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Risk update: probability of extreme down case rises to 19%, up case drops to 10% on downgrades, baseline case weaker growth and rand

9th May 2017

Figure 1: Economic Scenarios – base case or scenario 3

		Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Q2.17 post downgrade Base line case 35%	Rand/USD (average)	13.22	13.45	13.25	13.55	13.85	13.65	13.25	12.90
	Repo rate (end rate)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.25

Trend growth rate of 2.0% y/y, reached by 2022. Recent downgrades subdue confidence, growth somewhat, structural constraints. Rand structurally weaker so slower return to PPP (by 2020). SA retains two investment grade (IG) ratings on its local currency (LC) long-term sovereign debt this year. Sedate global monetary policy normalisation – avoid severe global risk-off environment, neutral to global risk-on. Modestly strengthening global demand.

Migration

		Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Q2.17 pre-downgrade Base line case 35%	Rand/USD (average)	13.22	12.80	12.60	12.90	13.20	13.00	12.60	12.25
	Repo rate (end rate)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.25

Trend growth rate of 2.5% y/y (by 2021) on modestly strengthening global demand, growth held back by structural constraints despite some improvements (infrastructure, inflexible labour market, fiscal constraints, deindustrialisation, increased statism). SA retains all IG ratings on its LC denominated long-term sovereign debt. Rand strengthens back to PPP by 2019, sedate monetary policy normalisation. Global risk-on quickens 2017 rand strength.

		Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Q1.17 **Base line case** 36%	Rand/USD (average)	13.68	13.47	13.33	13.40	13.13	12.67	12.33	11.99
(Q4.16 35%, Q3.16 40%)	Repo rate (end rate)	7.00	7.00	7.00	7.25	7.25	7.25	7.25	7.25

Trend growth rate of 2.5% y/y (by 2021). Economic growth weak on modestly strengthening global demand. Structural constraints hold SA back from faster economic growth. Rand strengthens to PPP by 2019, sedate global monetary policy normalisation.

Note: Event risk begins Q3.17

With this document being an economic risk and credit rating update document, the migration path of the scenarios and hence probabilities, qualitative and quantitative information is explained. In particular, a migration occurred within a quarter, Q2.17, as S&P and Fitch delivered downgrades on 3rd and 7th April respectively (see figure **11**), after the Q2.17 scenarios (pre-downgrade) were already active. The Q2.17 post-downgrade scenarios, i.e. the ones that subsequently went live are given in the migration tables for comparison (see figures **1**,**3**,**5**,**7** and **9**). Specifically, the Q2.17 post-downgrade scenarios characterize South Africa's baseline partial sub-investment grade status following the downgrade of its local and hard currency long-term sovereign debt credit ratings. This has necessitated changes to the qualitative (written characterization) and quantitative (numerical characterisation) of the baseline, down and extreme down scenarios. The extended currency

Figure 2: Baseline expected case exchange rate forecasts

Expected case	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
USD/ZAR (Av)	13.22	13.45	13.25	13.55	13.85	13.65	13.25	12.90
GBP/ZAR (Av)	16.35	17.03	17.33	18.17	18.71	18.44	17.87	17.50
EUR/ZAR (Av)	14.08	14.52	14.64	15.31	15.86	15.77	15.37	15.09
ZAR/JPY (Av)	8.54	8.19	8.15	7.86	7.65	7.77	7.96	8.14

Source: Investec

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Figure 3: Economic Scenarios – down case or scenario 4

Q2.17 post downgrade
Down case
35%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	13.45	16.90	18.00	19.00	19.50	19.00	18.50
Repo rate (end rate)	7.00	7.00	7.75	8.00	9.00	9.50	10.00	10.50

All three key agencies rate SA's sovereign foreign **and local** currency long-term debt sub-investment grade. Higher borrowing costs increase the cost of repaying debt, increase the chance of further credit downgrades. Upwards pressure on interest rates, rand weakness on loss of investor confidence, inflation shock, SA portfolio assets sold, capital exits, business confidence and investment depressed. Government's capacity for expenditure reduced, including existing social welfare grants. Significant strike action.

