University of Cape Town Retirement Fund
Statement of Investment Principles

Significant changes vs. the previous version are shown in red below.

Effective date: 1 Sept. 2005 as revised 2/2007, 11/2008, 4/2010, 10/2010, 07/2011, 07/2012, 04/2013, 07/2013 and 11/2015. Asset modelling annexure revised 10/2011.

1. Preamble

1.1. The University of Cape Town Retirement Fund is a *defined contribution arrangement* which exists ***primarily*** to provide members with reasonable and competitive retirement benefits.

The Fund/Employer also provides death and disability benefits via insurance arrangements.

1.2. The Employer contribution to the Fund is 22.5% of pensionable salary. After meeting the cost of insured benefits, Fund administration and other costs, a minimum of 16% is allocated to retirement savings.

The balance of the employer contribution of 6.5% that is not required to meet the cost of insured benefits and Fund costs is allocated by the Trustees on the advice of the actuary by way of an additional retirement savings bonus.

The Trustees seek to maximise the amount of these additional retirement savings (subject to prudent management of the Fund's insured benefits and administration arrangements), and in recent years the additional retirement savings have been in the region of 3% of members' pensionable salaries.

The additional retirement savings bonus is subject to adjustment (up or down) in the event of changes in the cost of insured benefits and other Fund costs.

1.3. At retirement the member may elect to apply the benefit received to secure a pension from an Insurer in their own name or a living annuity from the Fund (in which case the member takes on the investment and mortality risk/reward). Alternatively, the member may elect to receive part or the full amount of the retirement benefit in cash.

1.4. A glossary of terms is included at the end of the Statement – terms that are explained in the glossary are *underlined and in italics* when they first appear in the text.

2. Purpose of the Fund

2.1. The Fund's purpose is to provide long serving members with reasonable retirement benefits.

2.2. Based on the minimum retirement saving contribution of 16%, a normal retirement age of 65 and using the Trustee default life-stage investment model, a member with an average career progression and 35 years of service

should ideally retire with a pension of 75% to 85% of his/her pensionable salary at retirement. This is a target and is not guaranteed.

2.3. If investment conditions so allow, the Fund would like to provide benefits in excess of the above target.

3. Investment philosophy

3.1. The Fund's primary investment philosophy is to achieve superior returns over long measurement periods of 7 years and longer.

3.2. The Trustees believe that it is possible to achieve superior returns (i.e. higher than market returns for the same or less amount of risk) over long measurement periods because:

- Investment markets are inefficient, particularly over short measurement periods (see the "theory of irrational markets" below), thus creating the opportunity for disciplined investors to earn superior returns; and
- The Fund will consider alternatives that other investors will generally ignore.

3.3. The **Theory of Irrational Markets** posits that:

- Over long measurement periods (typically 7 years and longer) investment markets are efficient and so the "price" and "value" of a particular asset will converge.
- However, over shorter time frames investment markets may be materially inefficient, resulting in big and non-random disparities between the "price" and "value" of a particular asset. This "price" and "value" gap arises *inter alia* because:

  (a) Most investment managers adopt too short an investment horizon, which results in decision-making based largely on forecasting (which is notoriously difficult to get right consistently)

  (b) Many investment managers are over-confident of their abilities and will use short term results (which may be random or fashion driven) to predict long term trends

  (c) Many investment managers get caught up in the sentiment of the market and thus do not always make rational decisions

  (d) Most investment managers are subject to agent/principal conflicts. Often an investment manager will invest close to the benchmark as this minimizes the risk of under-performing the *peer group* (and ensures job preservation).

  (e) The assets under management of some investment managers are so large that they are unable to exploit the full opportunity set, thus leaving opportunities for their smaller competitors.

3.4. On the basis that markets are indeed inefficient, the proper investment

strategy for the Fund would be to appoint investment managers who focus on buying assets that they assess to be trading at a significant discount to intrinsic value (i.e. they invest in companies rather than in the stock market).

Typically such a manager requires the share to be trading at about 20% below its assessed intrinsic value before they will buy the share (the so-called "margin of safety") to allow for any errors they may make in assessing intrinsic value.

The assumption, as per the above, is that over the long term the price and the assessed intrinsic value will tend to converge and this discount will be unlocked.

3.5. Empirical evidence suggests that the largest and most biased "price / value" differentials arise when a particular theme or concept becomes fashionable (e.g. the internet "bubble" of the late 1990s). The result is often that the "in vogue" sector becomes very expensive, whilst leaving the "out of favour" sectors cheap.

In such circumstances intrinsic value managers will be contrarian and may end up holding a portfolio that is rather different to that of the benchmark.

3.6. The Fund accepts that the "intrinsic value" investment approach will under-perform the *benchmark* and *peer group* significantly from time to time and that this under-performance may be for a sustained period.

Such under-performance is more likely to arise when market sentiment dominates decision-making (i.e. when investors are overly optimistic or overly pessimistic).

3.7. The Trustees further understand that at the time of severe under-performance the conventional wisdom will be that "the market has changed for ever" and there will be significant pressure to abandon the intrinsic value investment approach (as it will then be regarded as "old fashioned").

The key danger is that the Fund abandons this philosophy just at the time when the "fashionable" investment ideas start deflating (just as many Trustee Boards did with Allan Gray in 1998).

3.8. The structure of retirement fund trustee boards in South Africa increases the risk of the Fund abandoning the intrinsic value approach at possibly the wrong time.

Trustee Boards are subject to periodic re-election and the trustees serve as the agent of the membership. In the event of significant under-performance (which is almost inevitable with the long term intrinsic value approach) it is likely that the existing Trustee Board will be replaced on the basis that the investment performance has been poor under their stewardship.

