Are you on track to achieve your retirement goals?

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Technical Services Manager – Retirement Income and SMSF
What direction are you heading in retirement?
Today’s direction

• The retirement income challenge
• GPS Framework
• Risks in retirement
• Strategies to align with your direction
The retirement income challenge

• Generate cash flows from the SMSF to fund lifestyle in retirement

• Retirement is hard because there is so much uncertainty
  – How long will I live? How long will my partner live?
  – How much will the cost of living increase?
  – What growth and income will I receive on my investments?

• Uncertainty = risk

• Key retirement risks:
  – Sequencing/market risk
  – Longevity risk
  – Inflation risk
The key retirement questions

• Before retirement:
  “How much do I need to retire?”

• After:
  “How much can I afford to spend?”

• Answer: “It depends”
Retirement savings journey

Wealth vs. Age

Start of retirement

Today
The journey after retirement
The journey after retirement

Start of retirement

Not enough to last or maybe spending too much
The journey after retirement

Spend it all down:
- The last cheque bounces
The journey after retirement

Wealth

Start of retirement

Age

Just living off the income
Spending drives your direction

- Allow for inflation to maintain standard of living
  - Generally will need to spend more each year to buy same basket of goods and services

- Spending has the biggest impact on your direction in retirement
  - Allow for expected shapes of spending when assessing retirement sustainability

- For a couple spending often reduces when first person passes away
  - Age pension reduces by about 30%

- Active/passive phases of retirement
  - Later in life, assuming remain healthy, spending requirements reduce
  - ASFA budgets assume spending reduces around 10% when reach age 85
GPS Framework for SMSFs
The GPS Framework in retirement
Longevity risk

How long do savings need to last?

• Consider expected lifespans from retirement
• For couples consider age to which expect at least one will survive

• Standard life expectancy of 65 year old couple is age 90\(^1\)
• Allowing for future improvements it is 93\(^2\)
• Life expectancies are averages… SMSF trustees may live longer!

1. ALT 2010-12 life expectancy for male aged 65 and female aged 65, average age to which we expect at least one of them to survive to
2. ALT 2010-12 with 25 year mortality improvements
Not everyone lives to life expectancy

- Assumes male and female couple with both persons exactly age 65, calculated at March 2018 using ALT 2010-12, with 25 year improvement factors.
Differing longevity risk impacts

Start of retirement

Wealth

Grow

Preserve

Spend

Age pass away
Order and timing of returns

- Investment returns are not constant each year in the real world

**SMSF savings over retirement**

- SMSF savings of $1 million, asset mix of 70% growth, 30% defensive, and spending $80,000 p.a. increasing annually with price inflation.

Differing sequencing risk impacts

Start of retirement

Wealth

Age

Grow

Preserve

Spend
## Impact of retirement risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Grow</th>
<th>Preserve</th>
<th>Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spending</td>
<td>Some income &amp; capital gains</td>
<td>All income &amp; real capital gains</td>
<td>All income &amp; draws all capital</td>
</tr>
<tr>
<td>Longevity</td>
<td>Low</td>
<td>Moderate</td>
<td>Extreme</td>
</tr>
<tr>
<td>Sequencing</td>
<td>Moderate</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Inflation</td>
<td>Target high real returns</td>
<td>Managed through investments</td>
<td>Positive real income required</td>
</tr>
</tbody>
</table>
Forecasting in retirement

Testing different strategies

• Need to allow for
  – Uncertainty in key retirement risks
  – Age Pension rules
  – Superannuation and non-superannuation assets

• Use a stochastic model to allow for risk
  – Consider thousands of future scenarios of inflation, market returns and lifespans
  – Inflation and returns are not fixed
  – Examine the distribution of outcomes to determine chance of achieving goals
GPS Framework for SMSF Retirees

Couple aged 65 invested in ATO average pension asset mix

GPS Framework for a 65-year-old couple with their retirement savings in the SMSF invested in the ATO average pension phase asset mix, based on Accurium retirement healthcheck at Jan18. Taking into account longevity risk, inflation risk and market risk the Spend and Preserve guidelines are based on 50% confidence of spending or preserving retirement savings. See the accompanying paper’s appendices for detail on the assumptions and methodology.
## Savings required to Spend and Preserve

<table>
<thead>
<tr>
<th>Annual spending</th>
<th>Capital required to Spend it all</th>
<th>Capital required to Preserve it all</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60,000</td>
<td>$580,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>ASFA comfortable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$80,000</td>
<td>$1,100,000</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>Typical SMSF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,000</td>
<td>$1,600,000</td>
<td>$3,700,000</td>
</tr>
<tr>
<td>Aspirational</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Retiree age, asset mix and whether single/couple impacts GPS guidelines
- Spend and Preserve guidelines based on median (50% chance) outcomes
Aligning retirement income strategies to the GPS Framework

Grow
Preserve
Spend
Are SMSF retirees Spenders or Preservers?

