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2018 was a difficult year for investors, especially those in equities and listed property. This is particularly evident when comparing the asset class returns in 2017 to those of 2018 – where SA Equity and SA Property went from the top of the performance rankings to being the two worst performing asset classes (see the “smartie box” on page 15).

While increased volatility and uncertainty is unsettling for investors, it is the very motivation behind this publication.

The 89 years of data that informs the content of the LONG-TERM PERSPECTIVES yearbook shows the muted impact short-term returns have when viewed through a long-term lens. As we all know, it’s time in the market that matters, not timing the market.

This yearbook, now in its sixth edition, is designed to help investors look beyond the day-to-day noise. We scrutinise the long-term performance and behaviour of a range of the asset classes. These asset classes are used to create the MacroSolutions Balanced Index – a diversified portfolio that is a proxy for an average balanced fund (the main savings solution in South Africa).

Although not an asset class, inflation is a critical factor impacting investments – known as the silent assassin of savings. This is why we mainly show investment returns adjusted for inflation (that is, REAL returns). Real returns are what our clients need and are therefore a key driver in our investment allocation process.

I hope you find LONG-TERM PERSPECTIVES informative and that it helps broaden your perspective on the South African investment landscape.

Yours sincerely

Graham Tucker
Portfolio Manager
## CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>EXECUTIVE SUMMARY</td>
<td>Graham Tucker</td>
</tr>
<tr>
<td>6</td>
<td>THE MACROSOLUTIONS BALANCED INDEX</td>
<td>Graham Tucker</td>
</tr>
<tr>
<td>8</td>
<td>LONG-TERM LESSONS</td>
<td>Peter Brooke</td>
</tr>
<tr>
<td>13</td>
<td>DIVERSIFICATION</td>
<td>Graham Tucker</td>
</tr>
<tr>
<td>17</td>
<td>SA INFLATION</td>
<td>Johann Els</td>
</tr>
<tr>
<td>20</td>
<td>SA EQUITY</td>
<td>Graham Tucker</td>
</tr>
<tr>
<td>23</td>
<td>SA LISTED PROPERTY</td>
<td>Evan Robins</td>
</tr>
<tr>
<td>24</td>
<td>SA BONDS</td>
<td>Zain Wilson</td>
</tr>
<tr>
<td>27</td>
<td>SA CASH</td>
<td>John Orford</td>
</tr>
<tr>
<td>28</td>
<td>GOLD</td>
<td>Denzil Burger</td>
</tr>
<tr>
<td>30</td>
<td>THE RAND</td>
<td>Johann Els</td>
</tr>
<tr>
<td>33</td>
<td>GLOBAL ASSETS</td>
<td>Graham Tucker</td>
</tr>
<tr>
<td>34</td>
<td>GLOBAL EQUITY</td>
<td>Urvesh Desai</td>
</tr>
<tr>
<td>36</td>
<td>GLOBAL BONDS</td>
<td>Zain Wilson</td>
</tr>
<tr>
<td>39</td>
<td>LONG-TERM REAL RETURNS (OUTLOOK)</td>
<td>Peter Brooke</td>
</tr>
<tr>
<td>40</td>
<td>ASSET CLASS RETURNS (LONG-TERM OVERVIEW)</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>MACROSOLUTIONS BALANCED INDEX (REAL RETURNS)</td>
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EXECUTIVE SUMMARY

With the primary objective of investors being to save for long-term goals, the aim of this report is to draw attention to the long-term behaviour of asset classes and, in so doing, provide perspective on the shorter-term volatility.

8 lessons guide an investment plan
In analysing long-term data, we uncovered profound lessons to help build a resilient investment plan. These lessons shape the key principles of our investment philosophy (see page 8).

When R10 000 becomes R5 584
The first of our lessons is on an investor’s worst enemy: inflation. A 6% inflation rate will almost halve the value of your money over 10 years (see Chart 10).

87 years to double your money
Another risk to our future wealth is investing in cash. While there is minimal risk of losing money, it takes a lifetime to double the real value of your money, as opposed to 10 years in equities.

SA’s top asset class 42 out of 89 years
To counter the effects of inflation and low-return investments, you need the higher growth potential of equities – SA’s winning local asset class for 47% of the time (see Chart 4).

Diversification is the one free lunch
While equities are often the winning asset class, it still pays to diversify. The analysis of drawdowns on page 13 shows the benefit of blending different asset classes, while on page 15 you can see the consistent, above-average returns of the MacroSolutions Balanced Index.

Active asset allocation can reduce risk
The greater scope in asset class choice enables managers to produce similar returns for less risk. By adding just 0.25% a year to the MacroSolutions Balanced Index returns through active asset allocation, R1 would grow by an additional R5 815 to R32 339 over 89 years.

Domestic politics and slowing global growth meant it was a difficult year for financial markets and the rand. The MacroSolutions Balanced Index delivered a real return of -4.1% in 2018, while SA equity returned -12.5% after inflation. Looking forward, we expect the MacroSolutions Balanced Index to deliver a real return of 4.5% annualised over the next five years (see page 39), up from the current 2.4% a year over the past five years and lower than the average 5.7% a year real return achieved since 1930.

CHART 1: GROWTH ASSETS REWARD OVER TIME
Annualised real returns in rand terms (December 1929 - December 2018)
THE MACROSOLUTIONS BALANCED INDEX
A LONG-TERM PICTURE OF MULTI-ASSET CLASS PERFORMANCE

CURRENT WEIGHTING OF BALANCED INDEX

- SA EQUITY 42.5%
- GLOBAL EQUITY 22.5%
- SA BONDS 20%
- GLOBAL BONDS 7.5%
- SA CASH 5%
- GOLD 2.5%

LONG-TERM RETURNS OF THE MACROSOLUTIONS BALANCED INDEX

12.1%
NOMINAL ANNUAL RETURNS

5.7%
REAL ANNUAL RETURNS

MULTI-ASSET CLASS PORTFOLIOS, SUCH AS BALANCED FUNDS, ACCOUNT FOR A SIGNIFICANT PORTION OF TOTAL FLOWS INTO THE UNIT TRUST INDUSTRY.

Investors favour these funds because they:
1. Provide excellent real (above inflation) returns
2. Offer diversified, risk-managed solutions
3. Comply with Regulation 28 of the Pension Funds Act
4. Qualify for a tax incentive for retirement savings.

Therefore, the average SA investor’s returns are best measured by how a typical balanced fund has performed, and for that reason we developed our proprietary MacroSolutions Balanced Index.

THE MACROSOLUTIONS BALANCED INDEX OVER 89 YEARS

The MacroSolutions Balanced Index dates back to 1929 and provides a long-term total return series for an SA balanced fund.

The index has been fine-tuned over the years to reflect changes in the local investable universe (see History in the bottom left corner).

This index is a valuable tool in that it provides insight into long-term structural investment trends in SA.

THE HISTORY OF THE MACROSOLUTIONS BALANCED INDEX

The Index was initially a simple equity (65%), bonds (25%) and cash (10%) allocation. Over time, the weights adjusted to reflect changes in the investable universe and regulatory environment – for instance, gold was included in 1967 and global assets were introduced in 1995. The current weighting of the Index is 65% equity, 27.5% bonds, 5% cash and 2.5% gold.

CHART 2: MACROSOLUTIONS BALANCED INDEX PROVIDES CONSISTENT LONG-TERM RETURNS

Growth of R1 over 89 years in real terms (December 1929 – December 2018)
MULTI-ASSET CLASS GROWTH OVER 89 YEARS: 
THE POWER OF COMPOUNDING

EXPANDING THE INVESTMENT UNIVERSE
Investors have an increasing array of investment opportunities available for inclusion in their portfolios. This creates a greater opportunity set for managers to add value through actively managing portfolios across asset classes.

To illustrate this, we look at the impact of including different assets on a now globally diversified MacroSolutions Balanced Index relative to an SA-only index (65% SA equity, 25% SA bonds, 10% SA cash).

In real terms, investors’ money increased 143 TIMES in the MacroSolutions Balanced Index.