Migration

Q2.17 pre-downgrade
Down case
35%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	14.00	15.02	17.26	18.91	19.26	18.62	17.50
Repo rate (end rate)	7.00	7.00	7.50	8.00	8.50	9.00	9.50	10.00

All three key agencies ratings of SA's foreign currency (FC) long-term debt sub-investment grade. Substantial rand weakness, inflation shock, significant strike action, renewed commodity slump, global economic slowdown (SA V shaped recession), global financial risk-off, rapid, sharp interest rate hikes. Dwindling investment, capital flight.

Q1.17
Down case
34%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.68	13.47	15.02	17.26	18.91	19.26	18.62	17.50
Repo rate (end rate)	7.00	7.00	7.50	8.00	8.50	9.00	9.50	10.00

Renewed commodity slump, global economic slowdown (SA V shaped recession), domestic and global rapid, sharp interest rate hikes. All three key ratings of SA's FC long-term debt sub-investment grade. Substantial rand weakness, inflation shock, strike action. Dwindling investment, capital flight.

(Q4.16 35%, Q3.16 40%)

Note: Event risk begins Q3.17

forecasts are also given for all scenarios (see figures **2**,**4**,**6**,**8** and **10**).

Scenario 3 or the baseline scenario (off which the others are calculated) for Q2.17 now shows a depreciated rand and higher long-term interest rates than in Q2.17 pre-downgrade (and a slightly higher inflation longer-term). While April's drop in SA's sovereign long-term credit ratings saw the rand weaken to R13.96/USD, R14.87/EUR and R17.34/GBP the rand's post-downgrade strength

Figure 4: Down case exchange rate forecasts

Down case	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
USD/ZAR (Av)	13.22	13.45	16.90	18.00	19.00	19.50	19.00	18.50
GBP/ZAR (Av)	16.35	17.03	22.10	24.14	25.67	26.34	25.63	25.10
EUR/ZAR (Av)	14.08	14.52	18.67	20.34	21.76	22.52	22.04	21.65
ZAR/JPY (Av)	8.54	8.19	6.39	5.92	5.58	5.44	5.55	5.68

Source: Investec

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Figure 5: Economic Scenarios – extreme down case or scenario 5

Q2.17 post downgrade Extreme down case 19%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	13.45	17.00	21.00	22.30	24.00	25.50	27.00
Repo rate (end rate)	7.00	7.00	8.50	10.50	14.00	16.50	18.00	21.00

State bankruptcy (failed state) - lack of funds to pay social grants and civil servants wages, civil unrest and civil war. Persistent electricity, water, government services outages. Full loss of private sector property rights under nationalisation but majority of capital already exited under formal private sector disinvestment. Business confidence at record low. Persistent depression – L shaped. Downward spiral of a debt trap results in debt default, and so sovereign debt restructure and haircuts on sovereign debt.

Migration

Q2.17 pre-downgrade Extreme down case 19%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	14.50	15.50	16.90	18.50	20.00	21.20	22.30
Repo rate (end rate)	7.00	7.00	8.00	8.50	9.50	10.50	11.00	12.00

The path to a failed state. SA's credit rating speculative grade (local and foreign currency from all agencies) on ongoing fiscal deterioration, leading to partial sovereign debt default, debt restructure and haircuts. Loss of private sector property rights under state custodianship, Substantial recession (depression – U shaped) global economy falls into recession, commodity cycle in depression, civil unrest, persistent load-shedding.

Q1.17 Extreme down case 14%

(Q4.16 19%, Q3.16 19%)

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.68	13.47	15.50	16.90	18.50	20.00	21.20	22.30
Repo rate (end rate)	7.00	7.00	8.00	8.50	9.50	10.50	11.00	12.00

SA's credit ratings speculative grade. Sovereign debt defaults, debt restructure and haircuts. Substantial loss of private corporate sector property rights under state custodianship. Recession (depression – U shaped) global recession, commodity cycle in depression, civil unrest, persistent load-shedding (water as well as electricity).