One of the first actions of the newly elected trustee board may be to replace the existing investment managers. The Trustees accept this possible outcome, but have still decided to adopt a long-term intrinsic value approach to investing because of its more likely superior returns.

3.9. The Trustees accept and understand that they need courage and patience to

invest according to the long term intrinsic value approach.

4. Investment choice programme

4.1. The Fund offers member investment choice, with a life stage model (see paragraph 5) being available for those members that don't wish to exercise such a choice.

4.2. The table below sets out the "top line" features of the four portfolios offered:

Portfolio	Investment objective	Investment horizon	Broad strategy
Balanced Portfolio (Portfolio C)	5% p.a. (net of costs and taxes) above CPI over rolling 7 years	7 years +	Assets such as equities offer the best inflation protection and real return prospects *over the long term*, and investors with a long time horizon can expect to be compensated via higher real returns for the volatility risk associated with such investments. Markets are inefficient over short measurement periods, but tend towards efficiency over the long term, thus providing the long term active investor the opportunity to earn superior returns.
Smoothed Bonus Fund (Portfolio B)	3% p.a. (net of costs and taxes) above CPI over rolling 5 years, subject to the proviso of an Insurer capital guarantee of all contributions paid into this portfolio (including lump sums)	3- 5 years	To meet the dual goal of providing a reasonable return with capital preservation over short measurement periods, an Insurer product will be used. The combination of an underlying portfolio substantially invested in equities but with investment smoothing and insurer guarantees represents a cost-effective trade-off between lower returns expectations and lower volatility that is suitable for investors with a *short-to-medium term* time horizon.
Income Fund (Portfolio A)	1% p.a. (net of costs and taxes) above CPI over any 12-month period, with minimal risk of capital loss over the same period	0 – 2 years	The portfolio will be invested in money market instruments (with duration less than 3 years) with high credit quality, as being the best way to deliver a positive returns with minimal risk of capital loss *for those investors with a short time horizon and/or who have a very low appetite for volatility and capital risk.*
Shari'ah Fund (Portfolio D) –	4% p.a. (net of costs and taxes) above CPI	5 years +	The portfolio will be invested in a balanced, Shari'ah compliant

introduced w.e.f. 1 April 2010	over rolling 5 years – currently set midway between the objectives for Portfolios B and C, although subject to further revision.		product and will aim to meet the dual goal of providing a reasonable return with lower risk. The underlying portfolio will be weighted slightly towards Shari'ah compliant equities relative to Islamic bonds and similar instruments, and aims to be suitable for investors with a *short or long* time horizon.

4.3. The member has the flexibility to invest his/her retirement savings in any combination of these portfolios. Switches out of the Smoothed Bonus Fund are subject to the insurer conditions, which may include switching penalties in some circumstances.

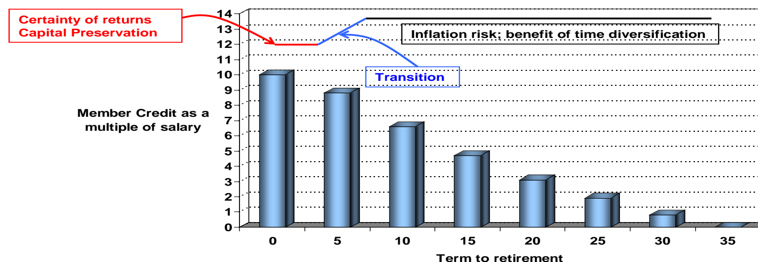
4.4. The member has the choice to change his/her investment strategy twice a year on 31 March and 30 September.

5. Life Stage model

5.1. The reason why the Fund has introduced a Life Stage model is that the Trustees recognize that the majority of members are uncertain in relation to investments.

5.2. The Life Stage model is designed around the assumed liability profile of a defined contribution (DC) member, which is shown in the diagram below:

Nature and term of DC liability



Thus when a member is a long way from retirement, the key risk is inflation. At this time the member has relatively little money in the Fund and the impact of negative returns, in Rand terms, is less.

As the member gets closer to retirement (deemed to be the point at which the member will "consume" his or her retirement savings in the Fund), capital preservation becomes more important. At this time the member has the most money in the Fund and the impact of negative returns, in Rand terms, is largest.

5.3. Given the above liability profile and the fact that the Fund has information

about the member's period to normal retirement date, the Life Stage model simply varies the member's investment strategy according to the period to retirement. The life stage model assumes that members retire at 31 December of the year in which the member turns age 65.

5.4. The table sets out the default life stage model based on retirement age of 65, as revised with effect from 1 April 2015:

AGE*	Strategy for the balance already accumulated in the Fund	Future contributions strategy
59 years or less	Balanced Fund	100% Balanced Fund
60 years	The member's accumulated balance will be restructured as shown in the right hand column	80% Balanced Fund 10% Smoothed Bonus Fund** 10% Income Fund
61 years	The member's accumulated balance will be restructured as shown in the right hand column	60% Balanced Fund 20% Smoothed Bonus Fund** 20% Income Fund
62years	The member's accumulated balance will be restructured as shown in the right hand column	40% Balanced Fund 30% Smoothed Bonus Fund** 30% Income Fund
63 years	The member's accumulated balance will be restructured as shown in the right hand column	20% Balanced Fund 40% Smoothed Bonus Fund** 40% Income Fund
64 years	The member's accumulated balance will be restructured as shown in the right hand column	50% Smoothed Bonus Fund** 50% Income Fund

* The transitions indicated in the above table occur on the 1 April of the calendar year in which the member turns the relevant age. In the following year, contributions will also be invested in accordance with the right hand column of the table.