MACROSOLUTIONS BALANCED INDEX
12.1% a year

INFLATION RATE
6% a year

R1 INVESTED FOR 89 YEARS...

CHART 3: MORE OPTIONS, MORE OPPORTUNITIES
MacroSolutions Balanced Index relative to an SA-only balanced index (December 1950 - December 2018)

CHART 4: A MIXED PERFORMANCE PICTURE
Each year’s best performing local asset class (1930 - 2018)
The figure in brackets denotes the percentage of time it’s the top performing asset class for the year

LOSER: CASH... BUT THE BEST PERFORMER FOR 12% OF THE 89 YEARS.
WINNER: EQUITIES... BUT ONLY FOR 47% OF THE TIME.

MACROSOLUTIONS BALANCED INDEX
12.1% a year

In real terms, investors’ money increased 143 TIMES

R26 524

R184


Global assets included in 1995
Gold included in 1947

This is a relative chart:
• SA-only underperforms
• SA-only outperforms

CHART 3 shows that simply including offshore exposure into a balanced fund’s portfolio as exchange controls relax is far from a one-way advantage. An expanding investment universe creates opportunity for active asset allocation to add value on a risk-adjusted basis. Chart 4 shows why...
LONG-TERM LESSONS
BUILDING AN INFORMED SOLUTION

Analysing long-term data is crucial to our investment process and it also teaches us some profound lessons. Understanding these lessons will help you build the right investment solution to achieve your goals.

LESSON 1
INFLATION IS YOUR ENEMY

REALITY:
Many investors suffer from “inflation illusion” as they don’t notice how destructive inflation can be over time (see INFLATION research on page 17).

LESSON:
We need to look at long-term investment returns in “real” terms, stripping out the impact of inflation.

INFLATION ERODES SPENDING POWER
Take a look at what a 6% inflation rate effectively does to your money.

Inflation is as violent as a mugger, as frightening as an armed robber and as deadly as a hit man.”

Ronald Reagan

LESSON 2
TIME IS YOUR FRIEND

REALITY:
The main reason investors prefer cash to equities is the fear of losing money.

LESSON:
The best way to manage the risk of losing money is to remain invested in equities for longer. As soon as you extend your holding period for more than three years, SA equity past performance shows that the chance of losing money becomes negligible. Take what happened in 2008: after a negative 30% return, the market rebounded to deliver 14% a year over the following five years (see Chart 13).

PROBABILITY OF NEGATIVE RETURNS OVER DIFFERENT TIME PERIODS

1 day and 1 week: Rolling total returns for SA equity, June 1995 – December 2018
1 month to 10 years: Rolling returns for SA equity, January 1960 – December 2018
The old ADAGE holds true:

“
It’s time in the market, not timing the market, that counts.
“

LESSON 3
YOU NEED EQUITIES

REALITY:
Many investors will not retire with enough money.

LESSON:
We need the higher long-term returns from equities to grow our wealth. This is particularly important in a world where people are living longer.

LESSON 4
CASH IS TRASH

REALITY:
A bank deposit exposes you to minimal risk, but there’s a price to be paid for that security.

LESSON:
Cash does not significantly increase your real wealth over time. Over 94 years, cash has an after-inflation return of just 1% a year. It is better to own shares in the bank than to leave your money there.

TIME NEEDED TO DOUBLE YOUR MONEY
Using each asset class’s long-term average returns, this is how long it will take to double your REAL investment value.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Time Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA EQUITIES</td>
<td>10 YEARS</td>
</tr>
<tr>
<td>SA BONDS</td>
<td>42 YEARS</td>
</tr>
<tr>
<td>SA CASH</td>
<td>87 YEARS</td>
</tr>
</tbody>
</table>

PERFORMANCE OVER 89 YEARS (nominal returns)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA EQUITY</td>
<td>13.8%</td>
</tr>
<tr>
<td>SA BONDS</td>
<td>7.8%</td>
</tr>
<tr>
<td>SA CASH</td>
<td>6.9%</td>
</tr>
<tr>
<td>INFLATION</td>
<td>6%</td>
</tr>
</tbody>
</table>
LESSON 5
COMPOUNDING IS A POWERFUL WEALTH GENERATOR

REALITY:
Money needs time to benefit from the full potential of compounding growth.

LESSON:
Start saving as soon as you can, leave it for as long as you can, and let compounding do the work for you. And tick the dividend reinvest box on your investment application form to maximise your growth.

GROWING YOUR WEALTH OVER TIME
Using the long-term nominal average return of 13.8% a year, look at what happens when a lump sum is invested in SA equities over time.

<table>
<thead>
<tr>
<th>TODAY</th>
<th>10 YEARS LATER</th>
<th>20 YEARS LATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1 000</td>
<td>R3 646</td>
<td>R13 290</td>
</tr>
</tbody>
</table>

LESSON 6
HIGH PRICE OF MISSING OUT

REALITY:
Short-term volatility can often lead to investors selling their investments at the worst time – as almost all of the 10 best days on the JSE occurred after bad news or during uncertain times.

LESSON:
Sitting on the sidelines and missing those good days can be detrimental to your savings. The only thing you can control is to have a well-considered plan and to stick to that plan. It is the best way of ensuring you have a secure retirement.

THE HIGH PRICE OF MISSING OUT
The performance of R100 invested in the FTSE/JSE All Share Index (June 1997 to December 2018)

- Fully invested: R2 320 (17.0%)
- Missed 10 best days: R1 068 (12.6%)
- Missed 20 best days: R668 (10.0%)
- Missed 30 best days: R452 (7.8%)
- Missed 40 best days: R320 (6.0%)
- Missed 50 best days: R232 (4.3%)
- Missed 60 best days: R171 (2.7%)
LESSON 7
DON’T PUT ALL YOUR EGGS IN ONE BASKET

REALITY:
Equities may have been the best performing asset class since 1929, but cash was the best performer for 11 of those 89 years and listed property for 9 years...

LESSON:
Diversification is the one free lunch in investments; use it. That is because it pays to invest across different asset classes. The analysis of drawdowns on page 13 shows the benefit of blending different asset classes, while on page 15 you can see the consistent, above-average returns of the diversified MacroSolutions Balanced Index over time relative to other individual asset classes.

LESSON 8
ACTIVE ALLOCATION ADDS VALUE

REALITY:
Asset classes have distinct secular or long-term periods of under- and outperformance.

LESSON:
Active asset allocation is a vital tool in delivering superior returns.

UNDERSTAND THAT MARKETS MOVE IN CYCLES

LISTED PROPERTY
went nowhere for 15 years, before becoming the best performing asset class for the next 20.

SA BONDS
delivered a negative real return for 40 years, before delivering a great return over the last 30 years.

PERCENTAGE OF TIME AS THE YEAR’S BEST PERFORMING LOCAL ASSET CLASS (1930 – 2018)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Asset Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>47%</td>
<td>SA Equity</td>
</tr>
<tr>
<td>17%</td>
<td>SA Gold*</td>
</tr>
<tr>
<td>14%</td>
<td>SA Bonds</td>
</tr>
<tr>
<td>12%</td>
<td>SA Cash</td>
</tr>
<tr>
<td>10%</td>
<td>SA Property**</td>
</tr>
</tbody>
</table>

* since 1967
** since 1980

CONCLUSION
We incorporate these lessons into the way we build our solutions:
• They all have real return targets.
• They all invest in growth assets.
• They are all well diversified.
• They all employ active asset allocation strategies.
• We recommend a minimum holding period for each solution – the more exposure a fund has to equities, the longer the recommended investment time.
• We hardcode long-term thinking into our investment process.

These principles also form the basis of Old Mutual Wealth’s investment philosophy, enabling them to deliver to client objectives.
DIVERSIFICATION
DON’T PUT ALL YOUR EGGS IN ONE BASKET

After time, diversification is the second most valuable tool you can use to manage risk – as it reduces the impact that a single poorly performing asset has on your overall portfolio.

Investors tend to have a low tolerance for pain, with the fear of losing money outweighing the greed for gains. This is especially true when it comes to investing in equities, due to their higher level of volatility.