Note: Event risk begins Q3.17

reflected the continuation of the global risk-on appetite, particularly to EM local currency (LC) debt, with SA still attractive in this respect as the country retains two investment grade (IG) ratings on its LC denominated long-term sovereign debt. Expanded forecasts show GDP growth somewhat weaker, unemployment lifts over the period (although Q2.17 pre-downgrade also saw this due to the very weak growth rate). Property prices are slightly subdued as the long-bond has risen. The

Figure 6: Extreme down case exchange rate forecasts

Down case	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
USD/ZAR (Av)	13.22	13.45	17.00	21.00	22.30	24.00	25.50	27.00
GBP/ZAR (Av)	16.35	17.03	22.23	28.17	30.13	32.42	34.40	36.63
EUR/ZAR (Av)	14.08	14.52	18.79	23.73	25.53	27.72	29.58	31.59
ZAR/JPY (Av)	8.54	8.19	6.35	5.07	4.75	4.42	4.14	3.89

Source: Investec

Figure 7: Economic Scenarios – up case or scenario 2

Q2.17 post downgrade
Up case
10%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	13.45	12.60	12.50	12.40	11.90	11.50	11.20
Repo rate (end rate)	7.00	7.00	7.00	6.50	6.50	6.50	6.00	6.00

Persistent economic growth of 3-5% on domestic economic reforms (structural constraints are overcome), strong global growth and upwards commodity cycle. Better governance, retreat from the threat to private sector property rights. Stabilisation of credit ratings on fiscal consolidation. Rand strengthens back toward PPP (reach PPP by 2020).

Migration

Q2.17 pre-downgrade
Up case
10%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	12.80	12.60	12.50	12.40	11.90	11.50	11.20
Repo rate (end rate)	7.00	7.00	6.75	6.50	6.50	6.50	6.00	6.00

Persistent economic growth of 3-5% on domestic economic reforms (structural constraints are increasingly overcome), strong global growth and upwards commodity cycle. Better governance, retreat from the threat to private sector property rights. Stabilisation of credit ratings on fiscal consolidation. Rand strengthens back toward PPP (reach PPP by 2020).

Q1.17
Up case
15%

(Q4.16 10%)

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.68	13.47	13.20	12.90	12.40	11.90	11.50	11.20
Repo rate (end rate)	7.00	7.00	6.75	6.50	6.50	6.50	6.00	6.00

Persistent economic growth of 3-5% as the global economy quickens and good domestic policies bolster business confidence and private fixed investment, reducing poverty by lowering structural unemployment, significantly increases government revenue and stabilises SA's credit ratings. The potential for credit rating upgrades increase (positive outlook).

Note: Event risk begins Q3.17

rand takes longer to strengthen back toward PPP. While the up and extreme up qualitative and quantitative are unchanged (besides historical updates) the likelihood of the up case has dropped from 15% to 10% to reflect the worsening outlook, increased tilt to the downside, as a consequence of the downgrades (the extreme up case remains unattainable at 1% under current circumstances).

With Fitch and S&P, the agencies rationales for the April 2017 downgrades include expected future fiscal deterioration, weakening of institutions and heightened political uncertainty. The local currency long-term sovereign debt is at the last rung of investment grade for S&P which has raised

Figure 8: Up case exchange rate forecasts

Down case	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
USD/ZAR (Av)	13.22	13.45	12.60	12.50	12.40	11.90	11.50	11.20
GBP/ZAR (Av)	16.35	17.03	16.48	16.77	16.75	16.08	15.51	15.19

