agile subject matter experts have been identified across the business and have access to the global learning platform.

### REINFORCING OUR ETHICS

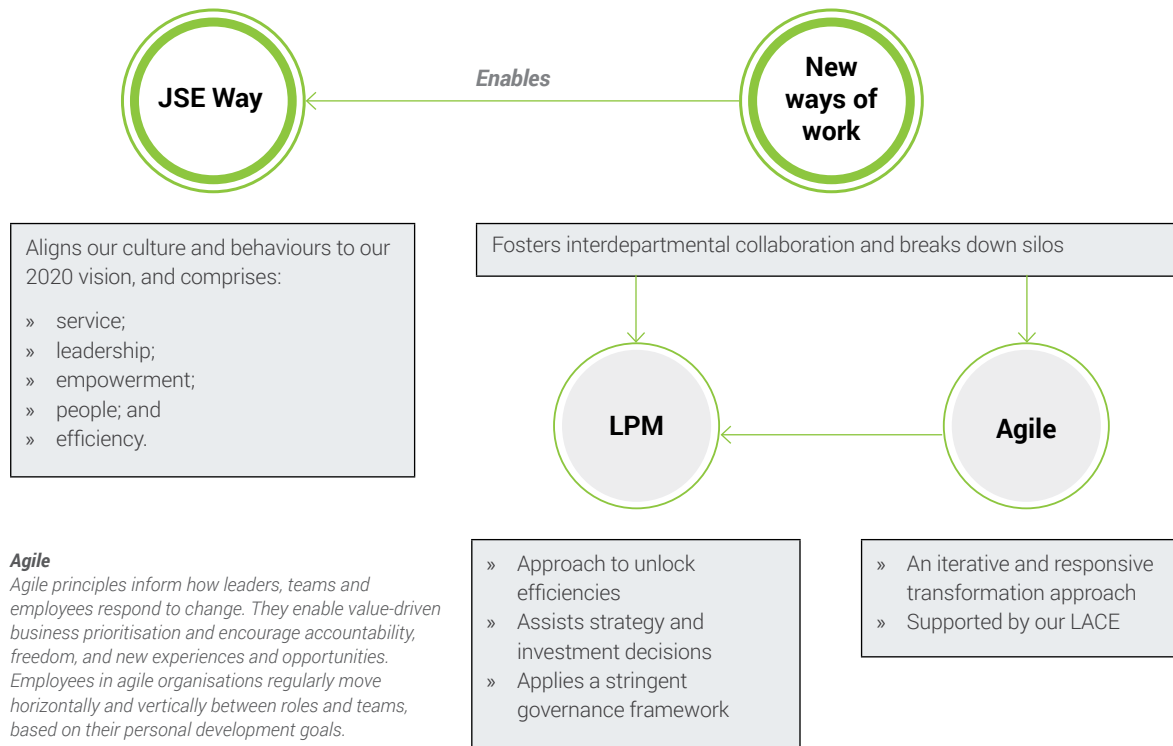
The JSE updated its code of conduct and ethics and the associated employee policies during the year. We remain focused on adhering to the applicable legislation and being an ethical, environmentally responsible business. We have zero tolerance for bribery, corruption, misconduct, fraud, theft and unethical behaviour. Breaches of the code may result in disciplinary action or criminal prosecution. All employees are required to report actual or potential breaches to management, the head of Group compliance or the whistle-blower hotline. No calls were received during 2019 (2018: nil).

During the year, the JSE advanced its plan for complying with PoPIA, so as to protect employees, clients and all stakeholders' personal information. Management held two ethics sessions, and employees attended one. These aimed to highlight values, foster discussion, and present and discuss an ethical fitness tool.

### What guides our approach to ethics

The Board is responsible for ensuring the ethical conduct of the employees of the Group, and is committed to the King IV principles of accountability, integrity, fairness and transparency, which are reflected in the Board's charter. The reputation of the JSE is built on the actions and decisions taken by all employees in our interactions, whether internal or external, and ethical conduct is an integral part of our corporate culture. Our behaviour in the performance of our day-to-day duties and interactions with stakeholders is underpinned by our values and indicative of how we think and feel about doing business and interacting in the broader economic and social environment.

Ethical behaviour and anti-corruption measures are instilled formally through our code of conduct and ethics policy,



procedures and training material, as well as compliance oversight of the Group's adherence to relevant laws and regulations. The code of conduct sets out individual responsibilities as colleagues, stakeholders and business partners, and guides our behaviour when we make decisions. It is based on a strong foundation of ethical leadership and a commitment to doing the right thing.

We hold ourselves to high ethical standards and, wherever possible, we insist that the external parties with whom we interact apply the same standards.

Responsible business and good governance principles are promoted by the JSE Listings Requirements, the effective regulation and surveillance of our markets, the FTSE/JSE Responsible Investment Index Series and our support of a variety of good governance and best practice initiatives, in South Africa and internationally.

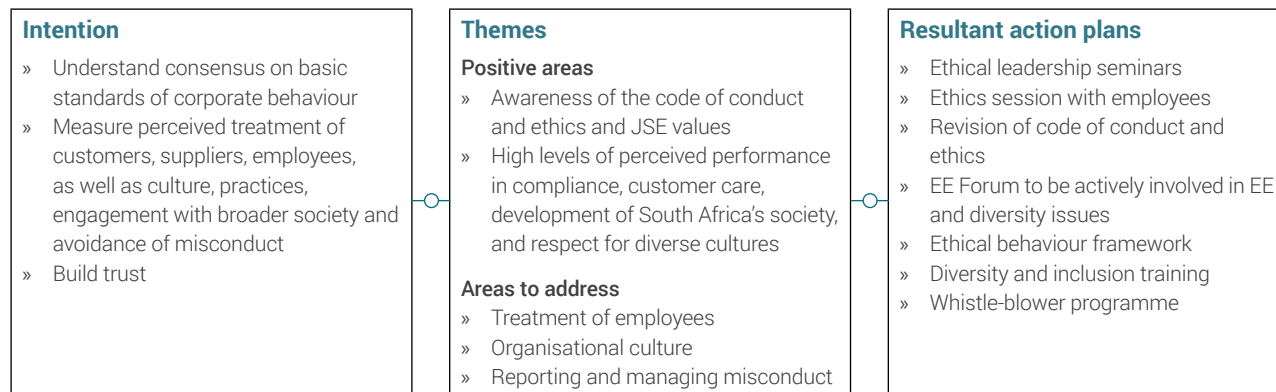
During the year, our employees participated in the GIBS Ethics Barometer survey.

**STRENGTHENING DIVERSITY**

The JSE supports the country's transformation objectives and is committed to becoming demographically representative in knowledge, skills and experience, race, gender and disability, while redressing historical inequality. We have an EE policy that aims to eliminate unfair discrimination and have compulsory diversity and inclusion workshops for all employees. These workshops facilitate discussion and a shared understanding of diversity and the JSE's transformation priorities. We have successfully completed the second year of our three-year EE plan and are making progress towards our objectives.

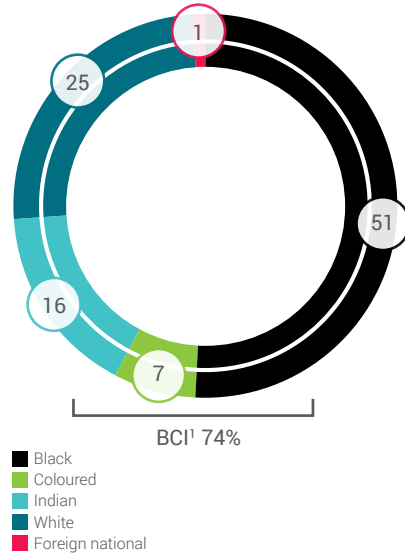
74% of our employees are Black and we continue to improve this representation in senior and top management. Our learnership programme for unemployed Black youth contributes to a pipeline of skilled Black employees and our focus is on disabled learners; which is a critical part of driving transformation. A significant percentage of our 2019 training spend was allocated to Black employees. In addition, based on an internal review, the JSE does not have a gender or race pay disparity.

We will start a mentorship and talent rotation programme in 2020 and will launch the JSE knowledge enhancement programme to institutionalise specialised knowledge and address key man dependencies. We will continue with our direct coaching and development programme to develop successors at all levels, as well as with our quarterly diversity and inclusion training.



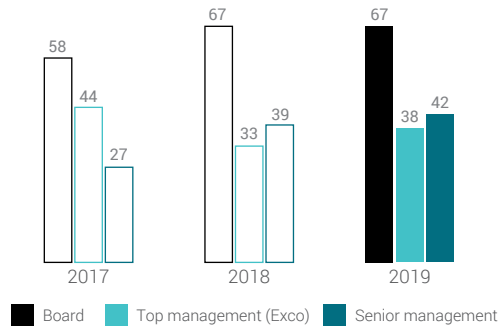


**Race breakdown 31 December 2019 (%)**

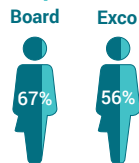


\* Black, Coloured and Indian (BCI).

**Black representation in leadership (%)**



**Female representation at:**



**REWARDING PERFORMANCE**

The JSE, along with other global markets, has experienced a difficult operating environment, which has impacted performance. Despite the constrained operating environment in 2019, the Group continues to be strongly cash generative, with net cash from operations of R880 million (2018: R913 million). Cash generated decreased by 4% compared with a decline in earnings of 23%. The decline in earnings is largely attributable to a planned increase in staff costs off an abnormally low base, the costs associated with the implementation of the new ITaC system, and once-off costs.

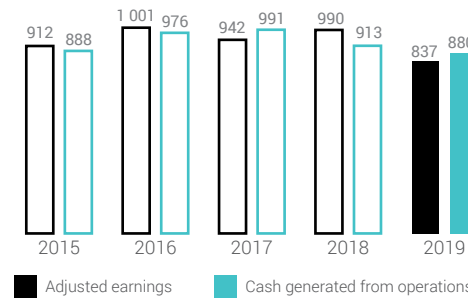
As a result of the relative increase in operating costs, Group earnings before interest and tax (EBIT) decreased by 26% to R687 million (2018: R932 million) and net profit after tax (NPAT) declined to R695 million (2018: R904 million).

Similarly, basic earnings per share (earnings per share (EPS) for continuing operations) decreased by 22%, to 820.5 cents (2018: 1 056.5 cents) and headline earnings per share (HEPS) decreased by 23% to 814.6 cents (2018: 1 055.4 cents) respectively.

In this context the Group Human Resources Committee (GHRC) approved increases to guaranteed remuneration of 6.5% for 2019 based on benchmarking and independent input (see the [online remuneration report](#) for additional detail).

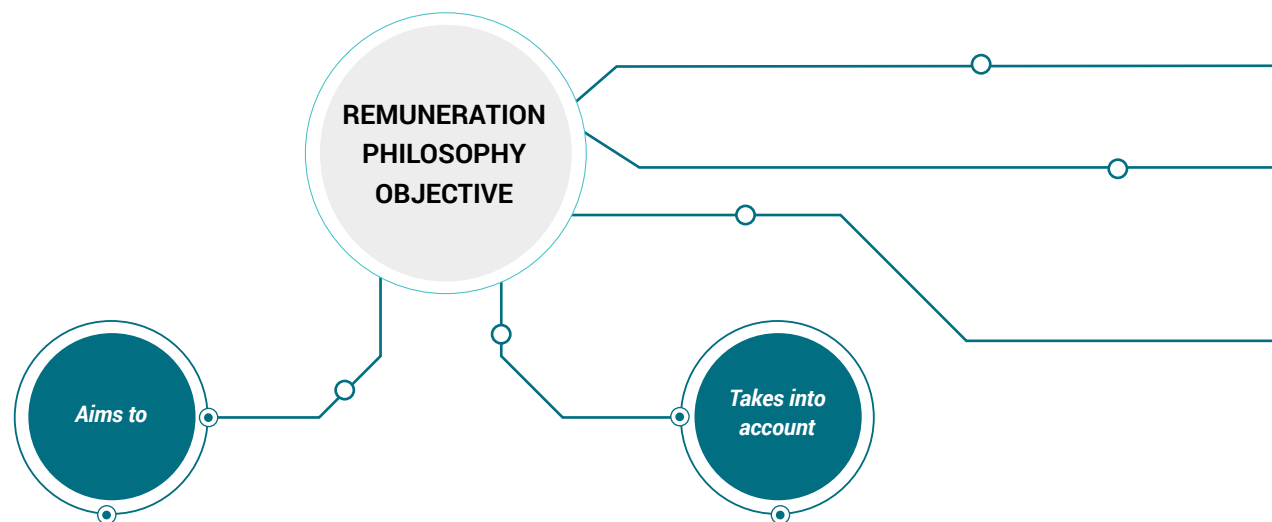
Corporate performance for 2019 was assessed as fair, the highlight being the successful implementation of the multi-year technology project ITaC, although tempered by the decline in financial performance. The Committee awarded a bonus pool of R64 million, a reduction of 24% on the incentives awarded in 2018 and in line with the year-on-year decline in NPAT for 2019. Long-term corporate performance was also assessed by GHRC, in determining the vesting of LTIS 2010 share award originally granted in 2016 and 2017. These corporate metrics are weighted towards financial performance, particularly return on equity and earnings growth over the three and four-year vesting terms. For the two share allocations vesting for the period ended December 2019, only 54% and 47% of the shares vested in the hands of executives and scheme participants, given the decline in earnings and total shareholder return over this period. The balance of these shares were forfeited (our long-term schemes are detailed in both the Policy Overview and Implementation sections in the [online remuneration report](#)).

**Quality of earnings (R million)**



### Philosophy and design elements

The JSE's remuneration philosophy and policy govern the remuneration of executive management (executive directors and prescribed officers) and other employees. We are committed to observing the concept of fair and responsible remuneration for executive management in context of overall employee remuneration.



- » Align pay to performance against corporate strategy
- » Promote a culture that supports innovation, enterprise and the execution of Group strategy
- » Align the interests of employees with attaining profitable (and sustainable) long-term growth of the business for the benefit of all stakeholders
- » Offer an equitable remuneration mix that attracts, motivates and retains the appropriate calibre of executives and employees

- » Reality of the JSE's size and its significant role in the South African financial sector
- » Nature of the business, its risk profile, the competitive environment and financial affordability
- » Balancing of rewards with the funding of capital to maintain and grow the JSE, dividend payments to shareholders and payments to wider society (through taxation and corporate social responsibility)

 Refer to our online *remuneration report* for detailed information.

## This remuneration philosophy is expressed through a comprehensive remuneration policy, supported by specific remuneration practices.

Inherent in this philosophy is the linkage between pay and short and long-term performance (both at an individual and corporate level).

Remuneration is structured in a fair and reasonable manner, recognising individual contributions and collective results. There is a clear differentiation between executives and employees based on line-of-sight responsibility, accountability, competencies, work performance and scarcity of skills.

In order to drive a pay for performance approach, there is also an increasing element of variable pay at senior management levels.

### FAIR AND RESPONSIBLE REMUNERATION

The following is factored into our remuneration policy and practices:

- » The principle of equal pay for work of equal value:
  - Guaranteed pay is determined based on clear role descriptions and validated by an independent remuneration advisor.
  - Pay levels are benchmarked against independent market data, and any unjustifiable income disparities (including race, gender and tenure) are subject to adjustment.
- » Overall pay ratios between executives and other employees are considered when determining annual salary increments.
- » The JSE invests in employees through career pathing, talent mapping and providing skills development opportunities to promote progress within the JSE.
- » Provision of financial education, debt counselling and training on basic financial education to assist employees in avoiding overindebtedness.