To better understand this volatility, we look at the drawdowns of equities and bonds in real terms (after inflation), which is a harsher light, as inflation normally softens the impact of a long-term bear market.

DRAWDOWNS ARE PAINFUL – AND COSTLY
Market declines are measured by the amount of money lost from the peak and how long it takes to recover the losses. Both equities and bonds have exposed investors to painful periods of negative returns.

**CHART 5: DRAWDOWNS OF SA EQUITY**
December 1924 – December 2018

**EQUITY VOLATILITY**
17.8%

**BOND VOLATILITY**
7.1%

**VOLATILITY** is the variability of an asset’s returns. The higher volatility for equity means that it has a wider range of possible returns than bonds (both positive and negative).

**OUR LONGEST EQUITY BEAR MARKET**
-55%
Investors lost half of their money in five years.
It took 15 YEARS to get back to breakeven.

**OUR MOST PAINFUL BEAR MARKET**
-63.5% lost in just 2.5 YEARS

**THE TRUTH ABOUT BONDS**
Starting in 1947, bonds lost 60.8% of their value (in real terms).
- For a continuous 39 years, bonds were an extremely poor investment.
- It would take more than 50 years to get back to breakeven.

Note: Figures calculated in real terms
THE WAY TO MANAGE THIS RISK IS THROUGH DIVERSIFICATION
A simple 50% equity : 50% bond blend dramatically improves the drawdown profile.

**CHART 7: DRAWDOWNS 50% SA EQUITY : 50% SA BONDS**
December 1924 – December 2018

**WORST DRAWDOWN**

**EQUITIES**
-63.5%

**BONDS**
-60.8%

**50:50 PORTFOLIO**
-45.2%
DIVERSIFICATION

Our “smart box” shows the performance of the different asset classes ranked over various time periods. The last 10 columns show just how variable the relative performance of asset classes can be from one year to the next. There are three key points arising from the table below that are discussed in LONG-TERM LESSONS (page 8).

1. **Diversification**: The MacroSolutions Balanced Index represents a typical balanced portfolio and illustrates that diversification works. The past five years saw incredible swings in the rankings. For instance, SA Property went from topping the table in 2014 to the worst performer in 2018, and the opposite was true for Global Bonds from 2016 to 2018. However, over longer investment periods, the diversified Index consistently ranks in the top half of the table.

2. **Active asset allocation**: The range of returns shown in the last line demonstrates just how important it is to have the ability and agility to move between asset classes. The wide ranges show the significant opportunity set for adding value with active allocation.

3. **Equities for the long term**: Although equities do go through periods of underperformance, investors are rewarded for this risk over the long term, as equities outperform inflation and “less risky” asset classes such as cash and bonds.

### Annual nominal returns in rand

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<tr>
<td>SA Equity</td>
<td>32.1</td>
<td>29.6</td>
<td>32.9</td>
<td>35.9</td>
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<td>-25.3</td>
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<td>-25.3</td>
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<td>Macro-Solutions Balanced Index</td>
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<tr>
<td>Gold</td>
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</tr>
<tr>
<td><strong>RANGE BETWEEN HIGHEST AND LOWEST RETURN</strong></td>
<td>51.0</td>
<td>34.0</td>
<td>30.4</td>
<td>30.3</td>
<td>30.3</td>
<td>30.3</td>
<td>30.3</td>
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</tr>
</tbody>
</table>

### Long-Term Lessons

- **Diversification** is crucial for managing risk and ensuring long-term growth.
- **Active asset allocation** can add value over time, as demonstrated by the varied performance across asset classes.
- **Equities** should be part of a long-term investment strategy, as they historically outperform inflation and “less risky” asset classes.

*Note: The table above includes actual returns for the years mentioned.*
SA INFLATION
PUBLIC ENEMY #1

Inflation is the biggest enemy of savers as it erodes their spending power. This is why we look at our long-term investment returns in real terms (stripping out the impact of inflation). In SA, this is particularly pertinent as inflation has averaged 5.5% over the past 107 years (see Chart 8). This compares unfavourably to the average 4.3% in the UK and 3.8% in the US.

SA’s inflation followed the rest of the world higher during the 1970s, on the back of the first oil crisis, while local factors kept our inflation rate high during the 1980s. These included rocketing wage growth, as remuneration per worker topped growth of 20% in the 1970s and early 1980s, and the negative impact of economic isolation during the sanction years of the mid-1980s.

Nearly a decade after US Federal Reserve Board (Fed) Chairman Paul Volcker broke the back of US inflation, Dr Chris Stals played a similar role after becoming Governor of the South African Reserve Bank (SARB) in 1989. A combination of high real interest rates, a lengthy recession and the opening of the economy in 1994 led to lower inflation. The introduction of inflation targets also played a big role in anchoring inflation expectations. The result is that inflation has averaged 5.3% over the last decade.

---

**CHART 8: INFLATION TARGET ANCHORS EXPECTATIONS**

SA inflation as measured by the consumer price index (CPI) (December 1911 - December 2018)

Source: Stats SA
THE IMPACT OF INFLATION ON OUR EVERYDAY LIVES

1. WHAT WILL IT COST?
The variability of inflation is a challenge for budgeting. Despite the fact that SA’s inflation measurement and calculation is among the best in the world, it is an average of all the consumers in the country. If your expenditure is more skewed towards components in the basket of goods with very high inflation rates (for instance, education and healthcare), you will experience a much higher personal inflation rate than the country average. In this case you will need to save more for future expenses.

- Mid-size family sedan (1600cc engine) at 5.8% vehicle inflation rate (average since 1990)
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>+10 yrs</th>
<th>+25 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>R272 000</td>
<td>R478 000</td>
<td>R1 114 000</td>
</tr>
</tbody>
</table>

- One year’s tuition and boarding at a top private school at 9.2% education inflation rate
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>+10 yrs</th>
<th>+25 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>R215 000</td>
<td>R518 000</td>
<td>R1 940 000</td>
</tr>
</tbody>
</table>

- Private hospital kidney dialysis costs for a year at 10.1% medical inflation rate (average since 1990)
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>+10 yrs</th>
<th>+25 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>R192 000</td>
<td>R502 000</td>
<td>R2 128 000</td>
</tr>
</tbody>
</table>

* Note: Inflation averages since 1990

2. HOW MUCH HAVE PRICES GONE UP?
We can look back in time to see how much some South African favourites cost compared with today’s prices.

- Spur Burger
  
<table>
<thead>
<tr>
<th>Year</th>
<th>1970s</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>R0.30</td>
<td>R74.90</td>
</tr>
</tbody>
</table>

- Cheddarmelt Steak (300g)
  
<table>
<thead>
<tr>
<th>Year</th>
<th>1970s</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Price</td>
<td>R0.50</td>
<td>R159.90</td>
</tr>
</tbody>
</table>

- Ricoffy 750g
  
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<thead>
<tr>
<th>Year</th>
<th>1970s</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>R0.25</td>
<td>R79.99</td>
</tr>
</tbody>
</table>

- Condensed Milk
  
<table>
<thead>
<tr>
<th>Year</th>
<th>1970s</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>R0.10</td>
<td>R26.99</td>
</tr>
</tbody>
</table>

Similarly, 10 years ago you would have paid almost half of what it costs today for a basket of consumer goods. Twenty years ago it would have cost R311 to fill your trolley, compared with the mere R4 of 80 years ago.

CHART 9: VALUE OF BASKET OF GOODS THAT COSTS AROUND R1 000 TODAY
3. DID I SAVE ENOUGH?

If your retirement income does not at least grow in line with inflation, you will either experience a decline in your standard of living or you will run out of money. At a 6% inflation rate, a fixed monthly retirement income of R10 000 a month today will decline in real terms to about R1 700 a month after 30 years. Chart 10 shows your purchasing power is even worse at a higher inflation rate. This highlights how important it is to plan carefully and ensure that you invest to achieve inflation-beating returns in the long run.

