2019 at a glance

Key developments impacting the underlying investment proposition

- Challenging global capital markets dynamics, with heightened uncertainty driven by US/China trade wars, Brexit and a slowdown in global growth
- Unfavourable South African macro-environment resulting from low GDP growth, political uncertainty and declining business confidence
- Flattening top-line resulting from muted Equity Market activity offset by diversified asset classes
- Cost cutting and headcount management initiatives offered margin resilience
- HEPS contraction caused by non-recurring costs as well as OPEX increase in 2019
- High cash-flow conversion & earnings quality, driven by the strength of the business model
- Healthy capital structure with no debt providing balance sheet optionality
- Strong dividend pay-out, driven by ordinary DPS growth and special payments, resulting in attractive shareholder remuneration
Operating environment in 2019

Global

- Ongoing trade tensions which are starting to ease
- Brexit uncertainty
- Widespread monetary policy easing by major central banks
- Subdued inflation pushed global yields down
- Flight to safety of flows into bond markets
- Increase in Equity Market volatility
- Global equities value traded dropped by 16%*
- Global IPOs down 19%**, with proceeds 4% lower
- Increased weight of China and the inclusion of Argentina and Saudi Arabia in the MSCI EM index

South Africa

- Persistent policy uncertainty
- Infrastructure bottlenecks and financial stresses at the public utilities
- Increased fiscal deficit and public debt ratio
- Poor business confidence
- Continued threat of sovereign downgrade
- Foreigners were net sellers of equities and bonds
- Equity market contraction counterbalanced by an increase in the bond market
- Corporate governance issues
- Investment commitment through SA Investment Summit in 2019. However, key fiscal risks to be addressed to improve investor sentiment

*Source: World Federation of Exchanges
**Source: EY Global IPO trends 2019
JSE strategic positioning over time remains consistent

Quality earnings
Strong cash flow
Healthy balance sheet

Robust technology to enable growth

Diverse revenue streams
Consistent strategy translates into share price outperformance over time

**Share Price Performance since IPO**

- **Rising disposable income in South Africa dovetails a sharp increase in domestic consumer demand**

- **Global financial crisis**
  - 1 Jan 2009 – 31 Dec 2013: JSE: +153% JALSH: +115%

- **Steady economic recovery built on a foundation of commodities and associated domestic industries**
  - 1 Jan 2014 – 11 Jul 2016: JSE: +106% JALSH: +13%
  - 1 Jan 2018 – 6 Feb 2020: JSE: -25% JALSH: -3%

- **Despite a South African mining sector contraction, low interest rates and quarterly GDP growth support bourses**

- **SA economy dips on mining and construction contraction in 2016 IPOs up 178% YoY in 2017**

- **Market is cautious on the SA macro context following 2019 elections and lower business confidence**

Source: Bloomberg as of 7 February 2020
Consistency in quality of earnings

Business remains highly cash generative

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

**A year of delivery**

<table>
<thead>
<tr>
<th>Declared R730m in dividends to shareholders (2018: R730m)</th>
<th>Provided members with an aggregate discount of 12% in the Equity Market trading fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintained market share in equity value traded – 99.32%</td>
<td>Achieved the multi-year R170m in cost savings (based to year 2016) to which management committed in 2017</td>
</tr>
<tr>
<td></td>
<td>Delivered the material multi-year Integrated Trading and Clearing (ITaC) project for the equity derivatives and currency markets</td>
</tr>
<tr>
<td></td>
<td>Continue to be a thought leader in ESG – JSE invited to co-chair a global sustainable development alliance (GISD)</td>
</tr>
<tr>
<td></td>
<td>Delivered new trade execution functionality in equities, introduced monthly expiries and launched a new tick data in the cloud</td>
</tr>
<tr>
<td></td>
<td>Announced our intention to acquire 74.85% of Link Market Services South Africa Proprietary Limited (Link SA)</td>
</tr>
</tbody>
</table>
2019 market activity drivers

Mixed market performance buffered by diverse revenue streams

5
Number of IPOs
(2018: 12)

10%
Equity transactions
(2018: 3%)

2%
Billable equity value traded*
(2018: flat)

2%
Equity derivatives value traded
(2018: -3%)

16%
Bond nominal value traded
(2018: 11%)

6%
Interest rate derivatives contracts
(2018: flat)

7%
Currency derivatives contracts
(2018: 9%)

2%
Commodity derivatives contracts
(2018: 14%)

*Central order book published statistics ↓ 7% to R5.2tn (2018: R5.6tn) ADV ↓ 7% to R21bn (2018: R22bn)
Billable value traded half-year growth rates: H1 ↓ 8% (2018: ↑ 11%); H2 ↑ 5% (2018: ↓ 10%)
How this translated in our business