EUR/ZAR (Av)	14.08	14.52	13.92	14.13	14.20	13.74	13.34	13.10
ZAR/JPY (Av)	8.54	8.19	8.57	8.52	8.55	8.91	9.17	9.38

Source: Investec

Figure 9: Economic Scenarios – extreme up case or scenario 1

Q2.17 post downgrade
Extreme up case 1%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	13.45	11.30	10.60	9.50	8.70	8.20	7.90
Repo rate (end rate)	7.00	7.00	6.75	6.50	6.00	5.50	5.00	5.00

Fast, sustainable growth of 5-7% y/y plus. End of threat to private sector property rights, pro private sector business (capitalist) policies bring certainty to investor climate, business confidence booms, employment rises markedly. Global growth (including commodity boom) and SA export boom that substantially lifts employment and incomes, eventually eliminating poverty. Credit rating upgrades occur, interest rate cuts. Currency appreciation shock.

Migration

Q2.17 pre-downgrade
Extreme up case 1%

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.22	12.80	11.30	10.60	9.50	8.70	8.20	7.90
Repo rate (end rate)	7.00	7.00	6.00	5.75	5.50	5.00	5.00	5.00

Fast, sustainable growth of 5.0-7.0% y/y plus. Global growth boom, lifts SA exports, employment and incomes. No threat to private sector property rights brings certainty to investor climate, lifts confidence levels. Fiscal consolidation, credit rating upgrades as, interest rate cuts. Currency appreciation shock.

Q1.17
Extreme up case 1%

(Q4.16 1%, Q3.16 1%)

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
Rand/USD (average)	13.68	13.47	11.30	10.60	9.50	8.70	8.20	7.90
Repo rate (end rate)	7.00	7.00	6.00	5.75	5.50	5.00	5.00	5.00

Fast, sustainable economic growth of 5.0-7.0% y/y, private sector business friendly government policies (entrench private sector property rights) structurally lift business confidence. Global growth boom lifts SA exports, employment and incomes, substantial rise in public revenues. Credit rating upgrades, interest rate cuts. Currency appreciation shock.

Note: Event risk begins Q3.17

fears that SA could fall into sub-investment grade here as it has a negative outlook (it is already there for Fitch on BB+). Moody's is yet to review SA. The bulk of SA' issuance, around 90%, is LC debt. The down case is characterized by all local and foreign currency debt at sub-investment grade, with a V shaped recession. Higher borrowing costs, loss of investor confidence, with SA unable to take advantage fully of strengthening global demand, should it occur. Weakening global demand would exacerbate the down case. The rand does not strengthen back toward PPP. The down case is one of a loss of all investment grade credit ratings, while the expected case sees two LC IG retained (see figures 1 and 3). The latter will allow a number of global funds to retain SA LC

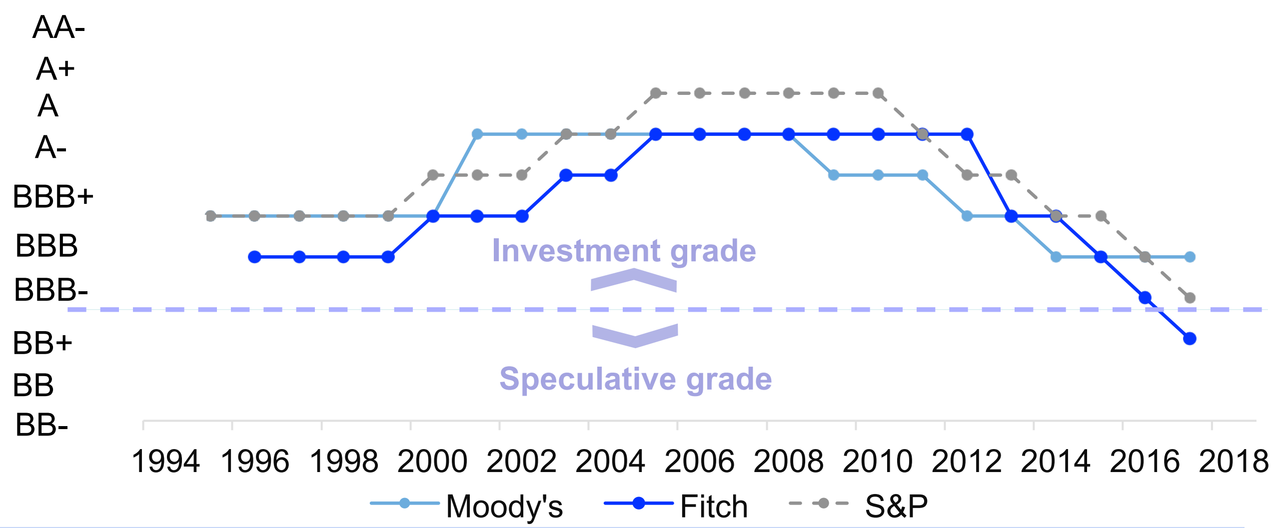
Figure 10: Extreme up case exchange rate forecasts