**CHART 10: IMPACT OF INFLATION ON RETIREMENT INCOME OF R10 000 OVER TIME**

[Graph showing the impact of different inflation rates on retirement income over time]

**OUTLOOK**

2019

Measured inflation continually surprised on the downside during 2018, as very little of the effects of the weak rand was passed on to consumer prices. Petrol price increases have limited consumer discretionary spending, further exacerbating the deflationary environment. This will likely continue in 2019, with the better growth only impacting price pressures more decisively in 2020. Apart from the deflationary environment, the sharp petrol price declines in December 2018 and January 2019 will pull down the 2019 inflation average markedly. With food price inflation also expected to perform relatively modestly during 2019, inflation could average 4.6% in 2019 – compared with the SARB’s forecast of 4.8%.

**LONGER TERM**

We expect inflation to average 5.0% over the next five years, which is within the SARB’s target range of 3% to 6%. The risk, though, remains to the upside. As we are a small and an open economy, SA inflation will always be subject to big global cycles as the currency and, consequently, food and petrol prices play havoc with price changes. Exchange rate risk is particularly high, given how exposed SA is during this period of heightened political and credit ratings risk.
SA EQUITY
VALUATIONS DETERMINE SUBSEQUENT RETURNS

Over the past 94 years, the SA equity market has swung between cheap and expensive relative to trend (as per the trend line in Chart 11). This movement from low to high and vice versa is known as reflexivity.

The local equity market rose sharply after the ANC elective conference in December 2017, and this rise continued into early 2018. However, a more challenging global environment and a realisation that the local recovery was to take longer than expected, saw those early gains eroded. After treading water for much of 2018, local equities fell in the final quarter to end the year down 8.5%. This resulted in the market pulling back to its real long-term trend.

THE ROLE OF VALUATIONS
While Chart 11 shows the real price of the equity market relative to its history, to determine if a market offers value, an important consideration is the price one is paying relative to the profits the company is generating, that is, the price-to-earnings ratio (PE ratio).

Chart 12 on the following page plots the average five-year real return for the equity market based on the PE ratio quintile at the beginning of that period. When viewed in this way, there is a clear relationship between the attractiveness of the market from a valuation perspective and the subsequent returns.

REAL RETURNS
+7.9% a year since 1925

NOMINAL RETURNS
+14.0% a year since 1925

-93.7% HIGHEST
annual return (1979)

-26.4% LOWEST
annual return (1970)

CHART 11: UPWARD TREND, DESPITE VOLATILITY
SA equities in real terms (December 1924 – December 2018)

REFLEXIVITY IN PLAY
- Low to a high in just 5 years
  (2000s bull market)
- Followed by a sharp move lower
  (Global Financial Crisis 2007/08)
THE MARKET IS LESS EXPENSIVE

The more expensive the market (i.e. higher historic PE ratio), the lower the subsequent five-year return, and vice versa. In recent years, the PE ratio for the local equity market has been elevated and in the top quintile, indicating low future real returns. Given the recent market movements, the PE ratio has fallen somewhat to the fourth quintile. This means that some value has returned to the market and, accordingly, we would expect slightly better real returns going forward.

CHART 12: IS THE MARKET EXPENSIVE OR OFFERING VALUE?
Historic PE ratio of JSE vs subsequent five-year real return (1960 – 2018)

Taking a Positive View on Negative Returns

Although the long-term equity market trend is up, in nearly one out of every three years investors have lost money in real terms. While painful, periods of significant negative returns can be opportunities, as can be seen in Chart 13, which shows the “Sandton skyline” of annual real returns for the local equity market.

CHART 13: OPPORTUNITIES IN TIMES OF CRISIS
SA equities’ real return (December 1924 – December 2018)

2008 was one of the worst years for our market (-30.4%), but look at the performance in subsequent years (see grey boxes).
While Chart 13 shows that there are years in which equities have lost a significant portion of their value, it is important to remember that investing is a long-term endeavour, and Chart 14 demonstrates the benefits of being patient. This time funnel shows the range of the annualised real returns investors would have achieved over various periods (listed on the horizontal axis). The funnel narrows from both the top and bottom as you increase the length of time invested, showing that time softens the impact of large positive or negative periods.

Although losses can be experienced over shorter periods, history shows that long-term investors have been rewarded with positive real returns. This will have contributed significantly to meeting their investment objectives, but only if they had the patience required to unlock that risk premium.

### Chart 14: Over Time Returns Become Less Volatile

Range of annualised real returns from SA equities (December 1924 – December 2018)

- **High**
- **Current**
- **Average**
- **Low**

<table>
<thead>
<tr>
<th>5 Years</th>
<th>10 Years</th>
<th>15 Years</th>
<th>20 Years</th>
<th>25 Years</th>
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### Five-Year Outlook

History tells us that real trend growth for the SA equity market is 7% a year, while the average five-year real return is 8% a year. In our view, the market is slightly expensive and earnings growth will be somewhat hindered by low economic growth. Consequently, our five-year expected annualised real return is only 5.5%. However, given the diverse nature of our market, there will be opportunities to enhance these returns. A potential upside risk to these returns would be the ability of Government to implement growth-enhancing reforms.

It has been a difficult period of late for equity investors. Returns have been well below the long-term experience. The primary drivers of these sub-par returns have been expensive valuations and poor local economic growth. The recent downturn in the equity market has refreshed valuations somewhat and we believe South Africa is on an upward trajectory, given the political developments in 2018. As such, we believe the next five years should result in better returns for equity investors, with stock and industry selection key to the outcome.
At MacroSolutions, we have long considered this once-tiny sector an important and a distinct asset class in its own right.

**THE STRONG PERFORMANCE OF LISTED PROPERTY**

Listed property is essentially a hybrid of equities and bonds, offering both capital growth and a stable and growing rental income component.

Following difficult conditions in the 1980s and 1990s, property fundamentals started to recover in the early 2000s. For instance, office vacancies peaked at 24%. It improved later as the voids were filled when a buoyant SA consumer boosted shopping centres. This allowed for a growth in dividends, which have more than doubled since 2002. Tepid economic growth and company specific governance concerns have recently put downward pressure on the sector.

**CHART 15: LISTED PROPERTY TURNAROUND**

R1 invested in SA Property Index in real terms (January 1980 – December 2018)

**REAL RETURNS**
- +3.6% a year since 1980

**NOMINAL RETURNS**
- +12.6% a year since 1980
  - +53.2% HIGHEST annual return (1999)
  - -26.3% LOWEST annual return (1998)

**PERIOD OF DEEPLY NEGATIVE RETURNS**
1983 to 1998: -7.8% real returns a year

**A DRAMATIC RECOVERY**
2006 to 2017: 10.1% real returns a year

**SHARP DECLINE**
2018: -28.5% real return

**FIVE-YEAR OUTLOOK**

Over the next five years, we expect property to deliver a 6.5% a year real return. This is based on the current forward yield of the sector (which is well above inflation), a dividend growth rate below inflation, and the possibility of derating (as the pace of distribution growth declines from historical high levels and property portfolios age). However, the attractive yields are tempered by the tough trading conditions and bad capital allocation in the sector.
Bond market returns are particularly sensitive to event and policy risk and can be broken up into distinct periods driven by structural macroeconomic and socio-political forces. Seeing the impact of these forces on returns reinforces why a long-term macro perspective is so critical.

1980s: THE LOST DECADE

While the US bond bull market began in the early 1980s (see GLOBAL BONDS on page 36), SA bonds continued to suffer from a combination of a weakening currency, structurally high inflation and political and economic isolation. The broad strength of the US dollar, along with a weak gold price (SA’s primary export at the time), exacerbated the financial pressures exerted on the economy by international sanctions. The consequences of trade restrictions increased as the strong external reserves position deteriorated and eventually led to a group of foreign creditors refusing to refinance their loans to domestic South African banks. This ultimately ended in the SA government imposing a moratorium on private sector debt. While national debt was unaffected, the rand weakened against foreign currencies, entrenching higher and less stable inflation, and with it higher bond yields and poor real bond returns.