** Investments made into the Smoothed Bonus Fund under the Life Stage Model are made on a different basis to those made by members at their own choice. Life Stage investments are made in terms of a "fund level" insurance policy which does not record individual members' investments. Own choice investments are made in terms of a "member level" insurance policy which does record individual members' investments.

5.5. The Life Stage model makes three important assumptions, namely the member:

- Invests for his/her ultimate retirement (rather than for a shorter period);
- Wishes to fund for a lump sum at retirement, or will purchase a life annuity that will provide future pension increases at retirement;[1]

[1] The transition to money market and smoothed-bonus investments by the time of retirement is consistent with the assumption that the member will either take a cash lump sum or will use his/her retirement capital to purchase a with-profits annuity, the pricing of which is not sensitive to changing bond (or equity) prices. Members who plan to invest their retirement capital in a living annuity (either from the Fund or from and outside provider) may prefer to

- Has "normal risk aversion", meaning that he/she varies his/her risk appetite around his/her investment time horizon.

5.6. The member's retirement savings will be invested according to the Life Stage model unless he/she makes a positive election to invest his/her money otherwise.

6. Balanced Portfolio (Portfolio C)

6.1. Portfolio overview

The Balanced Portfolio is a market related portfolio that aims to provide a reasonable return relative to inflation over the long term (measurement periods of at least 7 years).

The portfolio can be expected to deliver a negative return over short measurement periods (e.g. 1 year) from time to time.

6.2. Investment objective

The Balanced Portfolio aims to deliver 5% p.a. (net of investment fees and expenses) out-performance of "*headline inflation*" (or CPI) over any rolling 7-year period

6.3. Risk constraints

Based on the long-term capital market assumptions and level of investment manager skill (detailed in Annexure I), the Balanced Portfolio targets a risk constraint that the probability of the return being less than inflation over any rolling 7-year period is less than 10%.

6.4. Asset allocation

The *strategic asset allocation* of the portfolio is shown in the chart below:

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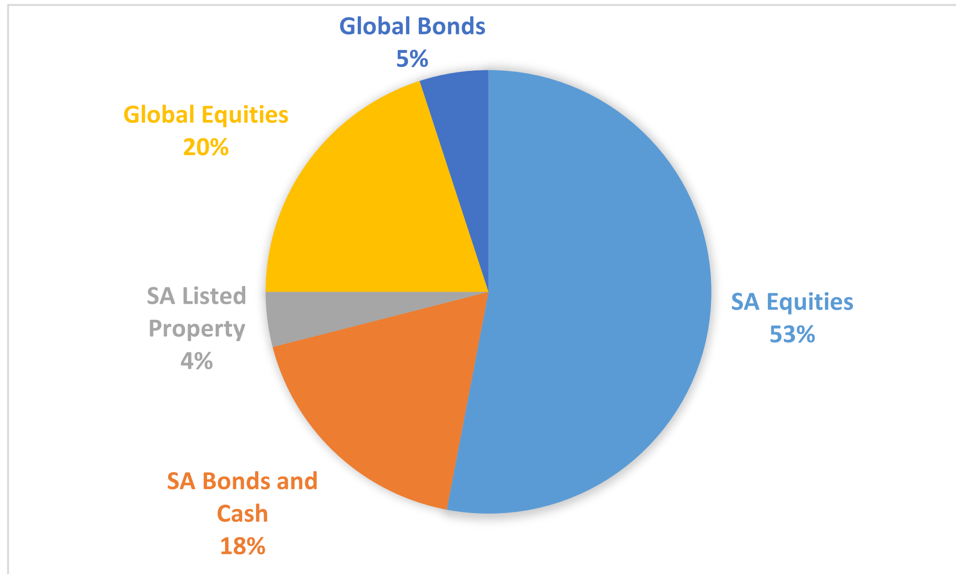
retain a degree of direct exposure to equities right up to retirement - the view of the Fund Trustees is that this should be the individual choice of the members, and so this has not been factored in to the Life Stage model.



<u>Variation to the asset allocation:</u>

- In general the Balanced Portfolio will re-balance back to its strategic asset allocation using pre-defined rules. In this regard the following parameters apply:

Asset class	**Strategic allocation**	**Permissible range**
SA Equity	53%	50% - 56%
SA Bonds and Cash	18%	16% - 20%
SA Listed Property	4%	3% - 6%
Foreign investments	25%	21% - 25%*
Int'l Equity	20%	18% - 22%
Int'l Bonds	5%	4% - 6%

*Since 25% is the maximum foreign exposure allowed in terms of Regulation 28 and any breaches of this limit (even resulting from market or currency fluctuations) have to be reported to the Registrar of Pension Funds, it is desirable to set 25% as the ceiling for foreign exposure. However, rebalancing to this ceiling will only be carried out when required by Regulation 28 (i.e. 12 months after the first breach of the ceiling, if the breach persists for that period), Rebalancing to the underlying components of the foreign exposure (equities and bonds) will be carried out if the exposure to these components moves outside the ranges indicated.

- By arrangement with the administrator, cashflows into and out of Portfolio C will be directed to / withdrawn from the SA Bonds portfolio (where liquidity is greatest). The investment consultant will check on a monthly basis whether any of the asset-class limits has been exceeded, and if so will prepare a switch instruction to be signed by the Fund to rebalance the portfolio(s) concerned. The consultant will apply judgment in this regard - typically, since rebalancing will require

disinvesting from one portfolio and investing in another, the rebalancing will not be to the midpoint of the strategic range but will be to a point approximately half way between the midpoint and the limit that has been exceeded, as this is generally regarded as a more efficient way to rebalance.