- On average ≈ 35% of savings are outside the SMSF
- Estimated total savings for 65-year-old SMSF couples:
Are SMSF retirees Spenders or Preservers?

- Proportion of 65-year-old couples in each GPS segment:
Using the GPS Framework

- Retiree age, asset mix and whether single/couple impacts GPS guidelines
- 65-year-old couple:

  ![Graph showing the GPS Framework for a 65-year-old couple]

  - Spend less to *Preserve initial savings* by $650,000 buffer to the Spend line.
Retirement income strategies

• Address the key risks of each GPS segment

• Retirement income strategies:
  • **Grow**: target high real returns
  • **Preserve**: cashflow strategy
  • **Spend**: income-layering
Grow: target high real returns

- 25% of typical 65-year old SMSF retiree couples
- Key risk: moderate sequence risk
  - Significant adverse market event probably won’t impact lifestyle but might result in a lower bequest
- Two bucket approach
  - Invest for long term growth
  - Cash bucket for liquidity
30% of typical 65-year old SMSF retiree couples

Key risk: high sequence risk
- Significant adverse event can push you towards Spend segment
- Must protect growth assets from being drawn on

Cashflow strategy:
- Invest for long term growth
- Secure income to protect growth
Preserver

Case study

• Median retiree couple $1,750,000 in total assets
• Spend $80,000 p.a. over next 15 years
• Invested 70% growth, 30% defensive

• Key risk is significant adverse market event impacting savings and ability to generate positive real income
Spend: Income layering

- 20% of typical 65-year old SMSF retiree couples
- Key risk: extreme longevity risk
  - Capital drawdown does not automatically match retiree lifespans
  - Live longer than expected or experience a poor sequence of returns = run out
Preserver

Case study

- Current strategy exposure to sequencing risk\(^1\):
  - Income alone is not enough, are preserving some but not all of the initial savings
  - Capital required to meet spending in 12 out 15 years on average
  - A significant adverse scenario\(^2\) could deplete savings $835,000 more than the median outcome

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1. Analysis completed using Challenger’s SMSF Cashflow Illustrator which examines 3,000 future market scenarios provided by Willis Towers Watson. Investment fees: growth 0.8%, defensive 0.6%. Annual required income $80,000 p.a. increasing annually with price inflation and $2,500 for an annual admin/advisor fee. No allowance for tax or Age Pension.
2. Significant adverse scenario is assumed to be the bottom 5% of the distribution of outcomes
Preserver

Case study

• Using the Cashflow Strategy¹:
  – Secure $80,000 in annual income
  – Invest remaining assets in growth for 15 years

• Exposure to sequencing risk²:
  – Capital set aside to produce cashflow protects growth assets from being drawn on
  – $138,600 better off under a significant adverse scenario

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1. Challenger Fixed Term Annuity, 15 year term, RCV0, nil indexation, $80,000 annual payment, purchase price $929,865 at 12 July 2018. Remaining assets invested 100% in growth.
2. Analysis completed using Challenger’s SMSF Cashflow Illustrator. Investment fees: growth 0.8%. Annual required income $80,000 p.a. increasing annually with price inflation and $2,500 for an annual admin/advisor fee increasing annually with inflation. No allowance for tax or Age Pension.
Preserver case study

Maximise SMSF balance at end of the term while controlling downside risk

<table>
<thead>
<tr>
<th>Median</th>
<th>(50th percentile outcome)</th>
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<tbody>
<tr>
<td>Cashflow strategy increases SMSF balance by $33,800.</td>
<td></td>
</tr>
<tr>
<td>Current: $1,025,900</td>
<td>Cashflow strategy: $1,059,700</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Downside risk</th>
<th>(bottom 25% of outcomes)</th>
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<tbody>
<tr>
<td>Cashflow strategy increases SMSF balance by $74,700.</td>
<td></td>
</tr>
<tr>
<td>Current: $615,400</td>
<td>Cashflow strategy: $690,100</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Significant adverse event</th>
<th>(bottom 5% of outcomes)</th>
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<tbody>
<tr>
<td>Cashflow strategy increases SMSF balance by $138,600.</td>
<td></td>
</tr>
<tr>
<td>Current: $190,500</td>
<td>Cashflow strategy: $329,200</td>
</tr>
</tbody>
</table>

Considering 3000 market scenarios, investing in the cashflow strategy for the 15 year term has increased the SMSF balance over the term across all risk measures.