1%
R2.19bn
Revenue
(2018: R2.20bn)

14%
R1.54bn
Expenses
(2018: R1.35bn)

26%
R687m
EBIT
(2018: R932m)

23%
R695m
NPAT
(2018: R904m)

4%
R880m
Net cash flow from operations
(2018: R913m)

22%
820.5
EPS*
(2018: 1 056.5c)

23%
814.6
Total HEPS
(2018: 1 056.2c)

R101m
Total capital investment
(2018: R174m)

*For continuing operations
## Financial performance

<table>
<thead>
<tr>
<th>(Rm)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>2 187</td>
<td>2 199</td>
</tr>
<tr>
<td>Other income</td>
<td>41</td>
<td>82</td>
</tr>
<tr>
<td>Total revenue</td>
<td>2 229</td>
<td>2 281</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>(580)</td>
<td>(506)</td>
</tr>
<tr>
<td>Other expenses</td>
<td>(961)</td>
<td>(843)</td>
</tr>
<tr>
<td>Total expenses</td>
<td>(1 541)</td>
<td>(1 349)</td>
</tr>
<tr>
<td>EBIT</td>
<td>687</td>
<td>932</td>
</tr>
<tr>
<td>EBIT %</td>
<td>31%</td>
<td>41%</td>
</tr>
<tr>
<td>Net finance income</td>
<td>213</td>
<td>239</td>
</tr>
<tr>
<td>Share of profit from associate (net of income tax)</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>948</td>
<td>1 228</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>(248)</td>
<td>(323)</td>
</tr>
<tr>
<td>Profit for the year from continuing operations</td>
<td>700</td>
<td>904</td>
</tr>
<tr>
<td>Loss after tax for the year from discontinued operations</td>
<td>(5)</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>NPAT</strong></td>
<td>695</td>
<td>904</td>
</tr>
<tr>
<td><strong>NPAT %</strong></td>
<td>31%</td>
<td>40%*</td>
</tr>
<tr>
<td>EPS (cents)</td>
<td>820.5</td>
<td>1056.5</td>
</tr>
<tr>
<td>HEPS (cents)</td>
<td>814.6</td>
<td>1056.2</td>
</tr>
</tbody>
</table>

*Normalised view of 2018 NPAT % (excluding one-off tax credit): 38%  
Contains rounding differences
### Trends

**Total revenue**
- 2019: -2%

**Expenses**
- 2019: 14%

**Revenue as a % total**
- Primary Markets: 7% (2018: 8%)
- Equity Market: 22% (2018: 25%)
- Back-Office Services (BDA): 16% (2018: 15%)
- Equity Clearing and Settlement: 19% (2018: 19%)
- Bonds and Financial Derivatives: 13% (2018: 12%)
- Commodity Derivatives: 4% (2018: 4%)
- Information Services: 15% (2018: 13%)
- Funds under management: 4% (2018: 4%)

**Headcount**
- 2015: 506
- 2016: 476
- 2017: 376
- 2018: 372
- 2019: 392
- Exit headcount: 11 heads
- Contractors converted (18 heads)
Total capital expenditure

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*

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

*Bond repo’s migration to new technology, investigating an OTC surveillance and clearing market offering, various Information Services growth initiatives
Operating expenditure

Planned increase in headcount; technology investments

**Total operating expenses up 14% to R1.54bn (2018: R1.35bn)**

- Personnel costs ↑ 15% or R74m to R580m (2018: R506m)
  - Average headcount ↑ 9% to 395 (2018: 362). Gross remuneration ↑ 14%. This contributes 10 percentage points
  - One-off executive changes costs in 2019 (R37m). This contributes 7 percentage points
  - Other personnel costs ↑ R4m. This contributes 2 percentage points
  - Discretionary bonus pool of R64m or 9.2% of NPAT (2018: R83m or 9.2% of NPAT). This contributes -4 percentage points

- Technology costs ↑ 18% or R44m to R285m (2018: R241m)
  - Cost growth primarily owing to ITaC implementation, new master reference data system and accelerated BAU capex
    - Post ITaC go-live costs of R28m include contractor costs, and software maintenance and support. This contributes 12 percentage points
    - New master reference data system licenses and support of R6m. This contributes 3 percentage points
    - Incremental infrastructure support and risk landscape spend of R6m. This contributes 2 percentage points
    - Incremental equity clearing system support of R4m. This contributes 1 percentage point
Total operating expenses up **14%** to R1.54bn (2018: R1.35bn)