- At market extremes (e.g. when the market is judged to be either very expensive or cheap by historical measures) the Portfolio may adopt an asset allocation outside the strategic range. This will be by specific Trustee decision on an exceptional basis.

6.5. Investment approach

- The portfolio will use specialist investment managers for each asset class.
- Investment managers that adopt an *intrinsic value* investment approach will manage the SA and global equity portfolios.
- In awarding mandates to SA bond managers, the Trustees will allow the managers significant freedom to invest in cash and short-dated instruments (i.e. to take a very short duration position), while continuing to measure performance relative to the bond market as represented by the ALL Bond Index. This allows the managers significant scope to express a short- or longer-term view that investors are not being compensated for taking on interest rate risk - the Trustees regard this as consistent with an overall *intrinsic value* investment philosophy.
- The intention of the Trustees is to diversify global equity exposure with an allocation to global fixed-income assets.
- Although the Trustees recognise the possibility that a skilled tactical asset allocation (TAA) manager might be able to add value by varying the asset allocation (relative to the strategic allocation) on a short- to medium-term basis, the Trustees consider that the cost and complexity of introducing a TAA manager would not justify such a step, especially when the difficulty of identifying skill among TAA managers is taken into account. Similarly the Trustees consider that the strategy of using balanced (multi-class) investment mandates (where a single manager manages all asset classes and performs a TAA function) is not justified, considering both the difficulty of identifying skill in TAA and the trade-off involved in using "generalist" managers covering all asset classes, rather than specialist managers.

6.6. Probability of achieving investment objective

Based on the assumed level of long-term capital market investment manager skill (see Annexure I), there is about a 60% to 70% probability of the portfolio achieving the stated investment objective consistent with the risk constraints.

7. Smoothed Bonus Fund (Portfolio B)

7.1. Portfolio overview

The Smoothed Bonus Fund is primarily invested in an Insurer "smoothed bonus" product. This portfolio aims to provide a moderate return relative to inflation over medium terms (3 to 5 years), whilst at the same time providing a guarantee[2] of contributions invested (including lump sum transfers).

The key feature of the Insurer "smoothed bonus" product is that it deals with volatility in investment returns by pooling and smoothing the return. In effect, members that are present when investment returns are very good cross-subsidize the returns of members that are present in times of poor returns.

The Insurer smoothes the return by declaring bonuses – part of the bonus is "guaranteed" (the so-called vesting bonus) and part of the bonus is non-vesting, which means that the Insurer can remove this bonus at its sole discretion.

7.2. Investment objective

The Smoothed Bonus Fund aims to deliver 3% p.a. (net of tax and fees) out-performance of "headline inflation" over any rolling 5 year period.

7.3. Risk constraints

The Insurer provides a capital guarantee of contributions invested (including lump sum transfers) plus any vested bonuses declared.

7.4. Asset allocation

The Smoothed Bonus Fund will be invested primarily in an Insurer "smoothed bonus" product.

8. Income Fund (Portfolio A)

8.1. Portfolio overview

The Income Fund aims to provide a return that is 0.5% per annum above that available from short-term interest rate instruments. The portfolio will limit its investments into money market and bond instruments of high credit quality of duration less than 3 years (but with not more than 10% of the Income Fund longer than 12 months), so as to limit the risk of capital loss.

8.2. Investment objective

The aim of the Income Fund portfolio is to deliver investment performance that exceeds "headline inflation" by 1% p.a. after allowing for manager fees.

8.3. Risk constraints

The Income Fund may hold RSA bonds and money market instruments with a maximum term of 3 years.

[2] The concept of an absolute guarantee is illusionary – the value of a guarantee is only as good as the ability of the Insurer to honour that promise if ever it is called upon.

~~Not more than one-third of the Income Fund may be in instruments of longer than 12 months~~. The modified duration of the Income Fund will not deviate from that of the benchmark by more than 2 years.

Exposure to any single Bank is limited to 25%.

Up to 15% may be invested offshore provided that foreign currency exposure is hedged into Rands at all times.

There is expected to be less than a 2.5% chance of a capital loss (negative return) over a measurement period of 12 months - possible reasons for a capital loss include:

- Failure of one of the institutions where money is invested; and / or
- A significant increase in short-term interest rates, resulting in mark-to-market capital losses on instruments that have duration of 12 months and longer.

9. Shari'ah Fund (Portfolio D)

9.1. Portfolio overview

The Shari'ah Fund is a market related portfolio that complies with Islamic law or Shari'ah and has an asset allocation that is somewhat more conservative than that of the Balanced Portfolio. It is expected to give a return that is lower than the Balanced Portfolio over the long term due to the lower allocation to equities, and correspondingly the return on the Shari'ah Fund is not expected to fluctuate as widely as that of the Balanced Portfolio from year to year.

The key feature of the Shari'ah Fund is that it adheres to the following Shari'ah principles:

1. The ban on interest: Interest must not be charged or paid on any financial transaction, as interest is deemed unlawful by Shari'ah.
2. The ban on financing certain economic sectors: Companies involved in the following activities are not Shari'ah compliant:
    - Conventional financial services;
    - Alcohol and tobacco;
    - Non-halaal food production or processing activities;
    - Entertainment (casinos, gambling and pornography);
    - Weapons and arms manufacturing.

The portfolio can be expected to deliver a negative return over short measurement periods (e.g. 1 year) from time to time.