### Our remuneration philosophy creates sustainable value as it is:

Aligned with  
**stakeholder  
interests**

Congruent with  
strategic **priorities**  
and **values**

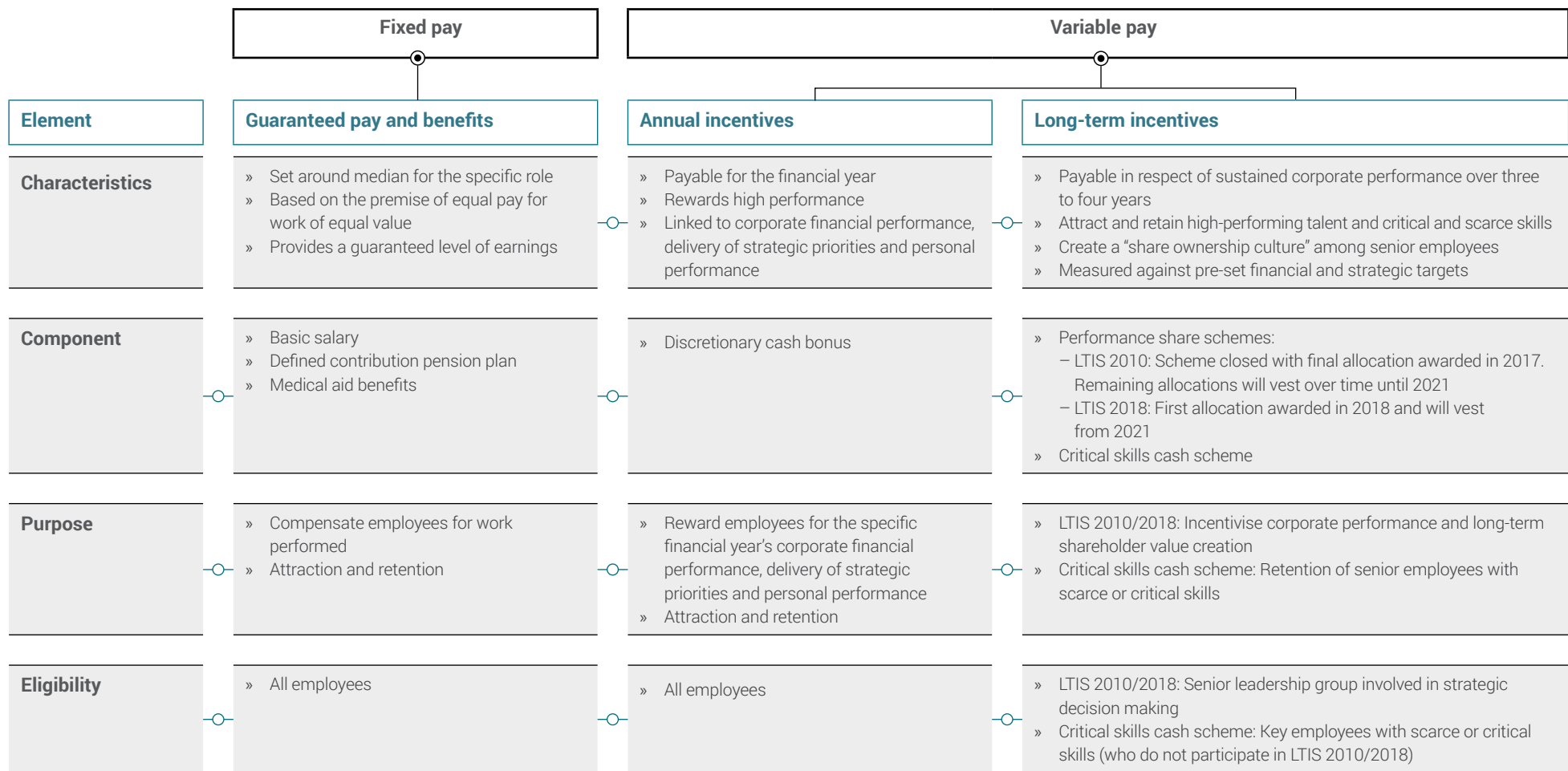
Linked to corporate  
and individual  
**performance**

**Competitive** with  
market norms and  
benchmarks

**Transparent** and  
understandable

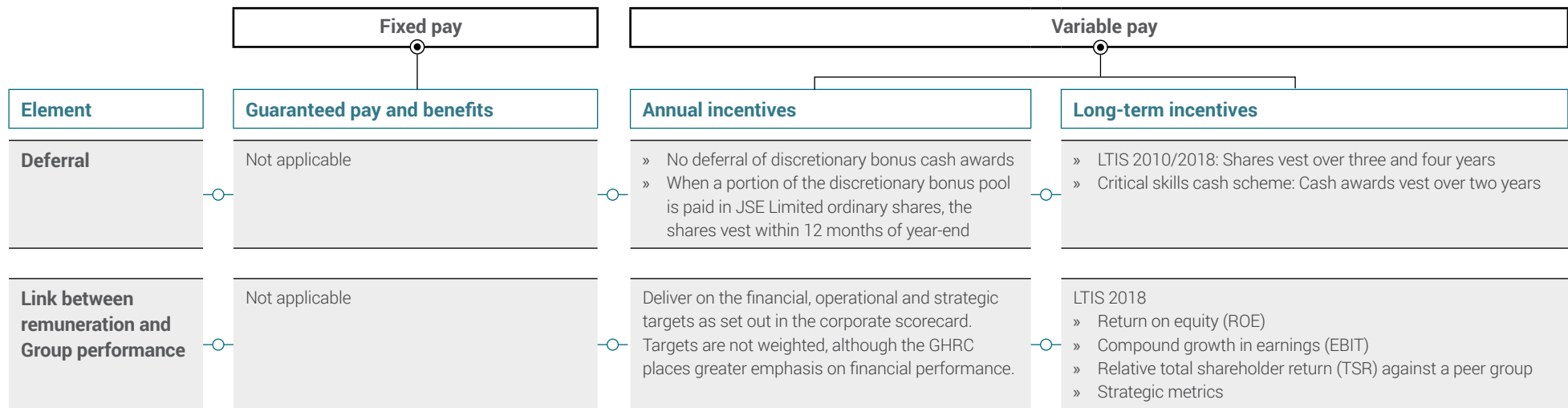
### Remuneration model

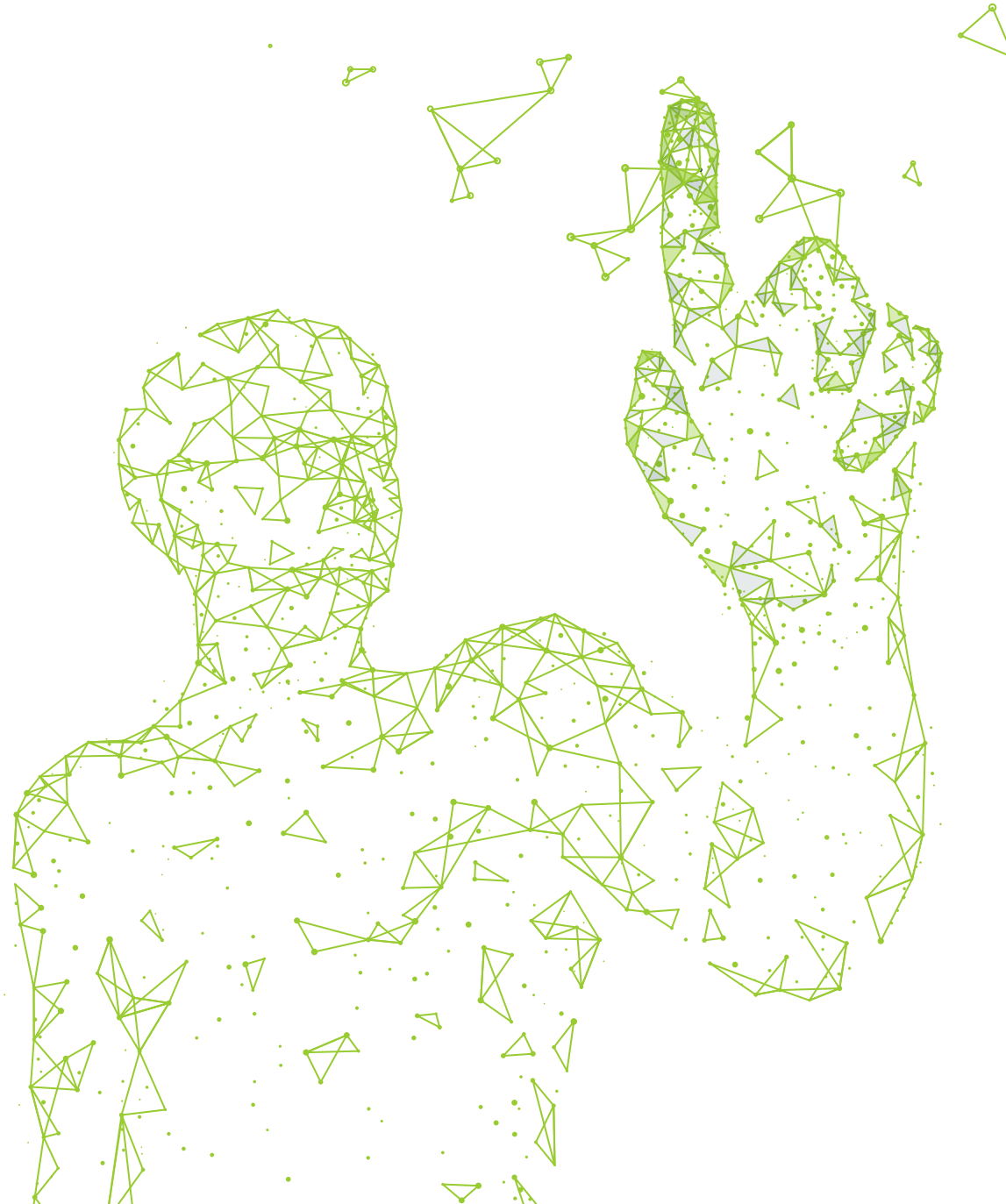
Our remuneration model comprises three core elements – guaranteed pay, annual incentives and long-term incentives. These are linked to performance to ensure that high levels of pay are awarded only for high performance and where there is sustained value creation for shareholders.





	Fixed pay	Variable pay	
Element	Guaranteed pay and benefits	Annual incentives	Long-term incentives
<b>How the pay is set</b>	<ul style="list-style-type: none"> <li>» Structured on a total cost to company basis</li> <li>» Benchmarked against independent market data</li> <li>» Reflects scope and depth of role, experience required, level of responsibility and individual performance</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Benchmarks</b>                      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.</p> <p>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.</p> </div>	<ul style="list-style-type: none"> <li>» GHRC determines the discretionary bonus pool based on its assessment of annual corporate performance</li> <li>» Individual discretionary bonus awards are linked to seniority, individual performance and contribution to corporate performance</li> </ul> <p>Performance is rewarded as follows:</p> <ul style="list-style-type: none"> <li>» Group CEO receives a discretionary bonus cash award of up to 200% of guaranteed pay based on GHRC performance assessment;</li> <li>» Exco members receive discretionary bonus cash awards of up to 150% of guaranteed pay based on performance as assessed by the Group CEO and subject to GHRC oversight;</li> <li>» Employees rated as “top performers” receive discretionary bonus cash awards of between 16% and 50% of guaranteed pay;</li> <li>» Employees rated as “meeting expectations” receive a discretionary bonus cash award of approximately one month’s guaranteed pay; and</li> <li>» 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% of the discretionary bonus pool).</li> </ul>	<ul style="list-style-type: none"> <li>» LTIS 2010/2018 are annual awards of JSE ordinary shares; future vesting is linked to corporate performance measured over three and four years</li> <li>» Critical skills cash scheme is an annual cash award up to 25% of the participant’s annual salary; future vesting is linked to continued employment and performance</li> </ul>
<b>Performance hurdle</b>	Not applicable	<ul style="list-style-type: none"> <li>» Fully discretionary based on GHRC assessment of annual corporate performance</li> <li>» Discretionary bonus pool is only awarded if preset financial and strategic targets are achieved.</li> </ul>	<ul style="list-style-type: none"> <li>» LTIS 2010/2018: Continued employment and achievement of corporate performance targets</li> <li>» Critical skills cash scheme: continued employment, JSE’s overall corporate performance and individual performance</li> </ul>





## REGULATION AND POLICY <sup>13</sup>

A substantial number of draft legislative or regulatory instruments and consultation papers are expected to be published by National Treasury and the regulatory authorities in final form or for comment in 2020.

### OUR REGULATORS

The JSE is both a frontline regulator and a commercial entity and as an SRO, we strive to ensure an appropriate balance between the pursuit of returns for shareholders and the regulation of the markets we operate. We are committed to conducting the business of the JSE in a fair and transparent manner. The integrity of our regulatory relationships is fundamental to the exercise of our regulatory authority.

The Financial Sector Regulation Act, 9 of 2017 (FSRA) established South Africa's twin peaks regulatory regime and while the FSCA, previously the Financial Services Board (FSB), remains our lead regulator, JSE Limited and JSE Clear, as market infrastructures, have since late 2018 been subject to prudential regulation by the PA, a division of SARB.

Detailed reports in respect of financial and risk information are submitted to the PA on a quarterly basis and in-depth on-site reviews of the business of JSE Limited and JSE Clear were conducted. The PA also engaged directly with the JSE Board on information security and cyberreadiness. No negative findings were raised by our regulators during 2019.

### DEFAULT SIMULATION

The FMA requires that clearing houses implement an effective and reliable infrastructure for the securities that they clear. Additionally principle 13 of the International Organisation of Securities Commissions (IOSCO) principles for financial market infrastructures (PFMI) specifies that the default procedures of financial market infrastructures be tested and reviewed annually.

JSE Clear conducted a full default simulation in October 2019, the outcome of which was positive and indicative of our ability to effectively manage an event of default.

### ICH

JSE Clear, which is presently licensed as an associated clearing house, will transition to become an ICH by 1 January 2022 in accordance with section 110 of the FMA. An operating model for the new ICH has been developed and agreed internally, which sets out the new governance structures of the CCP, as well as the nature and form of the ongoing relationship in respect of the provision of services and functions between JSE Limited and JSE Clear. JSE Clear will submit its formal licence application in 2020.

### OUR REGULATORY AND GOVERNANCE ROLE

The past two years have seen increased scrutiny applied to the regulatory and governance role of the JSE, most notably in response to the widely publicised South African corporate scandals that have taken place. This prompted us to re-examine our role, particularly in the context of our Listings Requirements, and to issue a consultation paper during September 2018, with a view to clarifying our regulatory role and enhancing the JSE Listings Requirements. We will continue to engage with all stakeholders in 2020 to improve the perception and understanding of the role of the JSE and to increase the quality of our regulation.

### Changes to the JSE Listings Requirements

The consultation paper, issued in 2018, sought to highlight and address the concerns of the South African investment community and challenge all role-players in the broader financial market ecosystem to consider their own roles and responsibilities. In particular, participants were asked to consider those roles that fall outside the JSE's regulatory ambit, including the disclosure of short sales; the disclosure of progress on market abuse investigations; and the responsibilities of other guardians of governance such as boards of directors, audit firms, analysts, large asset managers and shareholders.

Changes to the JSE Listings Requirements that followed this JSE consultation paper came into effect on 2 December 2019.

### Debt listings requirements

Changes to the debt listings requirements have progressed further. Market engagement is complex, as participants have disparate views on the appropriate level of governance. The JSE engaged with and conducted research on its global peers to benchmark and test its thinking against global precedent.

Changes to the debt listings requirements show a move to the incorporation of the King IV principles with the adoption of an “apply and explain” methodology and more alignment with the equity listings requirements. New sections include those that deal with disclosure and corporate governance; the introduction of the requirement that issuers fill the role of a debt officer to guard against potential conflicts of interest; and new controls applicable to SOEs. The SOE disclosure requirements now include requirements in respect of the disclosure of material suppliers, their procurement policies, and details of loans to material parties and politically connected parties.

The JSE aims to finalise these requirements during 2020.

### European issuer regulation global peer review

Our Issuer Regulation team met with some of its global peers (international regulators and exchanges) in 2019 to establish and strengthen these working relationships. The exchanges and regulators visited include the London Stock Exchange and UK Financial Conduct Authority, Euronext Amsterdam, the AFM (the financial services regulator for the Netherlands), Euronext Brussels, the Luxembourg Stock Exchange, and the Frankfurt Stock Exchange. The team focused on exchanges that are on our list of accredited exchanges and those jurisdictions where JSE-listed companies have dual listings.

There was general concern that the volume and complexity of regulatory requirements to which investors are subject may result in vital and onerous regulatory requirements being missed, with negative financial, compliance or reputational consequences. While it is not likely that there will be a reduction in these regulatory requirements, the JSE will continue to streamline and align its Listings Requirements where possible. Of particular interest to the JSE were those markets in where a disclosure-

based approach has been adopted and permits certain practices, provided that these are disclosed to the regulators. Examples of practices that are disclosed in other jurisdictions, but presently not permitted by the JSE, include related-party transactions, dual-class shares and pyramids. The JSE will apply careful consideration to these items in 2020.

### SENS short-form solution

Issuers raised concerns in respect of difficulties they had encountered with the submissions for their SENS announcements, in particular the complexity when such information is both voluminous and in PDF format, with the requirement that it be converted to TXT. The solution was designed and implemented in 2019 and has been well received by the market. The solution entails the issuance of a short-form announcement on SENS that contains key information, which is supplemented by a long-form announcement published in PDF format on the website of the JSE.