CHART 16: BOND MARKET REACTION TO ECONOMIC AND POLITICAL EVENTS

SA bonds in real terms (December 1924 – December 2018)

The decade-and-a-half that followed the change of government in SA saw many of the aforementioned pressures reverse: the US dollar peaked and was followed by a period of falling US interest rates and easier global financial conditions, while SA’s political and economic transition enabled the domestic bond market to re-sync with falling global bond yields at a time when inflation had begun its almost three decade-long structural decline. At the same time, the strength of domestic institutions’ actions added stability and reduced vulnerabilities in the SA economy, while Government’s tax revenues benefited from a booming global commodity cycle.

**SA bonds benefited from both global and domestic forces:**

- The signing of the Plaza Accord in 1985 paved the way for a period of a weaker US dollar and lower global interest rates.
- A more credible monetary policy was established as the SARB adopted inflation targeting in 2000 and began accumulating more foreign exchange reserves.
- With the aid of a strong economy, National Treasury reduced public debt to below 30% of GDP by 2008.

2010 – CURRENT: POST GLOBAL FINANCIAL CRISIS (GFC)

Over the most recent decade, South Africa has suffered from an extended period of low growth along with a decline in fiscal discipline and weakening institutions. With government debt, including contingencies to state-owned entities (SOEs), at record highs, the risk of falling into a “debt trap” rises disproportionately. While at lower levels of debt, a country (or company) can navigate periods where revenues grow more slowly than their interest burden. When debt levels are high, the margin of error decreases.

At the end of 2018, South Africa’s benchmark 10-year bond yield was 9.2% – this is 2% higher than nominal GDP growth over the past three years.

While there is no magic number at which this dynamic becomes unsustainable, South Africa’s current arithmetic is at a point where we require a combination of a cyclical growth recovery, tighter fiscal policy and at least a partial resolution to burgeoning state-owned enterprise debt. This is particularly necessary as we continue to run an aggregate savings shortfall, leaving Government reliant on accessing global liquidity.

Despite the clear deterioration in domestic fundamentals, South Africa’s bond yields have broadly remained unchanged since the beginning of the decade. The South African 10-year bond yield currently yields 9.2%, having started the decade at 9.1%; while the JSE All Bond Index has returned an average of 8.7% a year over the period, comfortably above both cash (6.5%) and inflation (5.2%). While far from the stellar real returns experienced during the Great Bond Bull Market, these are above the average real return of 1.9% since 1925, and more than respectable in a period defined by low growth and returns across countries and asset classes. This, too, when the currency has almost halved in value against the US dollar.
SA bonds are currently at an inflection point. New political leadership appears to be ushering in an era of improved governance, public sector efficiencies and greater policy clarity. This should underpin fiscal stabilisation, reduce credit ratings risk (and with it risk of capital flight), and eventually sow the seeds for improved business confidence along with investment. However, over the short term, as liquidity is gradually withdrawn from global markets and interest rates rise (normalise), foreign investors will continue to sell their SA bonds. Over a five-year horizon, a benign domestic inflation environment, a more pragmatic ANC leadership and the reduced risk of populism, along with a still credible South African Reserve Bank, leave us comfortable that prudent policy action would rein in any liquidity events.

From starting yields of 9.2%, we expect SA nominal bonds to deliver a real return of 4% over the next five years. Inflation-linked bonds will likely deliver a 3% real return - not far off the average that investors have received since the 1920s.

**YIELDS PROVIDE A CRYSTAL BALL**

While market volatility influences the performance of bonds in the short run, as we expand our horizon we see that yield proves to be the best predictor of nominal returns. Chart 17 shows the relationship between any given level of yield and returns, over different time horizons. As your time horizon lengthens, your starting bond yield is increasingly better at telling you what your returns could be.
In 2018, cash returned 7.3%, which was well ahead of equities and only slightly behind bonds. Indeed, over the past five years, the annualised return from cash was 6.9% – ahead of equities and inflation over that period. Despite low inflation and a very weak domestic economy, the central bank is unlikely to cut interest rates over the next year, given the risk to the currency. The risk is both local (risk of a downgrade) and global (rising US interest rates). This means that cash is likely to deliver an above average real return of 2% a year over the next five years. This is attractive relatively to history, but below what we expect from bonds and equities.

**REAL RETURNS**
- +0.9% a year since 1925

**NOMINAL RETURNS**
- +6.7% a year since 1925
- +21.7% HIGHEST annual return (1985)
- 0% LOWEST annual return (1938)

**VICTIM TO INFLATION AND POLICY**

Today’s holders of cash may be lulled into a false sense of security by the recent good absolute and relative returns from cash. However, the lesson from history is that that inflation is a real threat to cash, eroding its purchasing power over time. Central banks control interest rates and, consequently, cash returns can be negatively affected by central bank policy actions. For instance, over the last decade, global central banks have pegged interest rates at close to zero, resulting in negative real returns for investors. In South Africa, the long-term real return from cash of 0.9% a year masks long periods of negative real returns. Cash delivered a negative real return for 23 years from 1932 and for another 16 years from 1972, highlighting how monetary policy can adversely impact savers. This was reversed by the very high real yields under the Stals/Mboweni regime to crush inflation. More recently, cash has performed well, delivering a positive real return over the past five years and outperforming growth assets like equities and property. However, investors should remember the lesson of time – cash is a long-term loser that often does not keep pace with inflation.

**WHEN CASH IS KING**

The primary benefit of cash is opportunity value – it preserves its nominal value while other asset prices are falling, enabling investors to buy those assets at a cheaper price. Cash has been the best performing asset class for 11 years out of the past 89 years. In 100% of these instances, the JSE was actually down, including the 1932 Great Depression, the 1948-1949 post-WWII bear market and the 1998 emerging market crisis. That said, it is important to remember that cash is not a long-term investment. Over all 10-year time periods, cash has been the worst performer 35% of the time, and never the best performer.

**INTERNATIONAL EXPERIENCE**

Cash has been trash in a global context over the long term. The long-term work from the “Triumph of the Optimists” shows the average real return on cash has been 0.8%\(^1\) a year (to the end of 2017). This is skewed by the high inflation and volatile economic conditions in those countries that “lost” in WWII. However, in every country, except Portugal, equities and bonds beat the return from cash. The term premium\(^2\) for investing in longer-dated bonds was 2%, while the equity risk premium\(^3\) was 4.4%.

The lesson is clear: Cash offers protection against downside risk in growth assets, but is not a viable long-term investment option.

**FIVE-YEAR OUTLOOK**

In 2018, cash returned 7.3%, which was well ahead of equities and only slightly behind bonds. Indeed, over the past five years, the annualised return from cash was 6.9% – ahead of equities and inflation over that period. Despite low inflation and a very weak domestic economy, the central bank is unlikely to cut interest rates over the next year, given the risk to the currency. The risk is both local (risk of a downgrade) and global (rising US interest rates). This means that cash is likely to deliver an above average real return of 2% a year over the next five years. This is attractive relatively to history, but below what we expect from bonds and equities.

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\(^1\) Credit Suisse Global Investment Returns Yearbook 2018.

\(^2\) Term premium – the extra annual return the market demands for buying a bond that matures further in the future.

\(^3\) Equity risk premium – the extra annual return the market demands for investing in more risky equity rather than less risky bonds.
Gold has been part of the global financial system for centuries, having been adopted as a peg for currencies such as the UK pound since 1717. The end of the Bretton Woods system of fixed exchange rates in 1971 saw the move to broadly floating exchange rates.

**GOLD AS AN INVESTMENT**

Gold’s value has been seen as a hedge against inflation and protection against economic turmoil. The investment case cited against gold is that the metal has virtually no fundamental intrinsic value and does not produce cash flows. South African investors, in particular, have a long history of investing in gold, no doubt influenced by the historical importance of gold in the South African economy.

Investors who find the ability to own physical gold appealing have been able to invest in Krugerrand coins since 1967. We added gold to the MacroSolutions Balanced Index at a 2.5% weight, and it has delivered a return of 14% a year since 1967. A large component of this return has been driven by currency weakness as the annual US dollar return has been 6.1% a year. This is clearly shown in Chart 18 where the gold price has gone from R25/oz to R18 398/oz, while in dollars it has gone from US$36/oz to US$1 279/oz.