9.2. Investment objective

The Shari'ah Fund aims to deliver 4% p.a. (net of investment fees and expenses) out-performance of "*headline inflation*" (or CPI) over any rolling 5-year period.

9.3. Risk constraints

The level of market risk taken by the Shari'ah Fund is expected to be significantly lower than that of the Balanced Portfolio.

9.4. Asset allocation

The Shari'ah Fund will be invested primarily in a balanced, Shari'ah compliant investment product.

10. Benchmarks

10.1. The table below sets out the benchmark per asset class for Portfolios A, B and C – for SA and global equities, a "free float" market capitalization index is used

Asset class	Benchmark
SA equities	FTSE / JSE Free Float CAPI (maximum exposure to any one counter limited to 10%) – total return index
SA bonds	BE ASSA All Bond Index
SA listed property	JSE SAPY (J253T) total return index
SA money market	STEFI Composite Index plus 0.5%
Global equities	MSCI World Equity Index – total return index
Global bonds	Barclays Capital Global Aggregate Bond Index (unhedged)

10.2. The table below sets out the benchmark per asset class for Portfolio D – for SA and global equities, a "free float" market capitalization index is used. The Trustees recognise that this benchmark is only for comparison of performance and should not be published for information to members.

Asset class	Weight	Benchmark
SA equities	45,0%	FTSE / JSE Shari'ah ALSI – total return index. This index has a significant overweight to Resources relative to the CAPI or ALSI.
SA money market	32,0%	STEFI Composite Index - there is no suitable Shari'ah compliant index for the sukuks in which the Fund is invested
Global equities	18,0%	Dow Jones Islamic Market Titans 100 Index – total return index
Global bonds	5,0%	Dow Jones Global Sukuk Index – total return index

In this case a composite benchmark will be calculated, rebalanced monthly.

11. Mandate restrictions

Note that the intention of the amendments in red below is to avoid imposing excessively restrictive requirements on the Fund and its investment manager portfolios, where in practice the Trustees may be willing to relax these for specific investments.

11.1. This section deals with the principal risk areas the Trustees will seek to control – the specific limitations and conditions will be detailed in the agreements with the appointed investment managers.

11.2. Before entering into an agreement to invest in a particular investment, the Trustees will perform (or require their mandated investment managers to perform) a due diligence of the investment taking into account the risks relevant to the investment including, but not limited to, credit, market and liquidity risks, and where relevant risk relevant to a foreign (offshore) investment including but not limited to country and currency risk, as well as operational risks for assets not listed on an exchange. ("Operational risk" is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.) Similarly the Trustees or their mandated investment managers will consider any factor which may materially affect the sustainable long term performance of the asset including, but not limited to, those of an environmental, social and governance [ESG] character.

11.3. SA equities and listed property

The mandate given to the investment managers that manage the SA equity and SA Listed Property classes on behalf of the Fund should generally include restrictions on:

- The maximum deviation from the benchmark
- Use of borrowing (leverage)
- Use of derivatives
- Minimum liquidity of the portfolio
- Holdings where the investment manager holds more than 25% of the issued share capital of the company across its entire client base
- Investment in the shares of the investment manager and its associated companies
- Scrip lending
- Investment in unlisted securities
- Underwriting of new issues

11.4. SA bonds and money-market portfolios

The mandate given to the investment managers that manage the SA bond and money-market asset classes on behalf of the Fund should generally include restrictions on:

- The maximum deviation from the benchmark
- Use of derivatives
- Use of borrowings (or leverage)
- Minimum liquidity of the portfolio
- Investment in unlisted debt instruments
- Credit quality
- Deviation (in years) from the modified duration of the benchmark
- Investment in the instruments of the investment manager and its associated companies
- Scrip lending
- Underwriting of new issues

11.5. Global equities

The Fund's investment in offshore equities will be via a collective investment scheme (i.e. a pooled arrangement).

The consequence of this is that the Fund can only rely on the risk constraints and limitations set out in the Prospectus of the relevant CIS (collective investment scheme). The Fund will require that *inter alia* the following matters are covered in the prospectus, or will otherwise engage with the relevant investment managers to ensure that these issues will be dealt with in the management of the CIS in a way that is acceptable to the Fund:

- Maximum exposure to emerging markets
- Restrictions on the exchanges in which the manager may deal
- Restrictions on investment in unlisted securities
- Maximum exposure to any one Company (this may vary by market capitalization)
- Maximum exposure to a particular country (or geographic region) for a non-regional product
- Maximum exposure to a particular industry or sector
- Maximum exposure to a particular currency for a non-regional product
- Restrictions on the use of borrowings (or leverage)
- Restrictions on the use of derivatives and currency hedging
- Restrictions on scrip lending (including restrictions on counter-party risk)

The Prospectus should generally provide a maximum notice period of 30 days should the Fund wish to terminate its investment.

11.6. Global bonds (including Emerging Market Debt)

The Fund's investment in global bonds will be via domestic or foreign collective investment schemes (i.e. a pooled arrangement).

The consequence of this is that the Fund can only rely on the risk constraints and limitations set out in the Prospectus of the relevant CIS (collective investment scheme). The Fund will require that *inter alia* the following matters are covered in the prospectus, or will otherwise engage with the relevant investment managers to ensure that these issues will be dealt with in the management of the CIS in a way that is acceptable to the Fund:

- Maximum exposure to emerging markets
- Restrictions on the exchanges in which the manager may deal
- Limitations on credit risk
- Deviation (in years) from the modified duration of the benchmark
- Maximum exposure to a particular country
- Maximum exposure to a particular industry or sector
- Use of borrowings (or leverage)
- Maximum exposure to a particular currency
- Restrictions on the use of derivatives and currency hedging
- Restrictions on scrip lending (including restrictions on counter-party risk)

The Prospectus should generally provide a maximum notice period of 30 days should the Fund wish to terminate its investment.