### Smartreg

The purpose of Smartreg, is to provide the JSE’s Issuer Regulation team with a single view of issuer clients based on internal and external data, as well as market and social sentiment. The technology has cross-platform capability, draws information from multiple sources and is hosted seamlessly in the cloud. The system makes use of artificial intelligence functionality and machine learning algorithms that sort company information and will identify possible patterns or trends that may be indicative of matters of concern. The initial solution will be implemented in 2020.

### LOCAL POLICY AND REGULATORY DEVELOPMENTS

Throughout 2019, the JSE continued to monitor and respond to international and local policy and regulatory changes that may have impacted the JSE, its participants or the South African financial markets in general.

A substantial number of draft legislative or regulatory instruments and consultation papers are expected to be published by National Treasury and the regulatory authorities in final form or for comment in 2020.

### Twin peaks framework

The publication of the legislative instruments to complete the twin peaks framework will provide the definitive policy direction in respect of the role of the SROs (SRO model of market infrastructures) within the framework, and we anticipate that the policy direction is likely to have a substantial impact on the JSE, its participants and the financial markets:

- » The draft Conduct of Financial Institutions Bill was published by National Treasury in early 2019 and aims to significantly streamline the conduct requirements for financial institutions.
- » National Treasury initiated the review of the wholesale financial markets and a review of the FMA in 2018. The proposed amendments to the FMA indicated significant changes to the SRO model. It is expected that the final report and possibly a draft Bill will be published for comment in 2020.
- » The Financial Sector Levies Bill provides for the funding of the twin peaks framework by the imposition and collection of levies from market infrastructures and financial institutions, for the benefit of the FSCA, the PA, the Financial Services Tribunal, the Ombud Council, the Office of the Pension Funds Adjudicator and the Office of the Ombud for Financial Services Providers. It is expected that this bill will be introduced in parliament in 2020.
- » The Financial Sector Laws Amendment Bill provides for the resolution of systemically important financial institutions and deposit insurance for banks. Consequential amendments to the Insolvency Act, which are required to enable the JSE to accept securities as collateral *in lieu* of margin, are included in this bill.
- » The PA and the FSCA indicated that the draft guidelines on recovery plans for market infrastructures, previously published for comment, would be issued as a draft joint standard in 2020. The guidelines draw on the Recovery of Market Infrastructures report published by the CPMI-IOSCO, which provides supplementary guidance on the CPMI-IOSCO PFMI. Both the Exchange and JSE Clear are required to comply with the PFMI, where applicable.
- » In December 2019, the PA and the FSCA published their jointly developed framework for assessing the equivalence of external market infrastructures, such as CCPs and trade repositories, and the instructions to be followed by local market infrastructure licence applicants. The finalisation of these instruments will enable JSE Clear to apply for a CCP licence as required in terms of the FMA.

### Cybercrimes Bill

The Cybercrimes Bill has been revived by the National Council of Provinces (NCoP) and will be processed through the Securities and Justice Committee as a section 75 bill. It is expected to be processed in the first half of 2020 and the JSE and JSE Clear may be declared critical information infrastructures.

### Economic policy paper

National Treasury published an economic policy paper titled *Economic Transformation, Inclusive Growth, and Competitiveness: Towards an Economic Strategy for South Africa*. The purpose of the paper was to propose growth reforms for government implementation that promote economic transformation, support labour-intensive growth, and create a globally competitive economy. The JSE noted its full support of the intent of the paper and our commitment to supporting socio-economic initiatives that are relevant to our core functions and within our legislative and regulatory remit.

### Crypto-assets

The Intergovernmental Fintech Working Group (IFWG), comprising National Treasury, the Financial Intelligence Centre, the FSCA and SARB, has initiated a process to develop a regulatory framework for crypto-assets in South Africa. The IFWG's position is that crypto-assets possess the same economic value as other traded financial instruments, therefore they should be regulated. SARB is also due to publish a draft policy paper on crypto-assets following the review of the public comments on the crypto-currency discussion paper published in February 2019.

### Financial Action Task Force (FATF) and Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG) Evaluation

The final report on the on-site review of South Africa's capability for identifying and combatting money laundering and terror financing conducted by the FATF, ESAAMLG and the International Monetary Fund assessment team is expected in June 2020.

### Benchmarks

The purpose of FSCA's consultation paper on the implementation of a financial benchmark regulatory regime (October 2018) was to gather more information on benchmarks in South Africa to enable the drafting of a financial benchmark standard. An intergovernmental working group has been established to draft a joint standard aligned to the CPMI-IOSCO PFMI. This aims to establish a regulatory framework for benchmarks in South Africa, with a 1 January 2021 deadline for assessment as equivalent by the European Commission. It is expected that the FSCA will publish a draft standard in 2020.

### INTERNATIONAL POLICY AND REGULATORY DEVELOPMENTS

JSE's engagement with international standard setting bodies and regulators in 2019 related mostly to policy and regulatory developments in respect of CCPs.

#### Third-country CCPs

The revised European Markets Infrastructure Regulation (EMIR 2.2) came into force on 25 November 2019. EMIR 2.2 significantly enhances the supervisory powers of the European Securities and Markets Authority (ESMA) over third-country CCPs

(TC-CCPs) and introduces a two-tier system for classifying TC-CCPs: Tier 1: Non-systemically important CCPs will continue to be able to operate under the existing EMIR equivalence framework; and Tier 2: Systemically important CCPs will be subject to stricter requirements.

The JSE responded to ESMA both bilaterally and through the WFE in respect of ESMA's final reports (Technical Advice) on the supervision of TC-CCPs. Our expectation is that JSE Clear will be classified as a Tier 1 TC-CCP and will continue to be recognised under the existing framework. However, JSE Clear will be subject to ESMA's enhanced supervisory powers, which includes the ability to regularly review recognition decisions, investigative and on-site inspection powers and a penalty payment regime for infringements of EMIR requirements, and JSE Clear will be obliged to pay supervisory fees to ESMA.

### Key discussion papers

The JSE responded in respect of two key discussion papers to international standard setting bodies through the WFE:

- » CPMI-IOSCO's discussion paper on CCP default management auctions which focused on key aspects of a CCP's default management auctions; and
- » Financial Stability Board's discussion paper on financial resources to support CCP resolution and the treatment of CCP equity in resolution.



# PROTECTING VALUE CREATION

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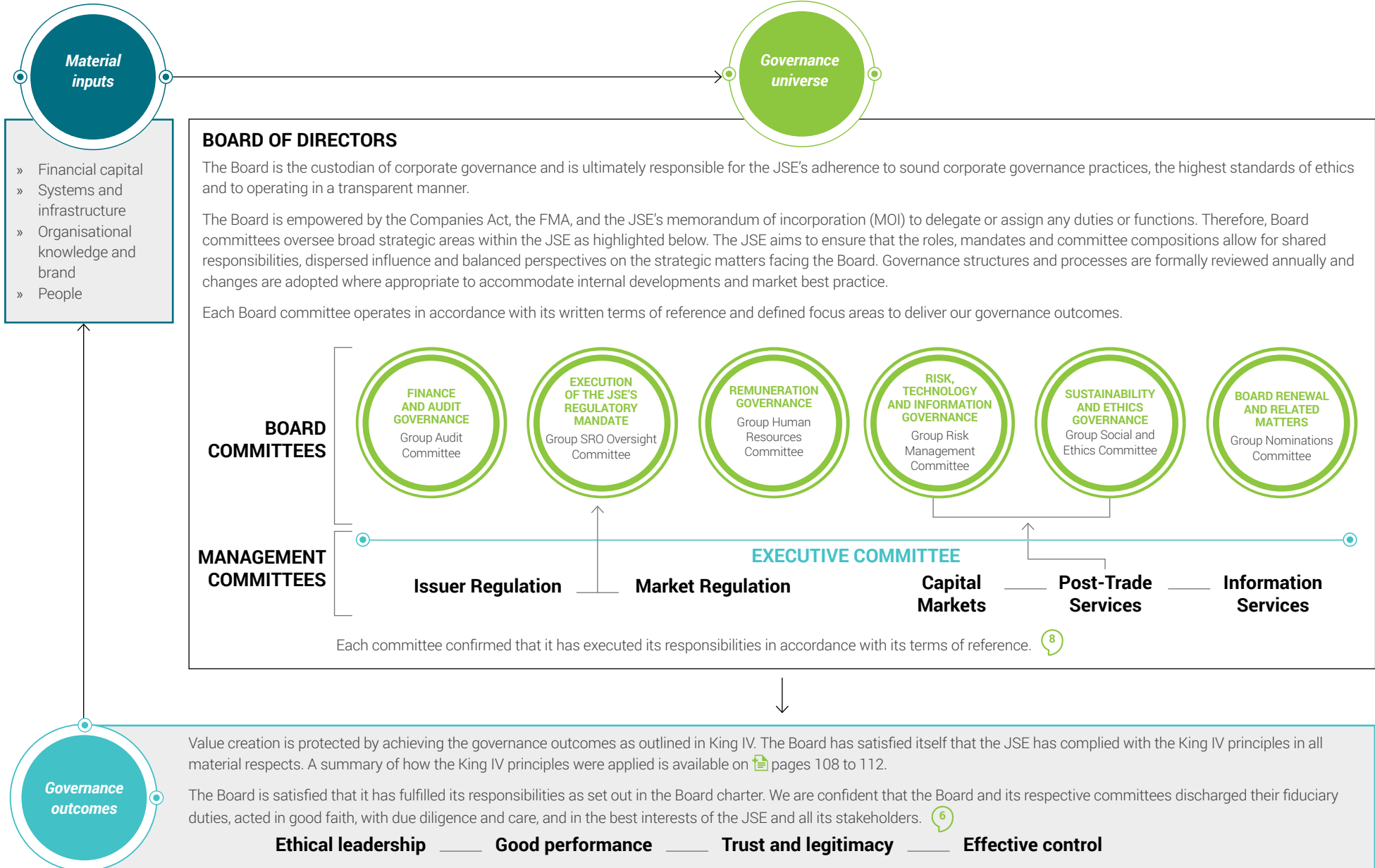
## COMMITMENT TO GOVERNANCE

The JSE Board regards corporate governance as more than mere structures and processes; it views it as a complete system that has purpose, inputs and outputs and involves people. The effectiveness of our governance, risk and compliance frameworks, policies and controls are judged on how well they support the Group in achieving its strategic objectives and ensuring that sustainable value is created for stakeholders.

The Board and executive management have adopted sound corporate governance principles, practices and reporting informed by a range of local and international requirements, standards and guidance, including, but not limited to, the Companies Act, 71 of 2008 (Companies Act); the JSE Listings Requirements; and King IV.









# OUR LEADERSHIP TEAMS

The JSE leadership is responsible for the future sustainability of the Group and for enhancing long-term value creation for stakeholders.



**Nonkululeko Nyembezi (59)**  
Independent non-executive chairman  
*BSc; MSc; MBA*



**Dr Suresh Kana (64)**  
Lead independent non-executive director  
*CA(SA); CD(SA); MCom; PhD (Honorary)*



**Zarina Bassa (55)**  
Independent non-executive director  
*BAcc; DipAcc; CA(SA)*



**Siobhan Cleary (46)**  
Independent non-executive director  
*BA LLB; MA; MBA; Fellowship: Yale World Programme*



**Fatima Daniels (59)**  
Independent non-executive director  
*BSc; CTA; CA(SA)*



**Nolitha Fakude (55)**  
Independent non-executive director  
*BA (Hons)*



**Dr Michael Jordaan (51)**  
Independent non-executive director  
*MCom; PhD*



**Faith Khanyile (52)**  
Independent non-executive director  
*BA (Hons); MBA; HDip Tax; PhD (Honorary)*



**Ben Kruger (60)**  
Non-executive director  
*BCom (Hons); CA(SA)*



**David Lawrence (68)**  
Non-executive director  
*BA; MCom*



**Dr Mantsika Matooane (44)**  
Independent non-executive director  
*BSc; PhD; MBA*

CEO of Ichor Coal N.V., non-executive director of Standard Bank Group; Anglo American plc; Macsteel International Holdings BV and Macsteel Service Centres SA Proprietary Limited  
Appointed to the Board in 2009  
Tenure as director: 10 years

Chairman of Murray & Roberts Holdings Limited and non-executive director of Quilter plc. Chairman of the Audit Committee of the United Nations World Food Programme, based in Rome  
Appointed to the Board in 2015  
Tenure as director: 4 years

Independent non-executive director of Woolworths Holdings Limited, Investec Limited, Investec plc, and Oceana Group Limited. Chairman of Yebo Yethu Limited  
Appointed to the Board in 2018  
Tenure as director: 1 year

Appointed to the Board in 2020  
Tenure as director: 5 months

Independent non-executive director of Clicks Group Limited, MMI Holdings and various subsidiaries of the MTN Group  
Appointed to the Board in 2018  
Tenure as director: 1 year

Non-executive director of Anglo American plc and African Oxygen Limited. Council member of the Human Development Council of South Africa  
Appointed to the Board in 2018  
Tenure as director: 2 years

Founder of Montegray Capital Proprietary Limited and chairman of Compuscan Holdings Proprietary Limited  
Appointed to the Board in 2014  
Resigned from the Board: 25 June 2020  
Tenure as director: 5 years

CEO of WDB Investment Holdings Proprietary Limited. Non-executive director of Discovery Limited and Safari RSA Investments Limited  
Appointed to the Board in 2018  
Tenure as director: 1 year

Former executive director of Standard Bank Group Limited and the Standard Bank of South Africa Limited. Non-executive director of Stanbic IBTC Nigeria and ICBC Standard Bank plc  
Appointed to the Board in 2018  
Tenure as director: 2 years

Non-executive director of Investec Bank Limited  
Appointed to the Board in 2008  
Resigned from the Board: 25 June 2020  
Tenure as director: 11 years

Non-executive director of Nedbank Group Limited and CEO of Truesport Investments Proprietary Limited  
Appointed to the Board in 2012  
Tenure as director: 7 years



**Leila Fourie (51)**  
**Group Chief Executive Officer (CEO)**  
*BA (Hons); MCom; PhD*

Director of JSE-related companies  
Appointed to the Board in 2019  
Appointed CEO in 2019  
Tenure as director: 9 months



**Aarti Takoorden (39)**  
**Chief Financial Officer (CFO)**  
*BCompt (Hons); CTA; CA(SA)*

Director of JSE-related companies. World Economic Forum Young Global Leader  
Appointed to the Board in 2013  
Appointed CFO in 2013  
Tenure as director: 6 years



**Alternate director**  
**John Burke (53)**  
**Director: Issuer Regulation**  
*BCom (Hons); HDip*

Chairman of the Issuer Services Advisory Committee; member of the King Committee on Corporate Governance; director of the Institute of Directors  
Appointed to the Board in 2005  
Tenure as director: 14 years  
Retired 1 February 2020



**Group Company Secretary**  
**Graeme Brookes (52)**  
*BCom*

Director of JSE-related companies  
Appointed in 2014  
Tenure as Group Company Secretary: 5 years

*Biographical details are correct as at 31 December 2019. Tenure as a director is calculated from the date that an appointment is first ratified by shareholders to the date of the AGM to be held on Thursday, 25 June 2020.*



**Leila Fourie (51)**  
Group Chief Executive Officer



**Aarti Takoordeen (39)**  
Chief Financial Officer



**John Burke (53)**  
Director: Issuer Regulation



**Valdene Reddy (37)**  
Director: Capital Markets

**BBusSc**

Financial Sector Transformation Council and Financial Services Working Group of BRICS Business Council  
Acting Director of Capital Markets from November 2019  
Appointed to Exco February 2020  
Years in service: 4 years 6 months



**Dr Alicia Greenwood (48)**  
Director: Post-Trade Services

**BSc (Hons); PhD**

Invitee to JSE GRMC and JSE Clear Risk Committee.  
Member of JSE Clear Board and Strate Board  
Appointed to Exco in 2016  
Years in service: 4 years



**Mark Randall (39)**  
Director: Information Services

**BCom**

Fellow of the Actuarial Society of South Africa  
Appointed to Exco in 2018  
Years in service: 8 years



**Hendrik Kotze (55)**  
Director: Information Technology  
Chief information officer

**BCom; CPIM (APICS)**

Appointed to Exco in December 2018  
Years in service: 1 year



**Donald Khumalo (42)**  
Director: Human Resources

**BA; BA (Hons); Management Development Programme, Advanced Executive Programme**

Appointed to Exco in 2016  
Years in service: 4 years



**Zanele Morrison (44)**  
Director: Marketing and Corporate Affairs

**BA; Management Advancement Programme; Executive Development Programme**

Appointed to Exco on 1 February 2019  
Months in service: 11 months

**Donna Nemer (62)**

Director: Capital Markets

Resigned: Effective September 2019



Biographical details are correct as at 31 December 2019.