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**CHART 18: RAND DEPRECIATION AUGMENTS THE US DOLLAR GOLD PRICE**

Nominal gold price/oz in rands and US dollars (1967 – 2018)
**GOLD’S ROLE IN A DIVERSIFIED PORTFOLIO**

Our optimisation work shows that, historically, the price of gold has a very low correlation to the various mainstream asset classes. The tendency for gold to move independently from other markets helps to smooth out the overall volatility of a diversified investment portfolio. From 2004, gold became even easier to access, especially for retirement funds, via the popular NewGold Exchange Traded Fund (ETF). Some R10.3 billion of this ETF had been issued by the end of 2018.

**STRONGER DOLLAR KEEPS LID ON GOLD**

Some reversion from elevated levels towards the long-term trend, together with a recovery in the value of the US dollar, had seen an erosion of the dollar gold price over recent years (see Chart 20). 2018 saw the US dollar strengthening further, placing more pressure on the gold price, but increased volatility in investment markets provided some support later in the year. Weakness in the rand boosted the return for local investors into double digits for the year.

**FIVE-YEAR OUTLOOK**

The price of gold remains fairly elevated in real terms compared with its long-term history. It is accordingly difficult to motivate good returns for this asset class over the next few years off this relatively high base. Having said that, a major reason for holding gold in a portfolio is to diversify risk and the level of uncertainty on, inter alia, the global geopolitical front has clearly increased in recent times. There will almost inevitably be times when holding gold will be beneficial to investment portfolios over the coming years.
THE RAND
A CRITICALLY IMPORTANT DRIVER OF YOUR INVESTMENT RETURNS

The exchange rate has a profound effect on investors, given its impact on inflation and that it is used to translate the returns of global assets into local currency returns. Local companies with offshore businesses also have a significant impact on the JSE’s earnings.

DRIVERS OF THE RAND

The most important fundamental long-term driver of any currency is inflation – and, more specifically, inflation differentials. Structurally higher inflation in one country versus that of its trading partner means that the currency must, over time, weaken to reflect that inflation difference. This difference in inflation rates, or the inflation differential line, is also termed the purchasing power parity (PPP) line. In other words, the exchange rates between two countries are assumed to be equal to the ratio of the currencies’ respective purchasing power. The reasoning is simple: relatively higher inflation drives up prices of locally produced goods, making them less competitive globally. So, unless local inflation is brought under control, the currency must weaken for exporters to remain globally competitive.

Chart 21 plots this inflation difference between SA and the US (or the theoretical exchange rate) versus the actual rand/US dollar exchange rate. The PPP line displays the practical impact on the structural weakening trend of the rand of SA’s consistently higher rate of inflation compared with the US.

The chart also highlights that while the rand follows the broad PPP-line trend over time, it can deviate significantly from it, often for extended periods.

Essentially three things drive these deviations: commodity prices, global capital flows and local issues (often related to local economic and political considerations). It is therefore interesting to note that all the major deviations can be related to any, or a combination, of these three factors.

CHART 21: THE RAND BUFFETED BY A DIVERSITY OF FACTORS
December 1970 – December 2018
THE BOTTOM LINE

The rand has many influencing forces, of which inflation and global conditions remain the dominant ones. While local economic and political considerations are important, too, they typically tend to accentuate or blunt the driving forces coming from abroad.

For investors, the rand remains a key consideration and, while difficult to predict with accuracy (given the diverse influencing forces), rand views remain a key input in any investment decision.

OUTLOOK

The global environment was somewhat less synchronised during 2018 (a strong US economy versus weaker growth in Europe and emerging markets), especially when compared with 2016 and 2017. This environment impacted global capital flows and led to significant US dollar strength – thus impacting emerging market currencies and the rand. Some rotation is expected in the global economy towards a more synchronised cycle again – albeit at somewhat slower overall global growth. This rotation entails a slower US economy and better growth in Europe, China and other emerging economies. This should lead to a weaker US dollar during the course of 2019. Combined with the expected confidence-boosting “Winds of Change” environment in South Africa – which should gain strength in terms of policy improvement after the 2019 elections – the rand could potentially be much more stable over the next year or two. This could even include significant strength over the short term as the above global and local scenarios unfold. However, the PPP discussion above indicates that over the medium to longer term, the rand will continue on a weakening path as SA inflation will remain higher than that of the US.
GLOBAL ASSETS
EXPANDING INVESTMENT OPPORTUNITIES

Given the characteristics of our local market, global assets play two vital roles within a diversified balanced fund: providing exposure to other sources of returns and offering additional protection against volatility.

Fortunately for investors, in 1995 exchange controls were relaxed to initially allow for some exposure (5%) to global assets. Over time, this has increased to 30% (effective February 2018) for retirement funds, with an additional 10% permitted for African investments.

EXPOSURE TO OTHER MARKETS

The South African equity market has developed significantly over time. A mere 30 years ago the equity market was dominated by resources companies and gold miners, in particular. With time, the market has developed, industries have risen and fallen, and companies have come and gone, merged and unbundled. Many local equity names have expanded into other emerging markets or invested in developed markets, such as Europe and Australia. This has meant that their earnings are increasingly impacted by the broader global cycle.

Despite these developments, there remains a fair degree of concentration within our equity market and fairly limited choice in some industries. Global investments provide additional avenues for generating returns, as investors are able to access a larger universe of shares, industries, geographies and currencies.

ENHANCED RISK DIVERSIFICATION

Our bond market is still largely driven by our local inflation rate, which in turn is subject to the global cycle via the rand, oil and food prices. Therefore, in times of heightened risk, local bonds offer little protection and may even exacerbate the anxiety already felt in riskier assets.

Due to the nature of some global assets (for instance, US Treasuries) and the behaviour of the rand, global exposure often acts as a more effective diversifier in times of turmoil.

In the subsequent sections we will unpack the two primary asset classes, namely global equity and global bonds, in more detail.

A BRIEF HISTORY OF THE RELAXATION OF EXCHANGE CONTROLS

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Exchange controls prohibited investments outside our borders</td>
</tr>
<tr>
<td>1996</td>
<td>Asset swap limit increased to 10% AUM</td>
</tr>
<tr>
<td>1998</td>
<td>Asset swap limit increased to 15% AUM</td>
</tr>
<tr>
<td>2000</td>
<td>Investment managers had their limits increased to 25%</td>
</tr>
<tr>
<td>2005</td>
<td>Retirement funds had their offshore limit increased to 25% (plus an extra 5% in Africa)</td>
</tr>
<tr>
<td>2008</td>
<td>Retirement funds had their offshore limit increased to 30% (plus an extra 10% in Africa)</td>
</tr>
<tr>
<td>2010</td>
<td>Collective investment schemes allowed 20% offshore</td>
</tr>
<tr>
<td>2018</td>
<td>Retirement funds allowed to increase their global investments to 20%</td>
</tr>
</tbody>
</table>
GLOBAL EQUITY
ALTERNATIVE SOURCE OF GROWTH TO MORE RISKY SA EQUITY

Over the past 94 years, global equities have delivered inflation-adjusted returns of 5.6% in US dollar terms and 7.6% in rand terms.

The SA equity market, on the other hand, has delivered a real return of 8.1% over this period – outperforming global equity, as you would expect, due to higher risk factors. This is confirmed by independent studies showing that the SA equity market has been one of the best investments since 1900.

As with SA EQUITY (page 20), time is your friend when investing in global equity. When compared to the SA market (Chart 14), global equity has almost identical ranges between high and low across all periods. This clearly proves that time in the market as a means of reducing risk is a global phenomenon. Note that this graph is in real terms. Nominal returns would look much better, as inflation provides a cushion to returns.
The market drawdowns in Chart 24 show how important it is to have a global perspective when managing assets and, particularly, understanding risk. From the high correlation of global equity markets during and immediately following the 2008 Global Financial Crisis, country level correlations are now breaking down.

Investing globally remains a powerful source of diversification and risk reduction. An example of this is the very strong return from this asset class in 1985, as that was the year South Africa defaulted on its debt obligations.