- **Depreciation**: ↑ 84% or R92m to R202m (2018: R110m), largely owing to:
  - The increased depreciation can be attributed largely to the ITaC project implementation costs from the April go-live. This is offset by fully depreciated assets of R14m or 13%
  - The application of IFRS 16 relating to leases. This contributes R39m. In prior years, the operating lease was accounted for in general expenses

- **General expenses**: ↓ 4% or R18m to R474m (2018: R492m)
  - The application of IFRS16 resulted in the reclassification of rental expenses of R56m. This is partially offset by:
    - R6m in transaction costs for Link SA
    - non recurring costs of R36m for work related to progressing the independent clearing house (ICH) frameworks, the executive transition and transformation to agile ways of work
Technology costs: 4-year growth trend
Rebased to 2016 levels

Technology cost 2019

New and incremental spend: R44m
- ITaC implementation: R28m
- New master reference data system: R6m
- Infrastructure support & maintenance: R6m
- Equity clearing system maintenance: R4m

*Interim results guidance was R280m
Contains rounding differences
Cashflow view

Exit cash balance enabling the growth of the ordinary dividend level and the declaration of a special dividend

*Includes the effect of exchange rate fluctuations on foreign denominated cash held
Declared ordinary dividend increased by 5% (2018: 655c) to 690c at a cover of 1.15 (2018: 1.61) and a declared special dividend of 150c (2018: 185c)
## Robust balance sheet

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

*Contains rounding differences*
Business review
Revenue ↓ 5% to R147m (2018: R155m) owing to significantly lower IPOs and the impact of the accounting treatment

IPOs worldwide decreased by 19% in 2019

- 5 new company listings, 6 new ETFs, 5 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 R3.1tr (2018: R2.7tr)
- Third commercial bank issuance of green bonds by Nedbank

Implemented changes to JSE Equity Listings Requirements flowing from issuer regulation consultation paper – came into effect 2 December 2019

Successfully navigated unbundling of Naspers and the listing of Prosus in Amsterdam
Capital Markets: Equity Market

22% of total revenue (2018: 25%)

Revenue ↓ 13% to R433m (2018: R499m). This follows a decrease in billable value traded and the implementation of the tiered billing model in August 2018

Billable value traded ↓ 2%

Foreign investment net outflows of R114bn

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)

Auction enhancements implemented to improve auction mechanics by creating deeper liquidity during auction sessions

Reduced block trade sizes

Launched new and enhanced equities trading functionality – central order book cross trade enhancement (XT) and iceberg orders

Revenue % changes calculated on unrounded figures  *Effective rate after implementation of the new billing model
Capital Markets: Bonds and Financial Derivatives

13% of total revenue (2018: 12%)

Revenue ↑ 4% to R258m (2018: R247m)

Equity derivatives revenue flat at R143m (2018: R143m). Activity remained muted, but hedge activity moderately increased in H2, as did the level of the index, which supported higher value traded
- Value traded ↑ 2% to R6.1tr (2018: R5.9tr)
- Delivered ITaC: new trading functionality
- Launched monthly expiries

Currency derivatives revenue ↓ 2% to R47m (2018: R48m). Uncertainty in the market resulted in increased hedging and reduced speculation
- Contracts traded ↓ 7% to 68.7m (2018: 74.2m). ↑ 7% in open interest
- Delivered ITaC: new trading functionality

Interest rate market revenue ↑ 21% to R68m (2018: R56m) as bond nominal value ↑ 16%. Global yields outlook and has resulted in increased volatility and volumes
- Bond nominal value of R36tr (2018: R31tr). ↑ activity in the repo market
- Interest rate derivatives contracts traded ↓ 6% to 11.4m (2018: 12.2m)
- Bond ETP nominal value traded of R442bn (2018: R192 billion). Revenue from the bond ETP contributed R7 million

Revenue % changes calculated on unrounded figures
Capital Markets: Commodity Derivatives

4% of total revenue (2018: 4%)

Revenue ↑ 5% to R82m (2018: R78m) on the back of volatility in the local grains market, as well as heightened activity in international grains products

Contracts traded ↑ 2% to a record high of 3.5m (2018: 3.4m)

Value traded ↑ 19% to R810bn (2018: R678bn)

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

Revenue % changes calculated on unrounded figures
Revenue ↑ 10% to R333m (2018: R303m) following an increase in the number of transactions and smaller transaction sizes

Trades ↑ 10% to 77m (2018: 70m)

Revenue % changes calculated on unrounded figures
Post-Trade Services: Clearing and Settlement

19% of total revenue (2018: 19%)

Revenue ↓ 5% to R385m (2018: R404m) 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

Improved automation in bonds operations

Progressed the application for an independent clearing house license

Successfully deployed Strate’s equity settlement system

Successfully concluded a full default simulation

Revenue % changes calculated on unrounded figures
Revenue up 16% to R310m (2018: R267m) largely owing to annual price increases, foreign exchange gains on USD-denominated revenue and a prior-year adjustment in 2018