## DIRECTORS' RESPONSIBILITIES

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 the JSE does not exercise control).

The role of the independent non-executive chairman is distinct and separate from that of the Group CEO. The separation of responsibilities is designed to ensure that no single person has unfettered decision-making powers and that appropriate balances of power and authority exist on the Board.

<p><b>Chairman</b> </p>	<p>An independent non-executive director who is responsible for leading the Board, ensuring the integrity and effectiveness of the Board and its committees. Ensures high standards of corporate governance and ethical behaviour.</p>
<p><b>Lead Independent Director (LID)</b> </p>	<p>An independent non-executive director who maintains the effectiveness of the Board by providing leadership and advice when the Chairman has a conflict of interest, without detracting from or undermining her authority. Provides support to the Chairman, is available as a trusted intermediary for the other directors, as necessary, and chairs a meeting of the non-executive directors at which the performance of the Chairman is considered.</p>
<p><b>Group Chief Executive Officer (CEO)</b></p>	<p>An executive director responsible for leading the Group, creating an organisational culture based on the Group values and maintaining an ethical environment. She develops and recommends the JSE's short, medium and long-term vision and strategy to the Board, and drives operating performance within the JSE's approved risk appetite. Furthermore, she appoints the executive management and ensures proper executive succession planning.</p>
<p><b>Chief Financial Officer (CFO)</b></p>	<p>An executive director responsible for the Group's financial capital. She leads the finance team and provides the Board with a second executive view of the Group. She creates and maintains a robust internal financial control environment, ensures appropriate treasury management, oversees the integrity of financial reporting and ensures compliance with all relevant financial and taxation laws and regulations, including IFRS.</p>

### Group company secretary


All directors have unfettered access to the advice and services of the Group company secretary, Graeme Brookes, who acts as a conduit between the JSE Board and the Group. The Group company secretary has a direct reporting line to the Chairman of the Board, the GAC and the GRMC. 

The Group company secretary plays a pivotal role in the effective functioning of the Board by providing guidance to directors on their governance, compliance and fiduciary responsibilities. He ensures that board and committee procedures, charters and relevant legislation and regulation are observed.

The Board assessed the Group company secretary for the year under review, as required in the JSE Listings Requirements, and confirms that he continues to demonstrate the requisite level of knowledge and experience to carry out his duties. In line with the principles of King IV, the Group company secretary is not a director of the Company and in the view of the directors is suitably independent of the Board to be an effective steward of the Group's corporate governance programme.

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

- » Explicit independence: There is no direct or indirect relationship between the directors and the Group company secretary; and
- » 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. Mr Brookes's biography is on  page 73.

# GOVERNANCE STRUCTURES

## BOARD COMPOSITION, DIVERSITY AND TENURE AS AT 31 DECEMBER 2019

### Unitary Board structure

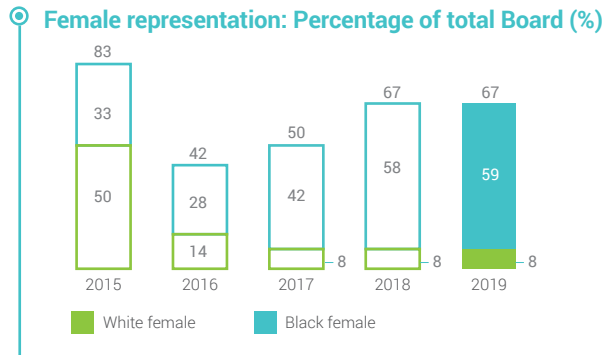
#### Board composition

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



#### Board diversity of gender and race

Policy: Maintain a minimum target of 50% female representation on the Board, and maintain a minimum of 67% Black Board members.



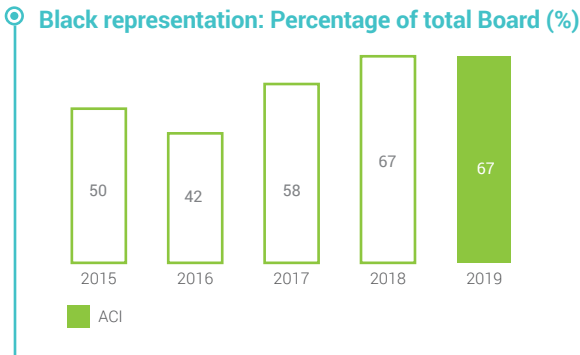
#### Board diversity of skill and expertise <sup>7</sup>

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

The Board's areas of expertise are:

- » Accounting, audit and internal control
- » Risk
- » Commerce
- » Entrepreneurship
- » Investment banking and financial services
- » Regulatory
- » Technology

The composition of the Board is well balanced, however it will need to focus on constant renewal in order to be well equipped to deal with the disruption and changing regulatory, technological and competitive landscape faced by the JSE.



#### Board diversity in age

Policy: No formal policy on retirement age applies.



#### 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, that 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.

#### 2019 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 <sup>7</sup> directors' report in the annual financial statements for non-executive directors' interests in JSE Limited.

The Board considers the Chairman to be independent. The Board has also appointed an independent non-executive director as a lead independent director.

#### 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 re-elected by shareholders. Non-executive directors who have served for nine consecutive years may thereafter stand for annual re-election 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
<b>Independent</b>	Zarina Bassa Fatima Daniels Nolitha Fakude Dr Michael Jordaan Dr Suresh Kana Faith Khanyile	Dr Mantsika Matookane	Nonkululeko Nyembezi
<b>Non-executive</b>	Ben Kruger		David Lawrence
<b>Executive</b>	Leila Fourie	Aarti Takoordeen	
<b>Average tenure</b>	1.8 years	6.5 years	10.5 years

The Chairman has served 10 years on the Board and Chairman succession is now a key area of focus.

## DIRECTOR ROTATION

The Board, supported by the GNC, devotes significant time ensuring that there is continuity of skills and experience on the Board, while introducing fresh thinking and skills to meet challenges and leverage opportunities arising from the changing capital markets landscape. This requires consideration of the JSE's tenure policy and the rotation of directors as required by the MOI. 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 AGM.

The new Group CEO, Leila Fourie, joined the Board on 1 October 2019, and will stand for election at the June 2020 AGM. The Board also appointed Siobhan Cleary, effective 1 February 2020, and she will also stand for election at the June 2020 AGM.

In accordance with the Board's tenure policy, the Chairman, Nonkululeko Nyembezi, will stand for re-election for a further one-year term at the June 2020 AGM. David Lawrence and Dr Michael Jordaan will be retiring from the Board and will not stand for re-election.

2020	2019	2018	2017	2016	2015	2014
	SP Kana	A Takoordeen NP Mnxasana MA Matooane	N Nyembezi M Jordaan NF Newton-King	AD Botha AM Mazwai DM Lawrence	A Takoordeen NP Mnxasana MA Matooane	N Nyembezi AM Mazwai NG Payne NF Newton-King
N Nyembezi	N Nyembezi DM Lawrence	NG Payne	AD Botha AM Mazwai NG Payne			
L Fourie S Cleary	BJ Kruger F Daniels FN Khanyile Z Bassa	VN Fakude		SP Kana	L Fourie	
Triennial rotation in terms of MOI		Annual re-election (after a nine-year tenure) in terms of JSE tenure policy			First election by shareholders	

The following resolutions are included in the AGM notice available at <https://web.jse.co.za/ar2019>:

- » Ordinary resolution number 1: Election of directors appointed to the Board of directors during the year; and
- » Ordinary resolution number 2: Re-election of directors who retire in terms of the Company's policy on non-executive director tenure.





## MEETING ATTENDANCE 8

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.

Director	Role	Overall attendance	Board	Board strategy session	GAC <sup>1</sup>	GRMC	GHRC <sup>2</sup>	GSEC	GSROOC	GNC <sup>4</sup>	GDC
<b>Number of meetings</b>			<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>
N Nyembezi	Chairman of Board and GNC	100%	4	1	3(l)	4(l)	5	3(l)	2(l)	1	3
Z Bassa	Independent non-executive director	100%	4	1	2	4			2		
F Daniels	Chairman GSROOC	100%	4	1	3	4(l)	4		2		3
VN Fakude	Chairman of GHRC	100%	4	1			5	3			
M Jordaan	Independent non-executive director	100%	4	1		4					
SP Kana	LID; chairman of GSEC; chairman of GAC	100%	4	1	3	4		3	2	1	
FN Khanyile	Independent non-executive director	100%	4	1	3	4(l)			2		
MA Matookane	Chairman of GRMC	100%	4	1	1	4					
<b>Non-executive director</b>											
BJ Kruger		100%	4	1		4	5				3
DM Lawrence		100%	4	1		4	5	3		1	3
<b>Executive director</b>											
L Fourie <sup>3</sup>	New Group CEO	100%	1	1	1(l)	1	1(l)	1(l)		1(l)	
A Takoordeen	CFO	100%	4	1	3(l)	4					3
<b>Alternate director</b>											
JH Burke	Alternate	100%	4	1					2(l)		
<b>Group company secretary</b>											
GA Brookes	Group company secretary	100%	4	1	3	4	5	3	2	1	3

GAC – Group Audit Committee

GRMC – Group Risk Management Committee

GHRC – Group Human Resources Committee

GSEC – Group Social and Ethics Committee

GSROOC – Group SRO Oversight Committee

GNC – Group Nominations Committee

GDC – Group Deal Committee

(l) – Invitee

<sup>1</sup> In addition, there were two telecons during the year.

<sup>2</sup> In addition, there was one telecon during the year.

<sup>3</sup> Appointed with effect from 1 October 2019.

<sup>4</sup> GNC also convened, on five occasions during the year, as the search committee to identify a new Group Chief Executive Officer for appointment by the Board. Other non-executive directors joined these meetings from time to time. The Board formally approved the appointment of Dr L Fourie as Group Chief Executive following a recommendation by GNC.

**Board committee**

Independence of committee: **100%**

**Objective**

Statutory committee constituted in terms of section 94(7) of the Companies Act. The committee's main objective is to evaluate the adequacy and efficiency of accounting policies, internal controls and financial and corporate reporting processes. In addition, the committee assesses the effectiveness of the internal auditors and the independence and effectiveness of the external auditors.

**Members (number of meetings)**

**Members**

- » SP Kana (Chairman) [3/3]
- » Z Bassa [2/2]
- » F Daniels [3/3]
- » FN Khanyile [3/3]
- » MA Matooane [1/1]

**Invitees**

- » N Nyembezi
- » L Fourie
- » External auditor
- » Group company secretary

In addition, there were two telecons during the year.

Further reading: *Directors' report and GAC report* in the annual financial statements

**Board committee**

Independence of committee: **57%**

**Objective**

The committee oversees the Group's risk management policies, procedures and activities, is responsible for governance of technology and information and closely monitors the risk register and effectiveness of risk mitigating strategies.

**Members (number of meetings)**

**Members**

- » MA Matooane (Chairman) [4/4]
- » Z Bassa [4/4]
- » L Fourie [1/1]
- » M Jordaan [4/4]
- » SP Kana [4/4]
- » BJ Kruger [4/4]
- » DM Lawrence [4/4]

**Invitees**

- » F Daniels
- » F Khanyile
- » N Nyembezi
- » A Takoordeen
- » FSCA representative
- » Chief information officer
- » Chief risk officer
- » External auditors
- » Group internal audit
- » Director: Post-Trade Services
- » Director: Capital Markets
- » Group company secretary

Additional information is available under *risk governance* on pages 90 to 93

**Board committee**

Independence of committee: **75%**

**Objective**

Statutory committee constituted in terms of section 94(7) of the Companies Act to monitor and report on the manner and extent to which the Group protects, enhances and invests in the economy and in society.

**Members (number of meetings)**

**Members**

- » SP Kana (chairman) [3/3]
- » VN Fakude [3/3]
- » DM Lawrence [3/3]
- » MA Matooane [3/3]

**Invitees**

- » L Fourie
- » Director: Human Resources
- » Director: Marketing and Corporate Affairs
- » Group company secretary

Refer to the reinforcing our ethics section on pages 58 to 59, as well as in the online *social value report*.

**BOARD COMMITTEES** <sup>8</sup>

The objective and composition of the Board committees are described. The responsibilities delegated to these committees are formally documented in each committee's terms of reference, which are approved by our Board and reviewed on an annual basis. After each committee meeting, committee chairmen report back to the Board, which facilitates transparent communication between directors and ensures that all aspects of the Board's mandate are addressed.

**Group Audit Committee**

**Group Risk Management Committee**

**Group Social and Ethics Committee**

Former CEO Nicky Newton-King was a member of the GRMC and GDC and attended all meetings held. She was also a standing invitee of all other Board committee meetings.

### Group Human Resource Committee

#### Board committee

Independence of committee: **60%**

#### Objective

The committee oversees strategic human resource matters paying focus on the remuneration policies for directors, executives and employees.

#### Members (number of meetings)

##### Members

- » VN Fakude (chairman) [5/5]
- » F Daniels [4/5]
- » BJ Kruger [5/5]
- » DM Lawrence [5/5]
- » N Nyembezi [5/5]

##### Invitees

- » L Fourie
- » Director: Human Resources
- » Group company secretary

In addition, there was one telecon during the year.

Refer to the rewarding performance section on pages 59 to 64, as well as in the online *remuneration report*.



### Group Nominations Committee

#### Board committee

Independence of committee: **67%**

#### Objective

The committee is responsible for Board governance policies, composition, succession planning and annual Board effectiveness review.

#### Members (number of meetings)

##### Members

- » N Nyembezi (Chairman) [1/1]
- » SP Kana [1/1]
- » DM Lawrence [1/1]

##### Invitees

- » L Fourie
- » Group company secretary

### Group SRO Oversight Committee

#### Board committee

Independence of committee: **100%**

#### Objective

The committee has an independent role, providing oversight of all regulatory matters, policies and related activities of the JSE Group.

#### Members (number of meetings)

##### Members

- » Z Bassa (chairman) [2/2]
- » F Daniels [2/2]
- » SP Kana [2/2]
- » N Nyembezi [2/2]

Refer to the *Group SRO Oversight Committee report* which is available in the online *Social Value Report*.



### Group Deal Committee

#### Board committee

Independence of committee: **33%**

#### Objective

An *ad hoc* committee of the Board established in April 2019. It provides a forum for the directors to consider and evaluate potential opportunities for strategic partnerships and acquisitions.

#### Members (number of meetings)

##### Members

- » D Lawrence (chairman) [3/3]
- » F Daniels [3/3]
- » L Fourie\*
- » B Kruger [3/3]
- » N Nyembezi [3/3]
- » A Takoordeen [3/3]

\* All committee meetings were held prior to L Fourie's appointment in October 2019.



# ENHANCING GOOD GOVERNANCE

## BOARD AS A DRIVER OF VALUE PROTECTION <sup>8</sup>

As a central player in the local economy and with a global reach, we need to ensure sustainable access to capital and fair access to a deep, liquid and robust trading platform while also applying regulatory tools to influence stakeholder behaviour. Therefore, it is even more important that we leverage good governance to ensure the long-term sustainability of our business.

During 2019, Board and Board committee discussions covered a wide range of topics with a significant amount of time spent on the following topics:

Key focus areas	Key priorities in 2019	Board	Board committees					
			GAC	GRMC	GHRC	GSEC	GNC	GSROOC
<b>Strategy and performance</b> <sup>4</sup>								
Board drove the JSE's strategy, including a critical assessment of acquisitions.	Reviewed, refined and approved a Group strategy that is more focused on driving revenue and creating new lines of business beyond equity market trading.	○	○					
<b>Connected to all nine material matters</b>	Approved the acquisition of a majority stake in Link SA which provides a platform for additional revenue in 2020 (subject to Competition Tribunal review).	○	○					○
<b>Talent continuity</b>								
<b>Connected to material matter:</b> <sup>6</sup> Managing critical and essential skills and talent	Directed the CEO leadership transition. <sup>10</sup>	○			○		○	
	Oversaw Exco leadership changes.	○			○			
	Engaged with the senior leadership talent management, including pipeline and succession planning for all divisions.	○			○			
	Reviewed and supported the personal development plans and actions of high-potential talent, critical employees and senior leaders.	○			○			

Key focus areas	Key priorities in 2019	Board	Board committees						
			GAC	GRMC	GHRC	GSEC	GNC	GSROOC	GDC
<b>Stakeholder engagement approach</b>									
Ensure the implementation of a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders over time.  <b>Connected to material matter:</b> 8 Concentration and interdependency of capital market eco-system	Oversaw client engagement and ensured management conducted the NPS survey to measure client satisfaction and improve delivery of service after the implementation of ITaC solution.	○				○			
	Ensured the development and implementation of an action plan to address feedback from the employee engagement survey taken in 2018.				○	○			
<b>Risk management</b> <sup>11</sup>									
Govern risk in a way that supports the Group in setting and achieving its strategic objectives.	Approved the risk and resilience roadmap and strategy.	○				○			
	Approval of crisis management policy and update manual.					○			
	Reprioritisation of top risks.	○				○			
Additional information is available under <i>risk governance</i> on pages 90 to 94.									