Comparing global equity to local equity in Chart 24, you can see some major differences in drawdowns:
- The 1929 Wall Street Crash and the resultant Great Depression affected global markets more than the SA market.
- WWII was good for export industries and SA was generally more insulated from the conflict.
- In the aftermath that saw a building boom and recovery in Germany and Japan, SA entered a major bear market.

FIVE-YEAR OUTLOOK

Globally, monetary policy has gotten increasingly tighter, led by the US Federal Reserve raising rates. This, together with the ensuing strong US dollar, has meant that many countries have endured the impact of either being forced to tighten monetary policy themselves or having the tighter financial conditions impact their equity markets and currencies. This put a damper on hopes for better growth outside the US economy. While US earnings have benefited from easing fiscal policy, belligerent trade policy initiatives and the higher cost of capital have meant, globally, future earnings are now threatened and being revised down. While US valuations have come off very high levels, the market is not quite cheap yet.

Outside the US, valuations are more reasonable and therefore long-term returns are likely to be better in the future. However, it is possible that markets may deteriorate further before they get better. The US Federal Reserve has recently paused in its hiking cycle as uncertainty has increased around economic growth. However, volatility in markets may continue. Until interest rates are cut (which would only come after more bad news for markets), our conviction levels remain low.
GLOBAL BONDS
LOW CORRELATION TO EQUITIES
ENHANCES GLOBAL DIVERSIFICATION

Given their diversification benefits relative to equity risk, developed market global government bonds are an important asset class. Their correlation to SA equities in calendar year returns (in rands) is effectively 0%, while their correlation to global equities (in US dollars) is 28%.

RETURNS IN US DOLLARS
(and using US inflation)

REAL RETURNS
+1.4% a year since 1930

NOMINAL RETURNS
+4.5% a year since 1930

+35.9% HIGHEST
annual return (1933)

-24.9% LOWEST
annual return (1945)

RETURNS IN RANDS
(and using SA inflation)

REAL RETURNS
+3.4% a year since 1930

NOMINAL RETURNS
+9.7% a year since 1930

+109.5% HIGHEST
annual return (1961)

-24.9% LOWEST
annual return (1945)

CURRENCY ENHANCES
RETURNS MORE THAN INFLATION

In line with economic theory, most of the difference in US dollar and SA rand returns can be explained by the real depreciation of the currency over and above the inflation differential.

As with SA bonds, the returns on global bonds have gone through very long cycles. The secular pattern of the global bond market can easily be seen by looking at Chart 25, which shows the benchmark UK and US 10-year government bond yields since 1703 and 1871, respectively. These cycles tend to reflect extended periods of high (often war-time) and low inflation, and with it respective monetary and fiscal regimes.

At the time of the peak in the US 10-year bond yield, the Federal Funds rate came close to 20%, as Chairman Paul Volcker sought to end the decade-long stagflation (high inflation and low growth/high unemployment) that the US had experienced following the post-WWII boom of the 1950s and 1960s. This arguably sowed the seeds for the phenomenal returns delivered by global bonds over the next 30 years, as inflation dropped and interest rates followed – allowing global bonds to benefit from cheap starting valuations as well as good capital returns. Similarly, arguments have been made that the actions of the respective US Federal Reserve Chairs after Volker – Alan Greenspan, Ben Bernanke and Janet Yellen – laid the ground for the next 30-year bond bear market.

LOW YIELDS = “RETURN-LESS” RISK

While developed market bond yields have drifted higher from the lows of 2016, the current UK 10-year government bond yield ended the year at 1.27% and remains in the 99th lowest percentile over the 300+ year history. One feature of bonds as an asset class is that, for a given bond, the nature of returns changes materially depending on the starting level of yields. This can be illustrated by looking at what percentage of total bond return comes from capital vs income over rolling year periods. At extremely low yields, as we stand currently, we can see that upwards of 85% of total returns are likely to come from capital return, or yield curve changes! Combined with a directional bias towards high rather than lower yields (and thus lower prices), it is clear how global bonds at current yields present a good example of “return-less” risk.

CHART 25: SECULAR CYCLES OF DEVELOPED MARKET BOND YIELDS
The Barclays Global Aggregate Bond Index, our benchmark for global bonds as an asset class, comprises more than just government bonds. The Index increasingly includes other significant asset classes, such as global corporate bonds, high-yield debt and emerging market debt. Over the past 10 years, global government bonds have returned 4.9% a year in US dollar terms. Comparatively, global corporate bonds have only offered a small premium to this for, at times, significantly more risk. The greatest beneficiaries of the low interest rate environment have been high-yield debt and emerging market local currency debt, as low developed market sovereign rates have pushed investors further out on the risk spectrum in search of yield. Over the past 10 years, high-yield debt has returned in excess of 11% a year and emerging market local currency debt has returned 3.4% a year. Although the latter might seem meagre, it hides what have been distinct periods of material out- and underperformance – indicative of the volatility and currency risk that come with these instruments.

The Barclays Global Aggregate Bond Index, our benchmark for global bonds as an asset class, comprises more than just government bonds. The Index increasingly includes other significant asset classes, such as global corporate bonds, high-yield debt and emerging market debt. Over the past 10 years, global government bonds have returned 4.9% a year in US dollar terms. Comparatively, global corporate bonds have only offered a small premium to this for, at times, significantly more risk. The greatest beneficiaries of the low interest rate environment have been high-yield debt and emerging market local currency debt, as low developed market sovereign rates have pushed investors further out on the risk spectrum in search of yield. Over the past 10 years, high-yield debt has returned in excess of 11% a year and emerging market local currency debt has returned 3.4% a year. Although the latter might seem meagre, it hides what have been distinct periods of material out- and underperformance – indicative of the volatility and currency risk that come with these instruments.

FIVE-YEAR OUTLOOK

US government bonds took centre stage in 2018. After a decade of repressionary interest rates – the bar to the US Federal Reserve raising rates and unwinding extraordinary policy measures has declined. With the US economy now running ahead of full employment for five quarters, and wage growth moving toward levels that have historically been a precursor to rising personal consumption expenditure (PCE) inflation, US 10-year yields ended 2018 at 2.7%.

While this is higher than a year ago, yields remain below a simple measure of potential GDP growth, and well below current GDP. Broadening signs of inflation across developed markets outside of the US, and less attractive valuations, keep the risk to global bonds tilted toward substandard returns. This does not mean yields are likely to return to levels seen in the inflationary 1970s and 1980s – by most measures a historical aberration – but rather that prices and yields need to adjust to reflect the shifting economic and policy environment. We have thus maintained our longer-term expectations for global bonds to a -0.5% real return over the next five years (in US dollars).
In developing our view for the different asset classes, there are two important themes that we see unfolding in the years ahead: a deterioration in the United States and an improvement in South Africa. This is a dramatic change in momentum.

While the US economy is still booming, US equities are expensive and we expect bad news – either in the form of interest rates going up or economic growth disappointing. Whichever happens, it is bad news for investors and we expect US equities to underperform, while the rest of the world offers cheaper equity markets.

The outlook for South Africa, on the other hand, is a bit more positive. In 2018, markets were disappointed when “Ramaphoria” didn’t materialise, but in reality the long and hard grind of improving conditions is taking place. Once confidence returns, businesses will start spending again and this will drive growth.

The big risk for our markets is South Africa’s rising debt burden that is pushing us to the very edge of being downgraded to junk status. If we make the right decisions, we will avoid a downgrade. This will lead to improved confidence, growth will improve, the currency will strengthen and interest rates will fall. However, at this moment, there is no room for error. The good news in all this is that if we can navigate these issues, there is potential for a positive surprise. If, on the other hand, we fail, there will be a short-term sell-off, but some support will still come from valuations being cheap enough. Cheaper valuations and depressed historic returns mean higher future returns and we have upgraded our expected returns across all asset classes.