15% of Total Revenue (2018: 13%)

- 24 new clients have signed up for market data products: (9 local clients and 15 international clients)
- Net new passive tracking mandates up 9 (2018: 8). Index-tracking assets under management increased by 11% to R573bn (2018: -17%)
- Launched a new tick-data-in-the-cloud solution
- Incorporated all ITaC market data in JSE Data Agreement licensing framework for Equity Derivative and Currency Derivative markets

Information Services: Includes market data sales

Revenue breakdown

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Data</th>
<th>Indices</th>
<th>Revenue overstatement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>192</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>228</td>
<td></td>
<td>-10</td>
</tr>
<tr>
<td>2018</td>
<td>234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>261</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Looking ahead
Operational Dynamics

- Navigate local and global headwinds
- Low growth in equity and equity derivatives markets
- High concentration in equity markets, participants and instruments
- Competitive threats
- Customer engagement
- Staff morale
- Transformation agenda

Strategic Initiatives

- Partner to co-create for inclusive and sustainable growth
- Rebuild trust and enhance resilience
- Contribute to national agenda

Enabling accelerators

- Drive inorganic growth strategy
- Expand footprint in Asia
- Continue diversifying revenue
- Ensure market quality, settlement assurance, governance, operational availability and resilience
- Promote South Africa as a global investment destination through public and private partnerships
- Lead the sustainability agenda

Enhance customer experience

Proactive talent management
Questions
Corporate scorecard 2020

**Partnership for growth**
- Deliver financial performance in line with 2020 Budget
- Execute on inorganic growth strategy
- Deliver new products & services in Capital Markets & Information Services
- Integrate LINK into JSE Group ¹

**Trusted market place**
- Improve our operational resilience
- Improve our cyber security readiness in line with plan
- Deliver MIT upgrade
- Improve governance

**National agenda**
- Deliver impactful corporate social investment, and financial literacy education, to enable future inclusion
- Lead on the sustainability agenda
- Partner with government on SA Inc. and promote SA as an attractive investment destination
- Maintain our BEE level 3 score & improve our BEE internal transformation

**Talent**
- Revise & launch our vision, values & JSE Way
- Deliver efficiencies through New Ways of Work & Agile capability
- Improve on our 2018 staff engagement score

**Stakeholder experience**
- Improve our client response times and quality of engagement
- Improve on our 2019 client engagement score
- Maintain the integrity & trust of our regulatory relationships

¹ Transaction is subject to Competition Tribunal approval
JSE liquidity

Monthly liquidity 2011 - 2019

[Graph showing monthly liquidity from 2011 to 2019 for JSE Limited, JSE Strate Liquidity, and WFE JSE Monthly Liquidity]
Equity Market: JSE effective pricing trend

Deliberate declines in fees over time, heightened impact on trading

- 2015 BDA fee reduced by 20%
- 2016 option delta (OD) fee reduced to zero
- 2017 BDA fee reduced by 8%
- 2018 new tiered billing model resulted in a 12% reduction of trading fee effective rate. 2018 above is after the reduction

*Effective rate post implementation of the new billing model*
# Financial metrics

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating margin</td>
<td>31%</td>
<td>41%</td>
<td>40%</td>
<td>41%</td>
<td>45%</td>
</tr>
<tr>
<td>EPS</td>
<td>820.5</td>
<td>1 056.5</td>
<td>1 006.0</td>
<td>1 074.8</td>
<td>1 051.0</td>
</tr>
<tr>
<td>HEPS</td>
<td>814.6</td>
<td>1 056.2</td>
<td>996.5</td>
<td>1 063.2</td>
<td>1 026.3</td>
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<tr>
<td>PE</td>
<td>14.6</td>
<td>15.7</td>
<td>15.4</td>
<td>15.3</td>
<td>12.2</td>
</tr>
<tr>
<td>Dividend yield (ordinary)</td>
<td>5.8%</td>
<td>4.0%</td>
<td>4.0%</td>
<td>3.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Dividend yield (total)</td>
<td>7.1%</td>
<td>5.1%</td>
<td>4.0%</td>
<td>3.4%</td>
<td>4.9%</td>
</tr>
<tr>
<td>EBITDA</td>
<td>889</td>
<td>1 042</td>
<td>993</td>
<td>1 074</td>
<td>1 123</td>
</tr>
<tr>
<td>ROE</td>
<td>17%</td>
<td>23%</td>
<td>23%</td>
<td>28%</td>
<td>30%</td>
</tr>
</tbody>
</table>
A history of South Africa’s largest exchange
Thank you