Key focus areas	Key priorities in 2019	Board	Board committees						
			GAC	GRMC	GHRC	GSEC	GNC	GSROOC	GDC
<b>Technology and information governance</b> <sup>12</sup>									
<p>Oversee the governance of technology and information management to support strategy.</p> <p><b>Connected to material matters:</b></p> <p>② Operational availability and stability</p> <p>③ Enabling technology to provide innovative solutions for clients</p>	The GRMC approved the IT strategy which is more aligned to the business strategy.								
	Approved capital expenditure towards IT upgrades: Improve security systems and firewall infrastructure and MIT software upgrade.		○		○				
	Increased focused on information security and monitored the campaign to raise employee awareness around IT security.		○		○				
	Oversaw cybersecurity, information management and data security interventions.					○			
<b>Transformation and socio-economic development</b> <sup>3</sup>									
<p><b>Connected to material matter:</b></p> <p>⑤ Transformation and socio-economic advancement</p>	Monitor progress against three-year EE plan targets.		○		○				
	Monitor progress on the Group's BBBEE plans and scorecard to ensure adoption of practices that consider our BBBEE transformation objectives.		○		○		○		
	Reviewed the JSE's participation in social and environmental indices, including FTSE Russell and the Dow Jones Sustainability indices.						○		
<b>Ethics</b> <sup>2</sup>									
Govern ethics in a way that supports the establishment of an ethical culture.	Revisited and approved the revised code of conduct and ethics policy.						○		



# 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.

### Board appointment and diversity

Guided by the Board appointment policy, the appointment process is a formal and transparent process which has a particular focus on gender and race diversity.

### Board induction

Induction programme is a formal one-year process that enables new non-executive directors to familiarise themselves with the Group's operations, financial affairs and strategic position. The programme requires the new directors to attend GRMC meetings for the first year of appointment.

### Board continuity

Focus on succession planning is important as it ensures the effective functioning of the Board over time and appropriate independence of all directors. Board succession planning, including CEO succession, is the responsibility of the GNC while executive talent planning falls within the remit of the GHRC.

## Changes in Board composition <sup>7</sup>

Mr D Lawrence and Dr Michael Jordaan will retire as directors of the JSE with effect from Thursday, 25 June 2020, the day of the AGM. Mr Lawrence, non-executive director, will retire in accordance with the Board's tenure policy for non-executive directors and will not be available for re-election.

Dr Jordaan, independent non-executive director, who has served on the Board since 2014 and is eligible for a further term, will retire at the upcoming AGM and will not be available for re-election.

Ms NF Newton-King resigned as the executive director as a result of her resignation as the CEO of the Group with effect from 30 September 2019.

Dr L Fourie was appointed as an executive director as a result of her appointment as Group CEO of the Group.

Ms S Cleary was appointed as a new independent non-executive director, effective 1 February 2020.

## EVALUATION PROCESS <sup>9</sup>

The annual self-assessment of the Board's performance and effectiveness, as well as that of its governance committees and individual directors (including the Chairman, CFO and Group company secretary), is overseen by the Chairman and the Group company secretary in conjunction with an independent service provider. Individual interviews are 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. Where gaps in knowledge or skills are identified, directors are developed or new appointments are made. The full report is presented to the GNC for discussion, and is tabled for consideration by the Board.

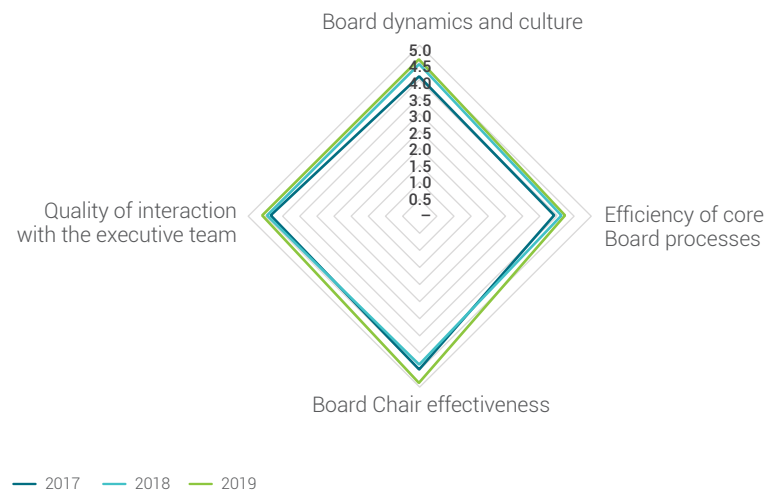
## Key insights from the 2019 review

### Board impact on critical issues



- » Technology remains a key focus area with further progress to be made in 2020.
- » The level of oversight on stakeholder engagement and culture and ethics needs to be heightened.
- » Impact remains positive on all areas of critical importance.

### Drivers of Board effectiveness



Drivers of Board effectiveness remained at very high levels.



## Compliance



- » Committees remain highly effective in the discharge of their duties.
- » The Group company secretary remains very effective.

## SUCCESSION PLANNING

Board succession planning, including CEO succession, is a responsibility of the GNC, supported by the Group company secretary. Executive talent planning falls within the ambit of the GHRC. The CEO, supported by the Director: Human Resources, is responsible for hiring the executive team.

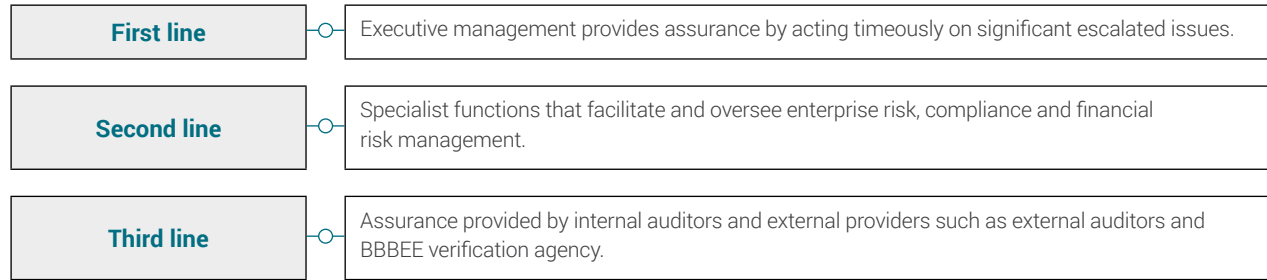
The position of Chairman remains a priority for the Group Nominations Committee. The committee has confirmed the principle that existing directors and external candidates will be considered for the Chairman role and the process will commence during 2020.

With several new directors appointed in 2017 and 2018 the Board is well balanced in terms of skills, experience and tenure. At the same time the changing business landscape demands continuous renewal of the Board, therefore this will remain a key area of focus in the future.



# GROUP INTERNAL AUDIT AND COMBINED ASSURANCE <sup>15</sup>

The Group's three levels of assurance model, which is aligned to King IV, is designed to effectively address the Group's key risks and material matters through a combination of the following assurance service providers and functions appropriate for the JSE:



During the year, the GAC received regular reports from Group internal audit (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 and objective assurance, insight and related advisory services.

GIA is headed by the chief audit executive who reports functionally to the GAC chairman and administratively to the Group CEO, 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.

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
Deep dive on the IT landscape and key risks	GIA	» GRMC » GAC
MIT business case process review	GIA	GRMC
The design and operating effectiveness of internal controls	GIA	GAC
Management oversight of manual processes within Treasury	GIA	» GRMC » GAC
IT controls relating to the SENS application	GIA	GSROOC
FSCA-on-site visits during the year. These on-site visits typically include understanding the division, key processes involved and controls. These are mapped against the FMA and the JSE Listings Requirements	FSCA	GSROOC

# MANAGING OUR TOP RISKS <sup>11</sup>

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, to drive business performance, innovation and growth, and to protect and enhance value for our stakeholders.

## RISK CULTURE AND KEY PRINCIPLES

The JSE seeks to embed a risk culture in which 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. Risk management is incorporated into performance measurements, with clear accountability.

We have defined and revised our strategic risk objectives, which direct the way in which we identify, quantify and mitigate any risk that affects, or is inherent in, our business strategy, strategic objectives and strategy execution. They are:

### Create a risk-aware culture

- » Provide ongoing risk insights and risk information to provide a better understanding of the operating environment;
- » Conduct assessments to determine the JSE's risk culture and areas for improvement; and
- » Ongoing training and awareness.

### Implement a dynamic risk and resilience framework

- » Apply a consistent/standardised approach and methodology to the management of risk and response plans; and
- » Provide innovative tools to promote efficiency.

### Enhance risk ownership

- » Set out and communicate clear roles and responsibilities; and
- » Provide the required training to key stakeholders.

### Integrate

Integrate risk and resilience activities into business, processes and decision-making structures.

### Coordinate best available, value-adding information

- » Collect and coordinate data to promote more informed decision making;
- » Use tools/systems to collect accurate and relevant information; and
- » Use informative reporting to enable risk strategy and decision making.

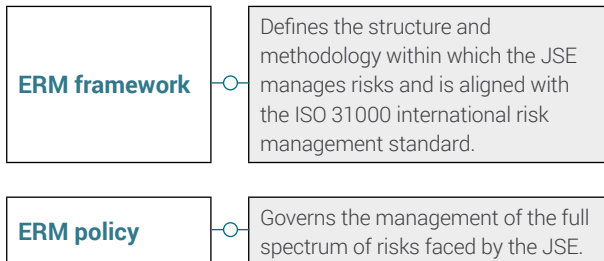
## RISK GOVERNANCE

The Board retains the ultimate responsibility for the oversight of risk. The 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.



Exco 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.

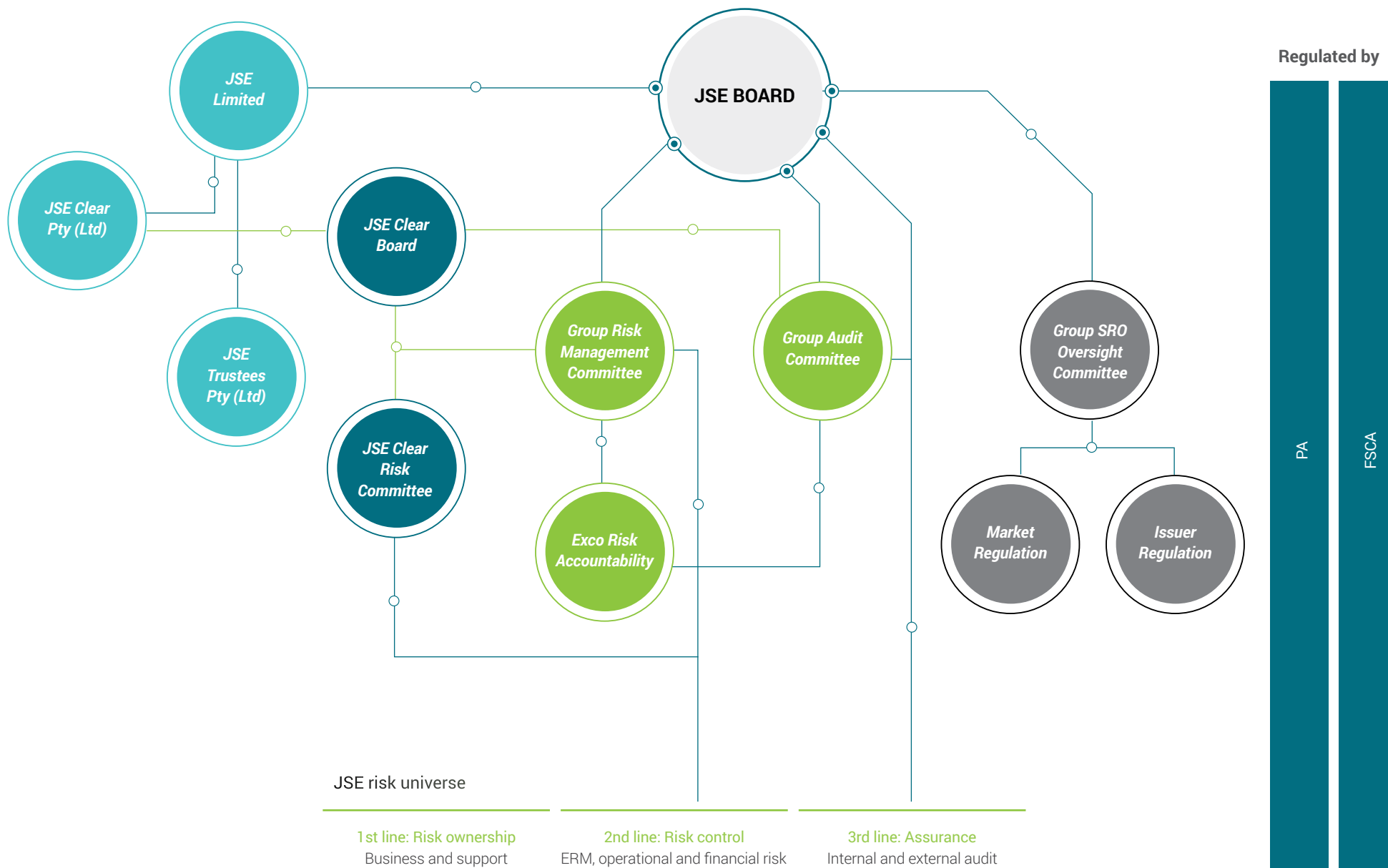


The ERM team provides oversight on strategic and operational risk management and business continuity with specialised risk teams responsible for IT governance, information security and financial risk management. The team applies industry best practice, which is obtained through interaction with SARB Financial Sector Contingency Forum (FSCF), WFE, Enterprise Risk Working Group (ERWG), Institute of Risk Management South Africa (IRMSA) working groups and International

Organization for Standardization (ISO) committees. The Group's chief risk officer is a member of ERWG, FSCF, IRMSA and ISO. The JSE integrated risk and resilience programme and strategy is based on guidance from King IV principles 11 and 15 and ISO 31000 (2009) and will be updated in 2020 to incorporate the updated ISO 31000 (2018) guidance as well as the elements of COSO deemed relevant to the JSE (such as key risk indicators), while also ensuring alignment with Basel III, Cobit 5 (previously referred to as Control Objectives for Information and Related Technology) and IOSCO principles on risk management.

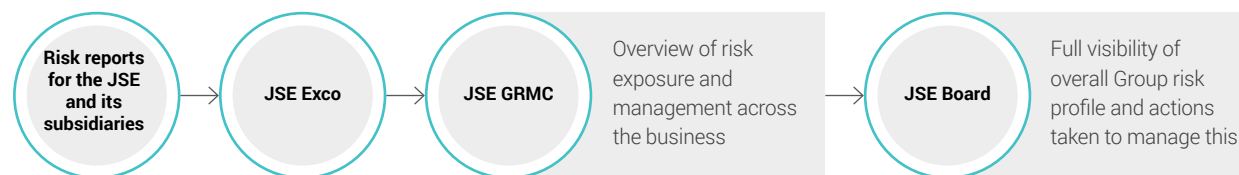


RISK GOVERNANCE STRUCTURE



## RISK REPORTING OVERSIGHT

Risk disclosure and oversight are fundamental components of risk management. The process is as follows:



As at 31 December 2019, the JSE Board was satisfied that the Group's risk and opportunity management processes were 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

<b>Capital positions</b>	Sufficient eligible capital to cover regulatory and economic capital requirements, including a buffer to accommodate stress events.
<b>Financial</b>	<ul style="list-style-type: none"> <li>» EBIT will not be less than the threshold.</li> <li>» Liquidity will be sufficient to cover a market participant default in cash equities and derivatives.</li> </ul>
<b>Operational</b>	Operational losses will be minimised to be within an expected target range.
<b>Compliance and ethics</b>	Compliance with all regulatory requirements and operating responsibly and ethically.
<b>Breaches to tolerance levels</b>	Any undue, unexpected and unusual risks and risk outside of tolerance level are escalated to the Board and where required the regulators.

## JSE CLEAR

The JSE's wholly owned subsidiary is involved in risk taking activities.

JSE Clear Proprietary Limited (JSE Clear) is a licensed clearing house in terms of the FMA and is a CCP for trades executed on the JSE's Derivatives Markets. JSE Clear manages counterparty credit risk, liquidity risk, operational risk and regulatory compliance risk.