---

### FIVE-YEAR ASSET CLASS OUTLOOK AS AT 31 DECEMBER 2018 (real returns)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>REAL RETURN (P.A.)</th>
<th>HISTORIC REAL RETURNS SINCE 1929 (P.A.)</th>
<th>VIEW</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SA</strong></td>
<td></td>
<td></td>
<td>+</td>
<td>SA starting to improve</td>
</tr>
<tr>
<td>Equity</td>
<td>5.5%</td>
<td>7.6%</td>
<td>Neutral +</td>
<td>Getting cheaper, more opportunities</td>
</tr>
<tr>
<td>Property</td>
<td>6.5%</td>
<td>4.7%**</td>
<td>Neutral</td>
<td>Value trap</td>
</tr>
<tr>
<td>Bonds</td>
<td>4.0%</td>
<td>1.7%</td>
<td>+</td>
<td>Good real return</td>
</tr>
<tr>
<td>Cash</td>
<td>2.0%</td>
<td>0.8%</td>
<td>Neutral +</td>
<td>Reasonable risk-adjusted return</td>
</tr>
<tr>
<td><strong>Global</strong></td>
<td></td>
<td></td>
<td>–</td>
<td>Still maintain some diversification</td>
</tr>
<tr>
<td>Equity</td>
<td>5.0%</td>
<td>5.3%</td>
<td>Neutral –</td>
<td>Risk increasing as liquidity shrinks</td>
</tr>
<tr>
<td>Bonds</td>
<td>-0.5%</td>
<td>1.4%</td>
<td>–</td>
<td>Global bonds expensive, US better</td>
</tr>
<tr>
<td>Cash</td>
<td>-0.5%</td>
<td>0.8%</td>
<td>–</td>
<td>Rate normalisation on the go</td>
</tr>
<tr>
<td>MacroSolutions Balanced Index</td>
<td>4.5%</td>
<td>5.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Old Mutual Investment Group | NB: These are long-term, real returns expected over the next five years, as at 31 December 2018

* The international return expectations above are in US dollar terms; any rand depreciation will add to returns in rands.

** Since 1980
### ASSET CLASS RETURNS (LONG-TERM OVERVIEW)

#### REAL RETURNS IN RANDS

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Equity</td>
<td>-12.5%</td>
<td>15.5%</td>
<td>-3.8%</td>
<td>-0.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>SA Property</td>
<td>-28.5%</td>
<td>11.9%</td>
<td>3.3%</td>
<td>2.6%</td>
<td>20.2%</td>
</tr>
<tr>
<td>SA Bonds</td>
<td>3.1%</td>
<td>5.2%</td>
<td>8.2%</td>
<td>-8.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td>SA Cash</td>
<td>2.7%</td>
<td>2.7%</td>
<td>0.6%</td>
<td>1.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Global Equity</td>
<td>21%</td>
<td>6.4%</td>
<td>-10.6%</td>
<td>26.8%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>10.5%</td>
<td>-7.6%</td>
<td>-16.0%</td>
<td>23.9%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Gold</td>
<td>10.2%</td>
<td>-2.6%</td>
<td>-10.6%</td>
<td>11.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>MacroSolutions Balanced Index</td>
<td>-4.1%</td>
<td>9.1%</td>
<td>-3.2%</td>
<td>5.1%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

#### NOMINAL RETURNS IN RANDS

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Equity</td>
<td>-8.5%</td>
<td>21.0%</td>
<td>2.6%</td>
<td>5.1%</td>
<td>10.9%</td>
</tr>
<tr>
<td>SA Property</td>
<td>-25.3%</td>
<td>17.2%</td>
<td>10.2%</td>
<td>8.0%</td>
<td>26.6%</td>
</tr>
<tr>
<td>SA Bonds</td>
<td>7.7%</td>
<td>10.2%</td>
<td>15.4%</td>
<td>-3.9%</td>
<td>10.1%</td>
</tr>
<tr>
<td>SA Cash</td>
<td>7.3%</td>
<td>7.5%</td>
<td>7.4%</td>
<td>6.5%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Global Equity</td>
<td>6.7%</td>
<td>11.4%</td>
<td>-4.6%</td>
<td>33.5%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>15.4%</td>
<td>-3.3%</td>
<td>-10.4%</td>
<td>30.4%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Gold</td>
<td>15.1%</td>
<td>2.0%</td>
<td>-4.6%</td>
<td>17.7%</td>
<td>10.6%</td>
</tr>
<tr>
<td>MacroSolutions Balanced Index</td>
<td>0.2%</td>
<td>14.2%</td>
<td>3.3%</td>
<td>10.7%</td>
<td>11.5%</td>
</tr>
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</table>

#### YEARLY RETURNS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last 5 years</td>
<td>0.4%</td>
<td>6.9%</td>
<td>9.3%</td>
<td>6.4%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Last 10 years</td>
<td>0.4%</td>
<td>6.4%</td>
<td>12.9%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Last 20 years</td>
<td>2.3%</td>
<td>2.2%</td>
<td>5.5%</td>
<td>2.0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Last 50 years</td>
<td>1.5%</td>
<td>1.3%</td>
<td>2.8%</td>
<td>2.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Last 80 years</td>
<td>6.4%</td>
<td>9.4%</td>
<td>3.9%</td>
<td>6.3%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

#### LONG-TERM RETURNS (P.A.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last 5 years</td>
<td>11.3%</td>
<td>5.9%</td>
<td>5.0%</td>
<td>12.5%</td>
<td>9.3%</td>
<td>0.3%</td>
<td>7.9%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Last 10 years</td>
<td>16.7%</td>
<td>-1.9%</td>
<td>-3.3%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Last 20 years</td>
<td>5.5%</td>
<td>8.5%</td>
<td>-0.8%</td>
<td>-3.9%</td>
<td>0.3%</td>
<td>-1.0%</td>
<td>-1.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Last 50 years</td>
<td>3.3%</td>
<td>6.0%</td>
<td>1.9%</td>
<td>-2.1%</td>
<td>1.8%</td>
<td>-0.7%</td>
<td>-4.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Last 80 years</td>
<td>-0.1%</td>
<td>9.7%</td>
<td>11.8%</td>
<td>-3.9%</td>
<td>7.8%</td>
<td>-0.7%</td>
<td>-2.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Last 200 years</td>
<td>9.8%</td>
<td>-0.8%</td>
<td>-5.1%</td>
<td>19.2%</td>
<td>4.9%</td>
<td>-3.0%</td>
<td>1.3%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

#### RETURNS BY DECADE (P.A.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last 5 years</td>
<td>8.0%</td>
<td>7.5%</td>
<td>3.4%</td>
<td>8.1%</td>
<td>6.6%</td>
<td>0.0%</td>
<td>4.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Last 10 years</td>
<td>23.5%</td>
<td>6.5%</td>
<td>10.6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Last 20 years</td>
<td>11.7%</td>
<td>17.8%</td>
<td>13.4%</td>
<td>6.4%</td>
<td>3.3%</td>
<td>2.2%</td>
<td>3.2%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Last 50 years</td>
<td>9.4%</td>
<td>15.1%</td>
<td>16.4%</td>
<td>8.4%</td>
<td>4.7%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Last 80 years</td>
<td>14.2%</td>
<td>23.5%</td>
<td>30.0%</td>
<td>10.3%</td>
<td>14.7%</td>
<td>16.8%</td>
<td>10.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Last 200 years</td>
<td>16.2%</td>
<td>7.7%</td>
<td>8.5%</td>
<td>31.9%</td>
<td>8.0%</td>
<td>0.2%</td>
<td>6.0%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>
MACROSOLUTIONS BALANCED INDEX (REAL RETURNS)

START OF YEAR

HOW TO USE:
The annualised real return on the MacroSolutions Balanced Index from start of 1975 to end of 1989 was 6.6%.
The annualised real return on the MacroSolutions Balanced Index from start of 1988 to end of 2000 was 6.9%.
**Sources:** Except where an alternative source is referenced on a specific graph, all graphs have been produced by MacroSolutions, acknowledging the following sources of external data: FactSet, I-Net Bridge, Colin Firer, Bloomberg, BNP Paribas Cadiz Securities, Bank of America Merrill Lynch, Credit Suisse, JP Morgan, Citigroup, Barclays and Deutsche Securities.

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