12. Criteria for selecting investment managers

12.1. The following criteria will be used in *selecting* investment managers:

- The manager must have a clearly defined investment philosophy and must have an established track record of applying this philosophy successfully and consistently.
- The manager must have a well-defined investment process off which the investment decisions are made. In particular the process should provide high quality information, contain risk controls and allow the investment decisions to be made by a few key decision-makers.
- The manager must have a sound business and remuneration structure that allows it to attract and retain the best investment managers.
- There must be clear alignment between the interests of the Fund and the interest of the investment manager.
- The investment manager must maintain a high standard of ethics.
- The investment manager must demonstrate an ability to comply with the due-diligence requirements for investing set out in the revised Regulation 28 to the Pension Funds Act, specifically principles (v) to (ix) in paragraph 2 of the Regulation.
- The Trustees will consider the need to promote broad-based black economic empowerment. This will also be considered when appointing other service providers.

12.2. Whenever a new fund manager is appointed, or a new investment is entered into directly by the Fund, the Fund will consider the need for specialist legal advice, and where necessary appoint its own suitable legal expert to review the contractual documentation prior to signing the documentation. The same process will be followed if any existing agreements are to be reviewed.

12.3. The following events would lead to a *review* of the investment manager's appointment:

- Rapid growth in assets under management;
- Change in the investment philosophy and approach;
- Material change in the investment process;
- Loss of key personnel, including a situation where a key decision-maker is "promoted" to a different role;
- Material change in the shareholding structure of the manager; and
- Perceived adverse changes in the ethics of the manager;
- Any other matter that is perceived to affect the ability of the investment manager to carry out its mandate effectively, or is considered by the Trustees to necessitate a review

13. Performance and compliance monitoring

13.1. An Investment Committee suitably mandated by the Board of Trustees shall monitor the performance of the Fund's investments on a quarterly basis. In

this regard the Investment Committee will *inter alia*:

- Monitor the overall performance of the Fund's investment channels relative to the particular performance objective and risk constraints
- Monitor the performance of the selected investment managers relative to their mandates
- Make a qualitative assessment of the investment managers on a quarterly basis
- Take responsibility for selection and de-selection of the investment managers
- Monitor compliance with the constraints and restrictions as set out in the investment manager mandates, as well as compliance with the investment limits contained in the revised Regulation 28 to the Pension Funds Act.
- Receive feedback from the investment managers.
- Review the overall risk inherent in a particular channel to ensure that there is not an unacceptable aggregation of risk
- Ensure that proper contractual arrangements are in place for all the investment managers
- Appoint and monitor the performance of the investment consultant appointed to advise on and assist the Committee on matters relating to the Fund's investment activities.
- Review the range of investment choice given to members and the appropriateness of the life stage model on an annual basis
- Review the Statement of Investment Principles on an annual basis (or on defined earlier events)
- On a periodic (e.g. annual) basis ask the Fund's investment managers to report formally on how they comply with the due-diligence principles for investing set out in the revised Regulation 28, specifically principles (v) to (ix).

14. Other governance issues

14.1. The Trustees and the investment consultant shall be required to make a full disclosure of any conflict of interest situation relating to the investments of the Fund at all relevant times.

14.2. The investment manager shall be required to report the amount of brokerage paid to each broker it deals with. The investment manager must disclose if it receives any commission rebate, service or other benefit from the brokers it deals with.

14.3. The investment consultant shall be required to report on any fees / commissions it receives from investment managers appointed to manage the Fund's investments. Such amounts shall be offset against the fees of the investment consultant for services unless the Board of Trustees agrees otherwise.

15. Trustee training

15.1. Each year as part of the Fund's calendar of Trustee business, the Fund will develop a formal training programme for the year. The purpose of this training is to assist the Trustees in ensuring that they are adequately trained to perform the tasks required of them as Trustees.

15.2. This programme may cover investment issues, general Fund governance issues and such other matters that the Trustees believe to be important.

15.3. The training will typically take the form of workshops organised during the course of the year. It will also include relevant seminars/conferences organised by outside parties.

15.4. The training programme will be assessed periodically for effectiveness. This will include keeping records of which Trustees have attended the various training sessions available. It will also include assessment of whether the training has improved the Trustees' ability to manage the Fund.

16. Review of Statement

16.1. In the normal course of events the Trustees will review the investment strategy annually.

16.2. The investment strategy must also be reviewed within 3 months of any of the following events occurring:

- A material change in exchange control regulations affecting retirement funds
- A change in the monetary policy of the Reserve Bank resulting in it no longer managing the economy around real rates of return on fixed interest instruments.
- A change in the tax basis affecting the investment strategy of the Fund
- A change in the Pension Funds Act that affects investments
- An indication that the Fund will have significant cash flow requirements (particularly outflows)

16.3. When reviewing the strategy, the Trustees will consider the appropriate investment objectives and risk constraints (including the range of assets to be used and the allocations and limits applying to these) for the various liability portfolios of the Fund. The Trustees will also seek to ensure that the adopted strategy is appropriate for the liabilities. This will include considering the expected outstanding term of the liabilities, the expected relationship between the liabilities and inflation, and the cash flow needs of the liabilities. The Trustees will also consider any *changes* to the risk profile of the Fund's investments over time, in the course of reviewing the strategy.