Its governance structures are similar to those of the JSE: ultimate responsibility for the management of risk lies with the board and the risk committee (RC) assists the board. The board includes executive and independent expert representation. The JSE Clear RC is 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; and
- » define JSE Clear'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 through JSE Clear's risk management frameworks. Oversight of the degree to which this risk management framework is appropriately maintained and implemented is provided by the JSE Clear audit committee.

JSE Clear has reporting obligations to the JSE Board and the GRMC, allowing for appropriate Group oversight.

**GLOBAL PEER TOP RISKS**

The WFE, the global industry group for exchanges and CCPs, held the inaugural in-person meeting of its ERWG in London on 26 and 27 June 2019. The ERWG consists of a wide range of WFE members across the global breadth of the association. The group connects ERM and operational risk management (ORM) leadership and thinking at the world’s financial exchanges and clearing houses. Members have found it important to share experience and perspectives in the interest of developing ERM and ORM that focuses on issues specific to market infrastructure operators.

The JSE risks are all in line with those identified by our global peers.

**OUR TOP RISKS**

The JSE’s risk profile is mapped against the revised JSE strategic objectives. Our risks and mitigation strategy are set out below.

The following are key changes to our risk profile, compared with 2018:

- » The ITaC delivery risk has been removed following its successful implementation in April 2019, notwithstanding some residual post-implementation issues;
- » Operational stability has improved due to targeted business resilience work done in key business areas to address vulnerabilities: valuations and clearing and settlement;
- » Financial performance and information security are still top risks given current local and global economic climate and trends; and
- » Technology, regulatory and technical skills risks were elevated to be included in the JSE Group strategic risk profile.

<p><b>Extreme</b> </p> <p>Risks within this range must be addressed as a priority owing to high JSE exposure.</p>	<p><b>High</b> </p> <p>Risks within this range are causing concern at an organisational level and require action.</p>
<p><b>Medium</b> </p> <p>Risks within this range require attention, but are not areas of concern at an organisational level.</p>	<p><b>Low</b> </p> <p>Risks within this range are not a concern for the JSE.</p>

**Financial performance**

**Inability to meet financial performance and growth targets**

**Risk level** 

<b>Potential causes</b>	<b>How we manage the risk</b>	<b>2019 developments</b>	<b>In future</b>
<ul style="list-style-type: none"> <li>» Slow economic growth and dampened market conditions.</li> <li>» Revenue dependency on the activities driven by the Equity Market.</li> <li>» Downgrade of South African credit rating.</li> <li>» Pressure to reduce margins.</li> <li>» Global index design.</li> <li>» South African politics.</li> <li>» Climate change (extreme weather changes and extreme natural disasters may effect planning of day to day business operations).</li> </ul>	<ul style="list-style-type: none"> <li>» Promote JSE markets, products and services globally.</li> <li>» Efficient allocation of Group capital to ensure capital requirements are maintained and sufficient capital is being invested into new strategic projects for long-term sustainability and revenue diversification.</li> <li>» Cost optimisation.</li> <li>» Through initiatives such as SA Tomorrow and the inaugural SA Trade Connect conference in 2019.</li> <li>» Involved in Business Leadership South Africa.</li> </ul>	<ul style="list-style-type: none"> <li>» The acquisition of Link SA.<sup>1</sup></li> <li>» The targeted R170 million cost reduction has been achieved. Headcount remains at current planned levels.</li> <li>» ITaC has been successfully delivered.</li> <li>» Launched new and enhanced functionality and monthly expiries, and delivered historical tick-data-in- the-cloud.</li> </ul>	<ul style="list-style-type: none"> <li>» Migrate bond repos to MTS trading platform.</li> <li>» Non-cash collateral.</li> <li>» Extend information services product offering.</li> <li>» OTC clearing.</li> <li>» ESG product development.</li> </ul>

<sup>1</sup> Subject to Competition Tribunal approval.





## Information security

### Information or data breach

Risk level 

#### Potential causes

- » Cyberattacks.
- » Network security breach.
- » Non-compliance to data privacy legislation.
- » Lack of adequate specialised skills and resources.

#### How we manage the risk

- » Maintain spend on IT security to keep up with trends and best practices.
- » Continue with self-assessments.
- » Information security roadmap has been set to address security enhancements.
- » Our enterprise information governance team is well under way with developing a data privacy governance framework.

#### 2019 developments

- » Invested in IT security in 2019.
- » Self-assessments completed and gaps identified.

#### In future

- » Continue with self-assessments.
- » Continue to address security enhancements.
- » Finalise the data privacy governance framework.

## Operational vulnerabilities

### Operational disruption and incidents

Risk level 

#### Potential causes

- » Possible failure of critical third party.
- » Operational stability of systems.
- » Manual processes and human error.
- » System outages.
- » Utility dependency (extended power outages).
- » Legacy systems that require decommissioning.
- » Loss of staff or unfilled vacancies.

#### How we manage the risk

- » Third party contract management capability enhanced through additional resourcing and systems/processes.
- » ITaC has delivered significant improvements in operational stability in the clearing and valuations capabilities for the two derivatives markets.
- » Process has been dealt with by ensuring sufficient documentation and mapping of processes, which will be tested by internal audit.
- » JSE's current storage of diesel and water supplies are adequate.
- » Our business continuity and crisis management capability is satisfactory.

#### 2019 developments

- » Business impact analysis completed and the business continuity plans are being updated.
- » Conducted successful market facing disaster recovery test.
- » Conducted successful JSE Clear default simulation.

#### In future

- » A number of initiatives are under way to improve our IT systems and tools.
- » Operational resilience improvement work under way in valuations with plans to extend it to other critical operational areas in 2020.

**Technical skills**

**Inadequate skills/loss of critical skills and institutional memory**

**Risk level** 

**Potential causes**

- » Critical skills leaving South Africa.
- » Inability to attract and retain the right skills.
- » Fast-changing technological environment.
- » Limited exchange and clearing house skills in South Africa.

**How we manage the risk**

- » Learnership programmes offered by the JSE to provide technical experience to new graduates.
- » Bursaries offered to deserving students who are interested in further education and training.
- » Capability building and talent retention programme.

**2019 developments**

Employee engagement and employee experience programmes in place.

**In future**

- » Improve employee engagement and employee experience programme in 2020.
- » Capability building and talent retention programme to be enhanced in 2020 by launching generalist and specialist career tracks.
- » People-centred and servant leadership programme planned for 2020.

**Competition**

**New competitors entering the market or gaining market share**

**Risk level** 

**Potential causes**

- » New local exchanges.
- » Systemic internalisers\* (SIs).
- » Multiple exchange venues.
- » Inadequate pricing strategy.
- » Service delivery challenges.

\* An SI is an investment firm which, on an organised frequent and systematic basis, deals on its own account by executing client orders outside trading venues.

**How we manage the risk**

- » JSE new products and services to broaden the offering.
- » Closely monitor and track competition through qualitative and quantitative research, including market quality analytics.
- » Expanding and strengthening our stakeholder relationship management through dedicated functions.
- » Continuously review billing models and price points

**2019 developments**

- » Established a dedicated Company Services function, with an Issuers Advisory Committee.
- » Established the Buy-Side Council.
- » Implemented equity derivatives price reduction.

**In future**

- » Detailed design of an equity CCP under way.
- » Further Equity Market functionality.
- » Continue to review our pricing models.



## Stakeholder management

### Ineffective stakeholder management

Risk level 

#### Potential causes

- » Changing customer preferences and behaviour.
- » Client satisfaction too low.
- » System challenges.
- » Lack of sufficient stakeholder communication.
- » Third-party dependency (partnerships).

#### How we manage the risk

- » Regular meetings, feedback sessions and strategic planning sessions with clients.
- » Ongoing proactive engagement to ensure healthy relationships with regulators and policy makers.
- » Updates to the debt and equities listings requirements.
- » Engagement with the newly established Buy-Side Council.

#### 2019 developments

- » Strategic planning sessions and post-ITaC feedback sessions held clients.
- » NPS survey conducted.
- » Client experience journey mapping under way.

#### In future

- » Focus on improved communication with our clients.
- » The stakeholder engagement model is being reviewed and refined.

## Transformation

### Inability to meet transformation targets and support South Africa's transformation goals

Risk level 

#### Potential causes

- » Inadequate BEE initiatives to achieve objectives.
- » Change in BEE codes and/or regulations.
- » Reputation and client dissatisfaction risk.

#### How we manage the risk

- » Our learnership programme.
- » Our Black stockbroker ED programme.
- » Our SD initiative.
- » Our procurement policy.

#### 2019 developments

- » Absorbed 100% of learners from the 2018 learnership programme. The programme continued in 2019.
- » Continued with the Black stockbroker ED programme.
- » Embarked on a new SD initiative in 2019.
- » Amended our procurement policy to embed preferential procurement.

#### In future

Link SA (acquisition in progress) has a level 1 BEE rating<sup>1</sup>. Additional learning and development spend initiatives.

<sup>1</sup> Subject to Competition Tribunal review.

### Technology

Disruptive technology threatening established business model, leading to disintermediation of the JSE

Risk level ○

#### Potential causes

- » Lack of a culture of innovation and reinvention.
- » Inflexible processes and technology.
- » Legacy systems.
- » Disruptive technologies.

#### How we manage the risk

- » A comprehensive IT strategy with a renewed focus on solution and enterprise architecture.
- » Full-time resources to ensure a robust technology roadmap (including a decommissioning plan for legacy systems).
- » Alignment of technologies to global best practice.

#### 2019 developments

- » Implemented new ways of work.
- » A comprehensive IT strategy was formulated.
- » Investing time and effort in thought leadership initiatives, such as blockchain workshops.

#### In future

- » Implement smart regulation capabilities for market and issuer regulation.
- » MIT upgrade planned for 2020.
- » Process automation work under way.

### Regulatory

Business model becomes dated owing to regulatory changes

Risk level ○

#### Potential causes

- » Regulatory changes.
- » Change to SRO model with trading and listing regulatory functions moving to the FSCA and/ or introduction of the admit to trade business model.
- » Non-compliance with regulatory requirements.

#### How we manage the risk

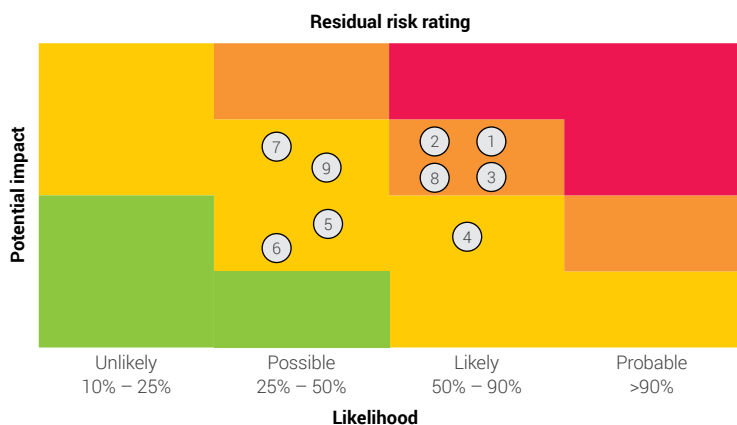
- » Ongoing proactive engagement on regulatory and policy matters.
- » JSE Group compliance and legal counsel functions sufficiently staffed and Group compliance being proactively monitored.

#### 2019 developments

- » As from 2019, the JSE and JSE Clear (as market infrastructures) have been subject to prudential regulation by the PA in addition to the existing regulation by the FSCA (previously the FSB).

#### In future

A significant number of draft legislative/ regulatory instruments and consultation papers are expected to be published in final form or for comment in 2020.



#### Top JSE risks

- 1 Financial performance risk
- 2 Information security risk
- 3 Operational vulnerability risk
- 4 Competition risk
- 5 Stakeholder management risk
- 6 Transformation risk
- 7 Technology risk
- 8 Technical skills risk
- 9 Regulatory risk



# STAKEHOLDER ENGAGEMENT <sup>16</sup>

Internal and external stakeholder relations and communications are central to our present and future success – a core ethical value of trust is at the heart of our day-to-day engagement.

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 that enables value creation for all our stakeholders. A wide range of stakeholders is influenced or impacted by our regulatory, commercial and other activities. The JSE operates largely in the services industry and forms part of a complex ecosystem engaging with a number of stakeholders.

In execution of its governance role and responsibilities, the Board has adopted a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders over time. Central to our strategy is putting our clients at the centre of what we do (see *value created for our stakeholders* on  pages 11 and 12) and aligning business initiatives to expedite those that provide the most value in enhancing stakeholder experience.

Effective communication is integral in building stakeholder value, and the JSE is committed to providing meaningful, transparent, timely and accurate financial and non-financial information to our stakeholders. We understand that by constructively engaging with stakeholders, we can increase confidence in our objectives and activities. As such, the JSE engages regularly with stakeholders to understand their perceptions of the Group and pinpoint future trends, possible risks, material issues and areas for strategic development.

We actively manage engagement with a number 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.

Our key stakeholder groups include, but are not limited to,

- » clients;
- » shareholders;
- » employees;
- » government and regulators;
- » #SAInc.;
- » communities; and
- » suppliers.

## MATERIAL STAKEHOLDER NEEDS AND EXPECTATIONS

Engagement with stakeholders occurs regularly in the ordinary course of business and is tailored to meet the needs of each stakeholder. This can range from day-to-day liaison with clients; integrated annual report and interim reporting; direct interaction or one-on-one meetings; and notices distributed through SENS and through channels such as roadshows, conferences, radio, TV and newspaper articles.

The table below provides an overview of the JSE's key stakeholders, and how we responded to their concerns.

Stakeholder group	How we responded to stakeholder needs and expectations
<p><b>Clients</b> (member firms, issuers, buy-side firms, clearing members, market data clients, advisors, and sponsors)</p>	<p>Clients raised concerns regarding service fees, lack of flexibility and the difficulties with the implementation of ITaC.</p> <ul style="list-style-type: none"> <li>We have prepared a focused six-month quick wins plan to address critical pain points raised by our clients and will engage the broader JSE leadership group in driving these client-focused initiatives.</li> </ul>
<p><b>Shareholders</b></p>	<p>Concern has been expressed regarding the reliance on transactional revenues, especially in a low-growth economic environment.</p> <ul style="list-style-type: none"> <li>We revised our strategic direction and aim to focus more actively on diversifying revenues, particularly from new lines of business beyond Equity Market trading.</li> </ul>
<p><b>Employees</b></p>	<p>In addition to the matters that were raised in the employee engagement survey (discussed in detail on page 38) employees requested increased and improved internal communication, particularly from management.</p> <p>We have responded by implementing:</p> <ul style="list-style-type: none"> <li>» regular staff communications;</li> <li>» enhanced training for new employees;</li> <li>» a dedicated comprehensive intranet; and</li> <li>» senior management engagement breakfasts.</li> </ul>
<p><b>Government and regulators</b></p>	<p>A significant number of draft legislative/regulatory instruments and consultation papers are expected to be published in final form or for comment in 2020.</p> <ul style="list-style-type: none"> <li>We have been active participants in a number of policy forums and have engaged with all relevant bodies. We expressed our concern that if these instruments are published at the same time or in quick succession it may constrain the ability of market participants to digest and respond effectively. The PA has undertaken to liaise with National Treasury and FSCA to provide a draft timeline for the expected regulatory instruments.</li> </ul>



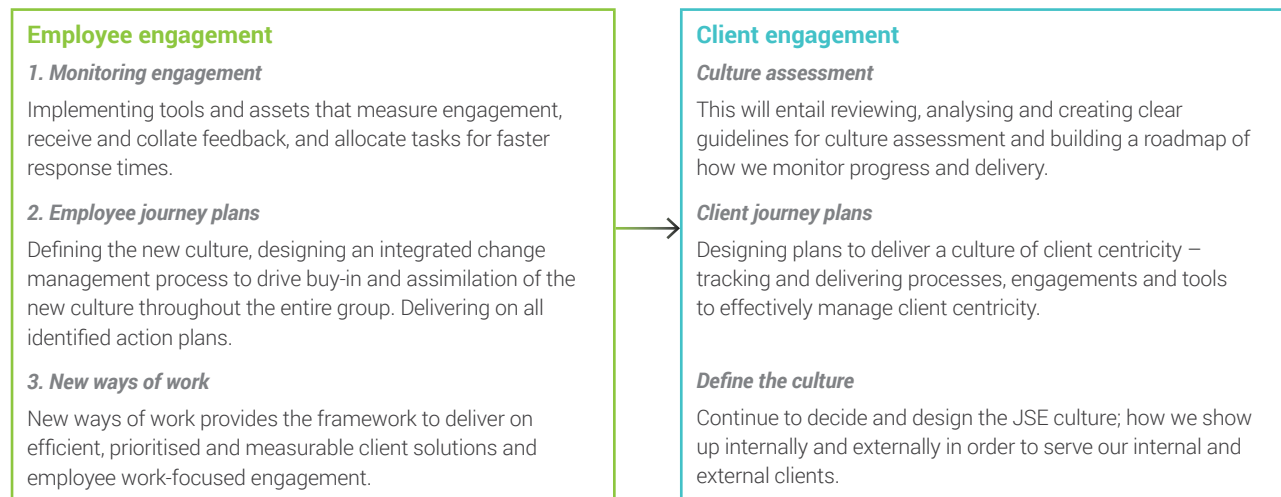
Stakeholder group	How we responded to stakeholder needs and expectations
<p><b>#SAInc.</b> (business leaders, government, academic institutions, industry bodies, civil society, political organisations, ratings agencies)</p>	<p>The major areas of concern have centred around three areas: fiscal debt, SOEs and low growth prospects and how the JSE plans to respond.</p> <ul style="list-style-type: none"> <li>We co-hosted SA Tomorrow in partnership with UBS, Standard Bank and Old Mutual in November 2019 in New York City. The conference showcases South African government and institutions as well as listed companies to investors in the USA, with the aim of retaining and attracting investors to South Africa to grow the economy.</li> </ul>
<p><b>Communities</b></p>	<p>We are active on the national agenda and focus our efforts on national priority issues, such as poverty alleviation, job creation and youth and community development, as indicated by the National Development Plan.</p> <ul style="list-style-type: none"> <li>We have strategically aligned causes in areas that relate to the JSE's business, where we can make a meaningful contribution, such as continuous education of civil society on the role of the JSE investor education through power hours and online investor education modules.</li> </ul>
<p><b>Suppliers</b></p>	<p>In line with government's transformation agenda, the JSE continued with its SD programme and identified two organisations to assist.</p> <ul style="list-style-type: none"> <li>This programme helps SMEs to expand their customer base, increase their turnover and profitability and scale their operations to be more sustainable.</li> </ul>

Without clients, employees and all the other participants in the value chain, we do not have a sustainable business. Therefore it is important to understand their concerns and meet their needs.