Down case	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18
USD/ZAR (Av)	13.22	13.45	11.30	10.60	9.50	8.70	8.20	7.90
GBP/ZAR (Av)	16.35	17.03	14.78	14.22	12.83	11.75	11.06	10.72

EUR/ZAR (Av)	14.08	14.52	12.49	11.98	10.88	10.05	9.51	9.24
ZAR/JPY (Av)	8.54	8.19	9.56	10.05	11.16	12.18	12.87	13.29

Source: Investec

Figure 11: South Africa local currency sovereign credit ratings

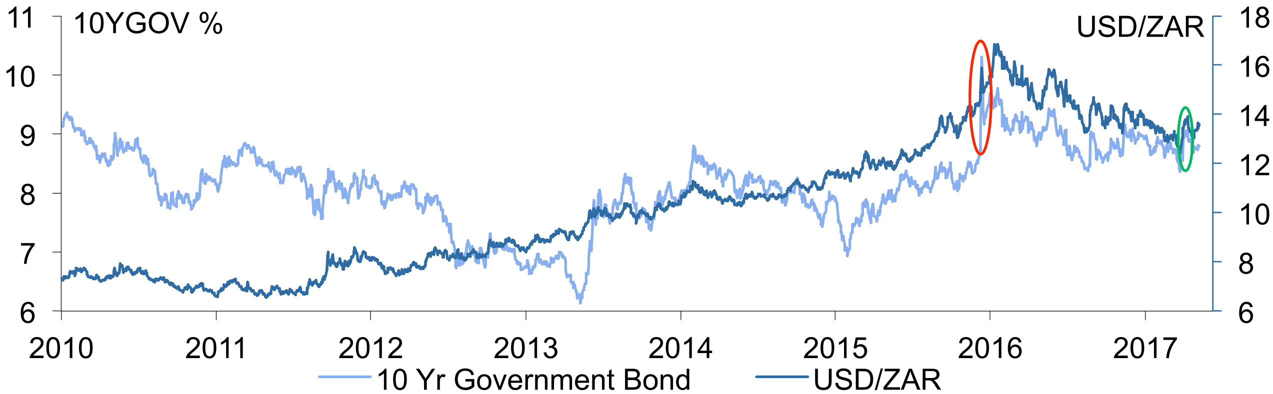


Source: Moody's, Fitch, Standard and Poor's

long-term sovereign debt in their portfolios, preventing the rand from seeing further substantial weakness from this source. Should SA retain only one LC IG rating then the rates forecasts for the baseline case (inflation, exchange and long and short term interest rates) are likely to be somewhat higher (the rand weaker against the crosses).

The extreme down case has also seen a rating migration during Q2.17 from the path to a failed state to an actual failed state (clarified in figure 10). The tilting to the downside in the probabilities of the five Q2.17 scenarios (pre-downgrades but after the cabinet reshuffle of March), as well as the worsening in qualitative and quantitative post-downgrade, reflect the worsening uncertainty and hence volatility of the outlook.

Figure 12: SA 10 Year Government Bond, rand reaction to loss of Nene (red), Gordhan (green)



Source: IRESS

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