17. Investment advisor and custodian

Investment consultant: Towers Watson (Pty) Ltd (an authorised Financial Services Provider – Licence No. 2545)

Custodian: Nedbank Limited – The custodian agreement is directly between Nedbank and the Fund.

18. Signature

Adopted as the Statement of Investment Principles for the University of Cape Town Retirement Fund

Chair: Board of Trustees	Chair: Investment Committee
Date	Date

19. Annexure I – Capital market and manager skill assumptions

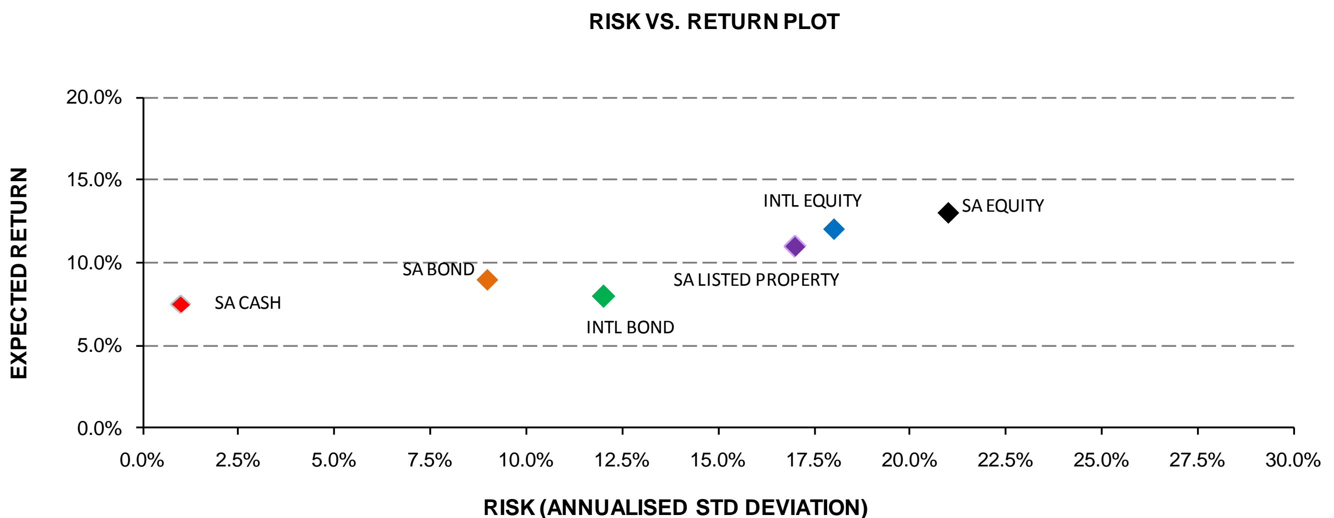
19.1. Revised asset modelling was carried out in October 2010. The Re-Sampled Mean Variance Optimization method was used in the latest study and it was based on the capital market assumptions which are plotted on the graph below. The strategic asset allocation which informs the Fund's investments is based in part on the outcomes of the modelling exercise.

In previous asset modelling, capital market assumptions were of central importance because they were direct inputs into the modelling tool, and the model output was heavily dependent on these initial "point-estimates". This approach has the significant disadvantage that we cannot be absolutely certain about what capital markets will offer in the future, and we should therefore steer away from attaching value to results based on point-estimates.

In the revised 2010 study, although we still use a set of capital market assumptions as part of the modelling process, the method used does not have the same tendency to maximize the "estimation errors" that we would inevitability make in our capital market assumptions.

19.2. An asset model (which assumes a long term inflation rate of 5.5% p.a.) was used to simulate the investment returns and risk profile for the Balanced Portfolio C. The Trustees and Investment Committee should regard the statistics quoted in this guide as indicative and not as a statement of fact.

19.3. The chart below shows the assumed risk and return profile for the main asset classes gross of retirement fund tax and manager fees.



19.4. The following table shows the correlations between various asset classes as used by the model.

	SA equities	SA listed property	SA cash	SA index linked	SA bonds sovreign	SA bonds credit	Developed equity	Intl sovreign bonds	Intl credit
SA equities	**100.0%**	48.2%	-2.0%	35.9%	41.0%	26.1%	62.8%	0.3%	-7.9%
SA listed property		**100.0%**	21.0%	27.1%	51.0%	23.8%	29.2%	2.8%	-2.9%
SA cash			**100.0%**	24.1%	40.5%	18.1%	2.1%	0.0%	-6.6%
SA index linked				**100.0%**	34.5%	20.9%	10.6%	-2.9%	-2.3%
SA bonds sovreign					**100.0%**	48.9%	-20.2%	-29.5%	-46.7%
SA bonds credit						**100.0%**	-3.8%	5.9%	-5.9%
Developed equity							**100.0%**	65.3%	43.5%
Intl sovreign bonds								**100.0%**	57.1%
Intl credit									**100.0%**

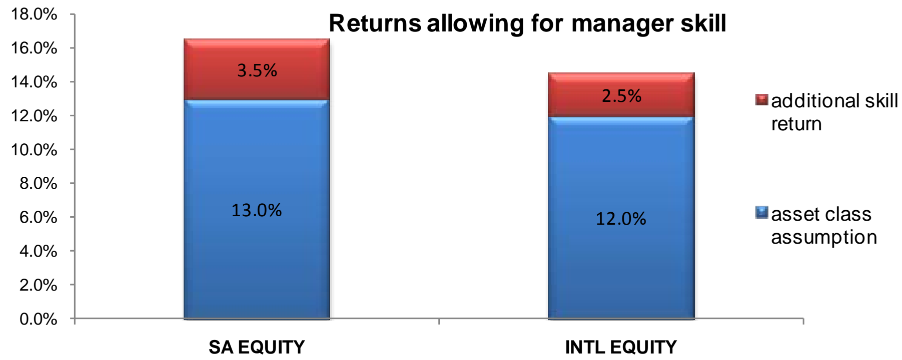
The table below provides the justification for the return assumptions – the risk parameters are set relative to the observed risk (taken as the historical standard deviation of monthly returns) of the various asset classes.