In 2019 the JSE implemented the ITaC technology solution and we undertook the NPS survey to measure client satisfaction with the solution with the aim to identify our clients' needs and the touchpoints they deem most important. The results showed a decline in client satisfaction in comparison to the previous survey in 2016. The results highlighted that, while there is significant support for the JSE and our strategic agenda, some clients are concerned about our fee structure and agility of our technology.

Our employees' levels of engagement are key to improving our clients' experience. To ensure that our business aligns with our client-centric brand, we undertook an employment engagement survey in August 2018 to understand their concerns and meet their needs. Of 369 employees, 334 (91%) of the employees completed the survey.<sup>2</sup>

The JSE will use the feedback from both surveys to design an integrated employee and client mapping journey to align the key elements required to improve the employee and client experience. The 2020 focus areas include:



We continued to engage with our current clients on our products and services, and demystifying the role of the Exchange to try to build an understanding of the JSE as a partner in the success of South Africa.

To achieve this:

- » we participated and initiated 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.<sup>3</sup>

<sup>1</sup> For more detail on the NPS survey, refer to page 38 in the online social value report.

<sup>2</sup> For more detail on the employee engagement survey, refer to page 38 in the online social value report.

<sup>3</sup> For a detailed list of the advisory committees, refer to pages 40 to 42 in the online social value report.





# COMPLIANCE <sup>13</sup>

The JSE complies with both the spirit and the letter of applicable statutory and regulatory requirements and is committed to performing its functions with due skill, care and diligence.

While ultimate accountability for compliance oversight resides with the Board, the responsibility for putting compliance into effect for the Group is delegated to the director: governance and assurance.

Key focus areas for 2019 included the completion of the annual FSCA self-assessments for JSE Limited and JSE Clear; managing the on-site reviews of both the PA of SARB and FSCA; conducting an assessment of the regulatory universe of the Group and a review of JSE compliance policies. The code of conduct and ethics of the Group was updated, as was the associated employee policy and employees received training in respect of ethical conduct and behaviour required of them.

The JSE's plan for compliance with PoPIA has been advanced and employees have received training in respect of the safeguarding of personal information.

GIA undertakes reviews of critical JSE functions including compliance with the conflicts of interest policies of the regulatory divisions, the JIBAR code of conduct issued by SARB, and compliance with internal treasury mandates.

There were no 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 year.

## CONFLICTS OF INTEREST

### Financial market infrastructure

As a financial market infrastructure, the JSE is required to avoid, eliminate, disclose and otherwise manage possible conflicts of interest between its regulatory functions and commercial services. This includes taking the steps necessary in the implementation and documentation of appropriate arrangements in accordance with Board Notice 1 of 2015, issued by FSCA. The conflicts of interest policies, as prescribed by the Board Notice, were in effect during the year.

### Directors and employees

Directors are required, at all Board and committee meetings, to table their directorships, if updates are required, and to declare any conflicts of interest that they have encountered or foresee for noting in the corporate register.

## INSIDER TRADING

Our dealing policy prohibits directors and employees from trading in JSE shares during periods when they could be privy to price-sensitive information. Trading in JSE shares is permitted during two limited open periods, these being immediately following the release of the annual financial statements and again after the interim financial statements are released. A director may not trade in JSE shares without obtaining the prior written approval of the Board Chairman and in the event that the Board Chairman wishes to trade, they must obtain the approval of the LID.

The dealing policy also governs the trading by directors and employees in JSE-listed securities, other than those of the JSE, and it is mandatory that the prior approval of the relevant executive head and the director: market regulation is obtained for these transactions. Employees in specific divisions, such as Market Regulation and Issuer Regulation, are prohibited from trading in any JSE-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-BRIBERY AND CORRUPTION

We have a strict zero-tolerance approach and do not engage in, accept or condone any illegal acts. This includes, among others, any form of bribery, facilitation payments, political donations or any corrupt practices in the conduct of our business. The Board's policy is to actively pursue and encourage the prosecution of perpetrators of fraudulent and other illegal activities, should it become aware of such acts. No fraud, bribery or corrupt practices were reported during the period under review.

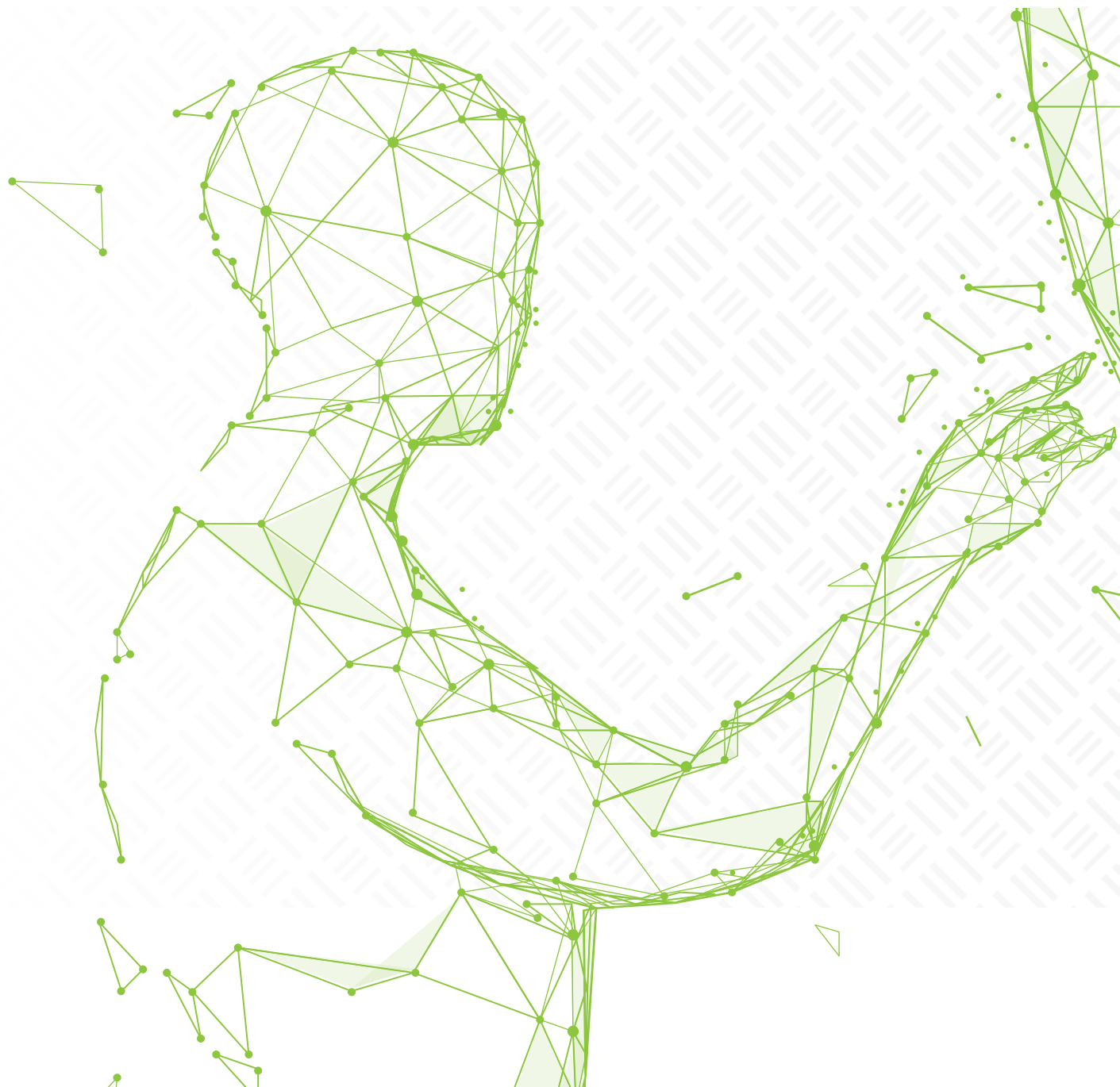
## TAX COMPLIANCE

Where complex tax treatment is required as a result of tax law amendments, tax opinions are sought from external experts to ensure correct treatment and compliance.

## OMBUDSMAN FOR JSE COMPLAINTS AND DISPUTES

The JSE Ombud Scheme is recognised in terms of section 194 of the FSRA, as an industry ombud scheme. The rules of the JSE Ombud Scheme, as set out in the rules of the JSE, regulate the resolution of complaints and disputes between authorised users and between authorised users and their clients. The governing body of the scheme is the JSE Exco.

The scheme allows the JSE to facilitate the resolution of complaints that are made by or against clients and authorised users in a timely and cost-effective way and reduces the need for either party to resort to legal proceedings.







# INTEGRATED ANNUAL REPORT OVERVIEW

The integrated reporting process is an ongoing journey. We constantly strive to improve on the quality of the JSE's reporting.

## REPORT OBJECTIVES

This integrated annual report is intended for our stakeholders and aims to tell the value creation story of JSE Limited. 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 ended 31 December 2019.

We welcome feedback from stakeholders on this report and invite you to contact [ir@jse.co.za](mailto: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 funds<sup>1</sup> 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 is on [page 15](#).

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. The Board approved the material matters for this report ([pages 59 to 61](#)).

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:

- » International Integrated Reporting Council Integrated Reporting Framework (IIRC <IR> Framework);
- » Companies Act;
- » King IV;
- » relevant indicators of FTSE Russell's ESG ratings methodology as applied for purposes of the FTSE/JSE Responsible Investment Index Series, of which the JSE is a constituent;

- » UNCG;
- » UN Principles for Responsible Investment (PRI);
- » SSEI; and
- » CDP (formerly known as the Carbon Disclosure Project).

## ASSURANCE OVER THE REPORT 5 15

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 BBBEE verification agency, has verified our BBBEE performance. It is confirmed a level 3 rating and the verification certificate is available at <http://ir.jse.co.za/JSEBEE>.


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.

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



## REPORTING SUITE

Our full reporting suite is available at

 <https://web.jse.co.za/ar2019> 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 GAC report, directors' report and annual financial statements prepared in accordance with 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 and our material inputs.

## REPORT

### 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 forward-looking statements were based was not audited. Like all businesses, the JSE faces risks and other factors outside of its control. This may lead to outcomes unforeseen by the Group. These are not reflected in the report.

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

### Notice of AGM and proxy form

Sets out the notice of the JSE's AGM of shareholders to be held on 25 June 2020, together with the summarised report containing the required financial disclosures.

### Remuneration report (rewarding value creation)

Sets out the JSE's remuneration philosophy and policy, and how it was implemented in 2019. This report is subject to two non-binding advisory votes at our AGM.



## APPENDICES

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# KING IV PRINCIPLES

## APPLICATION OF THE KING IV REPORT ON CORPORATE GOVERNANCE FOR SOUTH AFRICA

We are a listed company, listed on our own exchange and paragraph 3.84 of the Listing Requirements stipulates that issuers must comply with specific requirements concerning corporate governance. The JSE certifies that it complies with all the requirements detailed in paragraph 3.84.

We believe in ensuring these governance outcomes:

- » An ethical culture
- » Good performance
- » Effective control
- » Legitimacy

In our drive to ensure the achievement of these outcomes, we have applied all the principles outlined in King IV adequately during 2019 and on the following page we set out a brief description of the principles and their application within the JSE environment.



## JSE KING IV REGISTER

Desired outcomes	Activities in the year	Key governance policies, procedures and plans
<p><b>1 Principle 1</b> Lead ethically and effectively</p>	<ul style="list-style-type: none"> <li>» 100% attendance by directors of Board meetings</li> <li>» Declaration of interest at each Board and Board committee meeting</li> <li>» Ensured accountability for organisational performance</li> <li>» Oversight and monitored implementation and execution of policies by management</li> </ul>	<ul style="list-style-type: none"> <li>» Board charter and terms of reference</li> <li>» Declarations of interest</li> <li>» Board assessment</li> </ul>
<p><b>2 Principle 2</b> Govern the ethics of the organisation to support an ethical culture</p>	<p>Ensured that employees were aware of the code of conduct and ethics policy (ethics awareness training for all employees was conducted)</p>	<ul style="list-style-type: none"> <li>» Whistle-blowing hotline</li> <li>» Group dealing in shares policy</li> <li>» Code of conduct and ethics policy</li> </ul>
<p><b>3 Principle 3</b> Ensure that the organisation is and is seen to be a responsible corporate citizen</p>	<p>Oversaw and monitored the Group's following activities:</p> <ul style="list-style-type: none"> <li>» Implementation of EE plan</li> <li>» Transformation efforts – achievement of level 3 on BEE scorecard; and</li> <li>» Implementation of sustainability strategy – achieved CDP score of B from a D in 2019.</li> </ul>	<ul style="list-style-type: none"> <li>» Sustainability strategy</li> <li>» EE plan</li> </ul>
<p><b>4 Principle 4</b> The organisation's core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are inseparable elements of the value creation process</p>	<ul style="list-style-type: none"> <li>» Reviewed and monitored 2019 corporate and CEO performance against financial and non-financial targets aligned with the Group's strategic priorities, and determined the related discretionary bonus pool</li> <li>» Approved the revised Group strategy and 2020 corporate scorecard</li> <li>» Approved acquisition of Link SA<sup>1</sup></li> <li>» Reviewed solvency, liquidity and going concern status, and agreed dividend payments</li> </ul>	<ul style="list-style-type: none"> <li>» Group strategy</li> <li>» Board and Board committee work plans</li> <li>» Combined assurance and risk management framework</li> <li>» Sustainability strategy</li> <li>» Remuneration policy</li> <li>» IT and related security policies</li> </ul>

<sup>1</sup> Subject to Competition Tribunal review.