Asset class return (before allowing for RFT)	Reason
Inflation – 5.5% p.a.	It seems prudent to assume an inflation assumption that is nearer the upper limit of the South African Reserve Bank inflation band of 6%.
SA cash – 7.5% p.a.	We assume real interest rates of approx. 2% p.a. over the long term (lower than real rates over last 10-20 years).
Nominal bonds – 9% p.a.	We assume *long-term* excess return of nominal bonds over cash as some 1.5% p.a. (somewhat lower than observed over last 10-20 years). Note that this ignores any credit spread for bonds significantly below RSA credit quality.
SA listed property – 11.0% p.a.	We assume a 2.0% p.a. *long-term* risk premium vs. bonds. This is substantially lower than the observed returns over the last 15-20 years, but it seems prudent to assume a risk premium lower than that for equities.
SA equities – 13.0% p.a.	We assume a 4.0% p.a. *long-term* equity risk premium vs. bonds. 100-year equity risk premium has been 5.5% p.a. The risk premium is assumed to reduce on account of better corporate governance and information flow (i.e. investors are assumed to require a lower equity risk premium in future).
$ / ZAR appreciation – 4% p.a.	We assume an inflation differential between the countries 3% p.a.), plus 1% p.a. because the SA economy is subject to exchange controls.
Int'l equities – 8% p.a. ($) or 12% p.a. (ZAR)	This allows for a 1.0% p.a. lower return than SA equities because of SA country risk - also reflects a 4.0% p.a. equity risk premium for int'l equities (observed 100-year equity risk premium 5% p.a.).
Int'l bonds – 4% p.a. ($) or 8% p.a. (ZAR)	This reflects a 1.0% p.a. sovereign risk premium for SA debt.

19.5. In the modelling carried out for the Balanced Portfolio C we also have allowed for manager skill in respect of equity portfolios (but not for other asset classes). Given the "value" philosophy of the equity managers used in Portfolio C, we have also

assumed that actual equity portfolio risk will be 1% p.a. lower than the asset-class assumptions shown in the risk/return plot above.

The chart below shows the assumed level of investment manager skill for the SA and global equity asset class. The manager skill is reflected net of manager fees.



20. Annexure 2 – Glossary of terms

Term	Definition
BE ASSA ALBI	The Bond Exchange (of South Africa) / Actuarial Society of South Africa All Bond index. This tracks the return earned on a benchmark portfolio of 19 bonds, mainly comprising RSA Government and parastatal debt.
Capital market assumptions	The capital market consists of the share (or equity), bond and cash markets, both in South Africa and offshore. These markets will deliver a return, which commonly can be measured by an index (e.g. the FTSE/JSE All Share Index for SA equities). Investment managers may be able to improve the returns from capital markets if they are skilful.
Dow Jones Islamic Market World Index	The Dow Jones Islamic Market Indexes measure the global universe of investable equities that pass screens (based on their industry type and their financial ratios) for Shari'ah compliance.
FTSE/ JSE CAPI Free Float	The FTSE/JSE ALSI, but with the market capitalization of any counter limited ("capped") to 10% of the index. This index avoids undue stock-specific risk.
Headline inflation or CPI	With effect from January 2013, "headline inflation" is represented by the Consumer Price Index (CPI) for All Urban Areas (Base December 2012 = 100,0) as published from time to time by Statistics SA in Statistical Release P0141.
JP Morgan Global Government Bond Index (unhedged)	The JP Morgan index of returns earned on a benchmark portfolio of developed-market government bonds. "Unhedged" denotes that currency exposure reflects the currency exposure of the underlying basket of government bonds making up the benchmark portfolio. A "hedged" benchmark would be one in which currency exposure had been hedged back into the chosen base currency (e.g. US$ or Euro), in order to eliminate variations in returns arising from movements in the currencies in which the underlying bonds are denominated, relative to the base currency (US$ or Euro).
Market capitalization	The price of a particular security multiplied by the number of shares in issue. A market capitalization index is calculated by adding each constituent's market capitalization to the index. A "free-float" market capitalization index is calculated by excluding any part of a company's market capitalization deemed to represent shares not available for trade (i.e. "strategic investments" in the company held by

	certain investors, e.g. the controlling shareholders of family-owned businesses).
MSCI World Equity Index	The Morgan Stanley Capital International index of international equity prices (including dividends) for the developed markets only. Note that the version of this index that we use is the "Gross" version, which includes dividends before the deduction of dividend withholding tax, where applicable.
Peer group	The investment return earned by the typical retirement scheme usually measured as a "global balanced mandate" in published investment surveys
STEFI Composite Index	Alexander Forbes Short-Term Fixed Interest Index designed to measure the return for cash-like instruments with a maximum duration of 12 months. The Composite Index is calculated for a blend of instruments of different durations.
Strategic asset allocation	The mix of equities, bonds and cash (local and global) that statistically is deemed to have the best chance of meeting the nature and term of the liabilities (taking due account of risk, especially market volatility). The strategic asset allocation is derived using an asset model.
Specialist investment manager	An investment manager that manages only a single asset class on behalf of the Fund