Desired outcomes	Activities in the year	Key governance policies, procedures and plans
<p><b>5 Principle 5</b> Ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation's performance and its short, medium and long-term prospects</p>	<ul style="list-style-type: none"> <li>» Aligned meetings to quarterly reporting and committee work plans</li> <li>» Timely submissions to the Board and Board committees to better monitor strategic objectives</li> <li>» Approved the 2019 integrated annual report, Group consolidated annual financial statements, financial results and results announcements</li> </ul>	<ul style="list-style-type: none"> <li>» Shareholder investor roadshows</li> <li>» Integrated annual report</li> <li>» Social value report</li> <li>» Remuneration report</li> <li>» AGM</li> <li>» Trading statements</li> </ul>
<p><b>6 Principle 6</b> The Board is the focal point and custodian of corporate governance in the organisation</p>	<ul style="list-style-type: none"> <li>» Newly appointed Board members served on the GRMC for a period of one year</li> <li>» Reviewed and approved Board charter and Board committee terms of reference</li> </ul>	<ul style="list-style-type: none"> <li>» Board charter</li> <li>» Board protocol on access to independent, professional advice</li> </ul>
<p><b>7 Principle 7</b> Appropriate balance of knowledge, skills, experience, diversity and independence to discharge governance role and responsibilities objectively and effectively</p>	<p>Achieved voluntary diversity targets at Board level</p>	<ul style="list-style-type: none"> <li>» Diversity policy</li> <li>» GNC terms of reference</li> <li>» Chairman is an independent non-executive director</li> <li>» Have a lead independent non-executive director</li> <li>» CEO and CFO are executive directors of the Board</li> </ul>
<p><b>8 Principle 8</b> Ensure that arrangements for delegation within Board structures promotes independent judgement, and assists with the balance of power and the effective discharge of its duties</p>	<p>Reviewed the committee terms of reference to ensure alignment between the committees</p>	<p>Delegation of authority framework</p>
<p><b>9 Principle 9</b> Ensure that the evaluation of the Board and its committees supports continued improvement</p>	<ul style="list-style-type: none"> <li>» Considered the 2018 independent Board evaluation report and implemented action plans</li> <li>» Performed 2019 evaluation of directors, chairs and committees</li> </ul>	<p>Board and committee evaluations</p>



Desired outcomes	Activities in the year	Key governance policies, procedures and plans
<p><b>10 Principle 10</b></p> <p>Ensure that the appointment of, and delegation to, management contribute to role clarity and the effective exercise of authority and responsibilities</p>	<p>New Group CEO appointed by the Board</p>	<p>Delegation of authority framework</p>
<p><b>11 Principle 11</b></p> <p>Govern risk in a way that supports the organisation in setting and achieving its strategic objectives</p>	<p>Tabled comprehensive risk register at every GRMC meeting and monitored mitigating measures</p>	<ul style="list-style-type: none"> <li>» ERM framework</li> <li>» ERM policy</li> </ul>
<p><b>12 Principle 12</b></p> <p>Govern technology and information in a way that supports the organisation setting and achieving its strategic objectives</p>	<ul style="list-style-type: none"> <li>» Approved IT strategy</li> <li>» Implemented ITaC system</li> <li>» Approved MIT upgrade business case</li> <li>» Considered information security, the IT control landscape and the quality of operations and IT support to the business</li> </ul>	<ul style="list-style-type: none"> <li>» IT security policies</li> <li>» IT strategy</li> </ul>
<p><b>13 Principle 13</b></p> <p>Govern compliance with applicable laws and adopted, non-binding rules, codes and standards in way that supports the organisation being ethical and a good corporate citizen</p>	<ul style="list-style-type: none"> <li>» Approved the revised code of conduct and ethics policy</li> <li>» Monitored regulatory compliance to ensure the fulfilment of licence operating conditions</li> </ul>	<ul style="list-style-type: none"> <li>» Code of conduct and ethics policy</li> <li>» Library of Group policies</li> </ul>
<p><b>14 Principle 14</b></p> <p>Ensure that the organisation remunerates fairly, responsibly and transparently so as to promote the achievement of strategic and positive outcomes in the short, medium and long-term</p>	<ul style="list-style-type: none"> <li>» Re-examined the long-term incentive scheme metrics and targets considering the independent input from PwC and Bowman's Law, and revised the metrics and targets for future allocations</li> <li>» Determined the vesting percentages for the long-term incentive scheme 2010</li> </ul>	<p>Remuneration policy</p>

Desired outcomes	Activities in the year	Key governance policies, procedures and plans
<p><b>15 Principle 15</b></p> <p>Ensure that assurance services and functions enable an effective control environment that supports the integrity of information for internal decision making and for external reports</p>	<p>Ensure the combined assurance model is designed and implemented to effectively cover significant risks and material matters</p>	<p>Combined assurance model</p>
<p><b>16 Principle 16</b></p> <p>Adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation</p>	<ul style="list-style-type: none"> <li>» Reviewed our material stakeholders and oversaw the formulation of stakeholder engagement strategies</li> <li>» Conducted NPS survey to determine client satisfaction</li> <li>» Engaged with stakeholders on ESG matters.</li> </ul>	<p>Stakeholder engagement framework</p>
<p><b>17 Principle 17</b></p> <p>As an institutional investor organisation ensure that responsible investment is practiced by the organisation to promote the good governance and the creation of value by the companies in which it invests</p>	<p>This principle relates to institutional investors and has no bearing on the JSE.</p>	

# SHAREHOLDER INFORMATION

## SHAREHOLDER DIARY

Events or reports in relation to the 2019/2020 financial year:

Release of summarised annual financial statements with the declaration of a dividend	Monday, 24 February 2020
Annual results presentation	Tuesday, 25 February 2020
Record date to determine which shareholders are entitled to receive the AGM notice	Friday, 15 May 2020
Publication of 2019 integrated annual report	Friday, 22 May 2020
Last day to trade in order to be eligible to attend and vote at the AGM	Monday, 15 June 2020
Record to determine the registered holders of JSE shares to participate in the AGM	Friday, 19 June 2020
AGM at 15:00 on	Thursday, 25 June 2020
Release of results of AGM	Friday, 26 June 2020
Release of summarised interim report for the six months ended 30 June 2019	Wednesday, 5 August 2020

## SHARE INFORMATION

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

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

	Authorised share capital <sup>1</sup>	Shares in issue	Closing price	Market capitalisation R billion
31 December 2018	400 000 000	86 877 600	165.56	13.1
30 June 2019	400 000 000	86 877 600	140.00	12.2
31 December 2019	400 000 000	86 877 600	119.52	10.4

## ORDINARY AND SPECIAL DIVIDEND

A gross ordinary and special dividend (dividend) of 690 cents and 150 cents per share, respectively, was declared and approved by the Board on 24 February 2020. Refer to the annual financial statements available online at <https://web.jse.co.za/ar2019>.

Dividend declaration date	Monday, 24 February 2020
Last day to trade JSE shares cum dividend	Tuesday, 24 March 2020
JSE share commence trading ex-dividend	Wednesday, 25 March 2020
Record date to participate in the dividend	Friday, 27 March 2020
Payment date of dividend	Monday, 30 March 2020

Share certificates may not be dematerialised or rematerialised from Wednesday, 18 March 2020 to Friday, 20 March 2020, both days inclusive.

<sup>1</sup> Further details of the stated capital for the period under review are disclosed in note 20 of the company's audited annual financial statements, available at <https://web.jse.co.za/ar2019>.

**SHAREHOLDER SPREAD AS AT 31 DECEMBER 2019**

	Number of shareholders	Shares held	%
<b>Public</b>			
Institutional shareholders		70 807 824	81.5
Non-institutional shareholders		6 587 427	7.6
<b>Total</b>	4 945	77 395 251	89.1
<b>Non-public</b>			
JSE Empowerment Fund Trust	43	2 169 599	2.5
JSE LTIS Trusts	36	1 775 967	2.0
JSE Bonus Share holdings	436	57 473	0.1
Directors and Group company secretary	8	87 552	0.1
<b>Total</b>	480	4 090 591	4.7
<b>Total identified shares</b>		81 485 842	93.8
<b>Miscellaneous (below threshold)</b>		5 391 758	6.2
<b>Total share capital</b>	5 468	86 877 600	100.0
<b>Geographic ownership</b>			
South Africa		36 953 658	42.5
USA		16 091 975	18.5
UK		15 498 445	17.8
Sweden		1 466 433	1.7
Finland		246 012	0.3
Rest of Europe		466 681	0.5
Rest of world		84 620	0.1
<b>Total</b>		70 807 824	81.5



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 2019 were disclosed or established from enquiries:

	<b>% of total issued ordinary shares</b>	<b>Number of ordinary shares held</b>
Public Investment Corporation (SOC) Limited	<b>10.6</b>	<b>9 215 139</b>
Allan Gray Proprietary Limited	<b>8.7</b>	<b>7 517 688</b>
PSG Asset Management Proprietary Limited	<b>7.7</b>	<b>6 718 430</b>
Investec Asset Management Proprietary Limited	<b>6.5</b>	<b>5 674 090</b>
Somerset Capital Management, L.L.P.	<b>6.1</b>	<b>5 277 356</b>

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 2019, the following fund managers were responsible for managing investments of 2.5% or more of the share capital of the JSE:

	<b>% of total issued ordinary shares</b>	<b>Number of ordinary shares held</b>
Public Investment Corporation (SOC) Limited	<b>10.6</b>	<b>9 215 139</b>
Allan Gray Proprietary Limited	<b>8.7</b>	<b>7 517 688</b>
PSG Asset Management Proprietary Limited	<b>7.7</b>	<b>6 718 430</b>
Investec Asset Management Proprietary Limited	<b>6.5</b>	<b>5 674 090</b>
Somerset Capital Management, L.L.P.	<b>6.1</b>	<b>5 277 356</b>
Neuberger Berman, LLC	<b>3.9</b>	<b>3 404 965</b>
The Vanguard Group, Inc.	<b>3.2</b>	<b>2 816 623</b>
Oldfield Partners LLP	<b>3.1</b>	<b>2 660 807</b>
Abax Investments Proprietary Limited	<b>3.0</b>	<b>2 574 286</b>
JPMorgan Asset Management U.K. Limited	<b>2.4</b>	<b>2 116 252</b>



# GLOSSARY

**4IR:** fourth industrial revolution

**BCI:** Black, Coloured and Indian

**AGM:** annual general meeting

**ARB:** Architecture Review Board

**API:** application programme interface

**ASEA:** African Security Exchanges Association

**BaNCS:** TCS BaNCS Market Infrastructure. In February, Strate launched a new system for the settlement of money markets securities. The new system was selected for being a world-class CSD solution for the electronic settlement of securities.

**BAU:** Business as usual

**CCP:** central counterparty

**CE:** consumer education

**CEO:** chief executive officer

**CFA:** chartered financial analyst

**CFD:** contract for difference

**CGU:** cash-generating unit

**CIO:** chief information officer

**CIS:** Center for Internet Security

**CISO:** chief information security officer

**CoFI:** Conduct of Financial Institutions

**CoSSE:** Committee of SADC Stock Exchanges

**CPMI-IOSCO:** Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions

**CSD:** central securities depository

**CSDP:** central securities depository participant

**DA:** designated advisor

**DLT:** distributed ledger technology

**EBIT:** earnings before interest and tax

**ECL:** expected credit loss

**ED:** enterprise development

**EDM:** enterprise data management

**EE:** employment equity

**EIGC:** Enterprise Information Governance Council

**EME:** exempt micro-enterprise

**EMIR 2.2:** European Markets Infrastructure Regulation

**EPS:** earnings per share

**ERM:** enterprise risk management

**ERWG:** Enterprise Risk Working Group

**ESAAMLG:** Eastern and Southern Africa Anti-Money Laundering Group

**ESMA:** European Securities and Markets Authority

**ESG:** environmental, social and governance

**ETF:** exchange-traded fund

**ETN:** exchange-traded note

**ETP:** electronic trading platform

**Exco:** Executive Committee

**FATF:** Financial Action Task Force

**FCA:** Financial Conduct Authority

**FMA:** Financial Markets Act

**FSB:** Financial Services Board

**FSCA:** Financial Sector Conduct Authority

**FSCF:** Financial Sector Contingency Forum

**FSRA:** Financial Sector Regulation Act, 9 of 2017

**FTSE:** Global provider of benchmarks, analytics, and data solutions with multi-asset capabilities. FTSE Russell provides a comprehensive range of indexes

**GAC:** Group Audit Committee

**GDPR:** General Data Protection Regulation

**GHRC:** Group Human Resources Committee

**GIA:** Group internal audit

**GNC:** Group Nominations Committee

**GRMC:** Group Risk Management Committee

**GSEC:** Group Social and Ethics Committee

**GSROOC:** Group SRO Oversight Committee

**HEPS:** headline earnings per share

**ICE:** Intercontinental Exchange

**ICH:** independent clearing house

**IP:** intellectual property

**IPO:** initial public offering

**IOSCO:** International Organization of Securities Commissions

**IRC:** interest rate and currencies

**IRMSA:** Institute of Risk Management South Africa

**ISO:** International Organization for Standardization

**ISSC:** Information Security Steering Committee

**IT:** information technology

**ITaC:** Integrated Trading and Clearing

**JEF:** JSE Empowerment Fund

**King IV:** King Report on Corporate Governance™ for South Africa, 2016 (copyright and trademarks are owned by the Institute of Directors in South Africa NPC and all of its rights are reserved)

**LACE:** lean agile centre of excellence

**LP:** liquidity provider

**LPM:** lean portfolio management

**LTIS:** long-term incentive scheme

**MIT:** MillenniumIT

**MOI:** memorandum of incorporation

**MSCI:** MSCI provides index construction and index solutions. They also license indexes for exchange traded funds and exchange-listed futures and options

**MTS:** MTS is one of Europe's electronic fixed income trading markets. It is wholly owned by the London Stock Exchange Group

**NACA:** notional amount compounded annually

**NAV:** net asset value

**NCOP:** National Council of Provinces

**NIST:** National Institute of Standards and Technology

**NPAT:** net profit after tax



**NPS:** Net Promoter Score

**OCI:** other comprehensive income

**ORM:** organisational risk management

**OTC trade:** over-the-counter trade

**PA:** Prudential Authority

**PFMI:** principles for financial market infrastructures

**PoPIA:** Protection of Personal Information Act

**PRI:** Principles for Responsible Investment

**QCCP:** qualifying central counterparty

**QSE:** qualifying small enterprise

**REIT:** real estate investment trust

**RFSC:** revised Financial Sector Charter

**ROE:** return on equity

**SAFe®:** Scaled Agile Framework®. Empowers complex organisations to achieve the benefits of lean agile software and systems development at scale.

**SAIFM:** South African Institute of Financial Markets

**SANAS:** South African National Accreditation System

**SARB:** South African Reserve Bank

**SD:** supplier development

**SDGs:** Sustainable Development Goals

**SENS:** Stock Exchange News Service

**SG:** secretary general

**SI:** systemic internaliser

**SOE:** state-owned enterprise

**SPAC:** special-purpose acquisition company

**SRO:** self-regulatory organisation

**SSEI:** Sustainable Stock Exchanges Initiative

**SVAI:** Shared Value Africa Initiative

**TC-CCPs:** third-country CCPs

**TMPS:** total measured procurement spend

**TSR:** total shareholder return

**UN:** United Nations

**UNCTAD:** United Nations Conference on Trade and Development

**UNGC:** United Nations Global Compact

**UNGISD:** United Nations Global Investors for Sustainable Development

**VCC:** venture capital company

**VIS:** valuations input system

**WACC:** weighted average cost of capital

**WFE:** World Federation of Exchanges

**XaaS:** anything as a service

**XT:** cross-trade

# CORPORATE INFORMATION AND DIRECTORATE

## JSE Limited

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

## Registered office

One Exchange Square  
 2 Gwen Lane  
 Sandown, 2196

## Postal address

Private Bag X991174 Sandton, 2146

## Contacts

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

## Directors as at 31 December 2019

N Nyembezi<sup>1</sup> (Chairman)  
 Z Bassa<sup>1</sup>  
 F Daniels<sup>1</sup>  
 VN Fakude<sup>1</sup>  
 Dr M Jordaan<sup>1</sup>  
 Dr SP Kana<sup>1</sup>  
 FN Khanyile<sup>1</sup>  
 BJ Kruger<sup>2</sup>  
 DM Lawrence<sup>2</sup>  
 Dr MA Matooane<sup>1</sup>  
 Dr L Fourie (Group CEO)<sup>3,4</sup>  
 A Takoordeen (CFO)<sup>3</sup>

## Alternate director

JH Burke<sup>5</sup>

## Changes to the Board

NF Newton-King (former CEO)<sup>3,6</sup>  
 S Cleary<sup>1,7</sup>

<sup>1</sup> Independent non-executive director.

<sup>2</sup> Non-executive director.

<sup>3</sup> Executive director.

<sup>4</sup> Appointed effective 1 October 2019.

<sup>5</sup> Resigned effective 1 February 2020.

<sup>6</sup> Resigned effective 30 September 2019.

<sup>7</sup> Appointed effective 1 February 2020.

## Group company secretary

GA Brookes

## Transfer secretary

Computershare Investor Services Proprietary Limited  
 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

Investor queries should be directed to [ir@jse.co.za](mailto: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](mailto:GroupCompanySecretary@jse.co.za).