Analysis completed using Challenger’s SMSF Cashflow Illustrator. Investment fees: growth 0.8%, defensive 0.6%. Annual required income $80,000 p.a. increasing annually with price inflation and $2,500 for an annual admin/advisor fee increasing annually with inflation. No allowance for tax or Age Pension.
Spend: Income layering

- Income layering
  - Secure income to meet needs for life
  - Manage wants using market-linked assets
Spender
Case Study

• Mark (67) and Cassie (69) healthy retirees
• Spending $60,000 p.a.
• Mark has $600,000 in SMSF in retirement phase
  – 70% growth, 30% defensive asset mix
• Own their home and have no other assets

• Face a key risk that could fall short if live longer than life expectancy (25 years\(^1\)), or experience poor market returns

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1. Number of years expect at least one of Mark and Cassie to live to with 50% confidence, calculated using ALT 2010-12 with 25 year mortality improvement factors.
Spender

Case Study

• Spend $60,000 p.a.
  – $42,000 in needs and $18,000 in wants

• Layering strategy: Needs
  – If savings depleted couple Age Pension $35,573
  – Use 25% of savings ($150,000) to purchase a lifetime annuity paying $7,510 p.a. indexing annually with CPI\(^1\)
  – $43,083 in guaranteed income in today’s dollars

1. Challenger Lifetime Annuity (Flexible income) for 67yr old male, reversionary to spouse (female aged 69) on death, max withdrawal period 16 years, CPI indexed $7,510 annual payment, purchase price $150,000 at 12 July 2018. If one person passes away single Age Pension is $23,598 providing total income of $31,108.
Spender

Case Study

• Layering strategy: Wants
  – Invest remaining $450,000 to maximise discretionary spending over retirement
  – ABP$ in the SMSF invested in 93% growth assets, 7% defensive assets

1. Assumes ABP is a deemed account-based pension for Centrelink purposes. The 93% growth, 7% defensive ABP asset mix maintains the overall 70% growth, 30% defensive asset allocation in year 1 (assumes lifetime annuity forms part of defensive portfolio)
Spender

Case Study

- Current strategy:
  - No guaranteed income
  - 49% chance of meeting needs to life expectancy
  - 46% chance of meeting needs & wants to life expectancy

Analysis completed using Challenger’s Retirement Illustrator analysing 2,000 future market scenarios provided by Willis Towers Watson. Allows for current Age Pension rules, rates and thresholds. $2,500 annual admin fee increasing annually with inflation, growth investment fee 0.8%, defensive investment fee 0.6%. Assumes both Mark and Cassie survive for 25 years to their life expectancy.

Life expectancy is number of years expect at least one of Mark and Cassie to live to with 50% confidence, based on ALT 2010-12 with 25 year mortality improvement factors. Mark and Cassie’s life expectancy is 25 years.
Spender

Case Study

• Layering strategy:
  – Needs of $42,000 secured for life
  – 56% chance of meeting additional wants of $18,000 until life expectancy

• Have protected needs against market and sequencing risk by using an Income Layering strategy

Analysis completed using Challenger’s Retirement Illustrator analysing 2,000 future market scenarios provided by Willis Towers Watson. Allows for current Age Pension rules, rates and thresholds. $2,500 annual admin fee increasing annually with inflation, growth investment fee 0.8%, defensive investment fee 0.6%. Assumes both Mark and Cassie survive for 25 years to their life expectancy.

Life expectancy is number of years expect at least one of Mark and Cassie to live to with 50% confidence, based on ALT 2010-12 with 25 year mortality improvement factors. Mark and Cassie’s life expectancy is 25 years.
Spender

Case Study

• If live just 3 years longer than life expectancy:

Chance of $42,000 'needs' income being met

Account-based pension only

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
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<tr>
<td>36%</td>
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Comprehensive lifetime portfolio

<table>
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<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>100%</td>
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</table>

The chance of needs being met increased by 64%

Down from a 49% chance of meeting Needs at life expectancy!

Needs are secured under layering strategy. They are met in just over a third of future outcomes under the current strategy.

Analysis completed using Challenger’s Retirement Illustrator analysing 2,000 future market scenarios provided by Willis Towers Watson. Allows for current Age Pension rules, rates and thresholds. $2,500 annual admin fee increasing annually with inflation, growth investment fee 0.8%, defensive investment fee 0.6%.

Number of years expect at least one of Mark and Cassie to live to with 25% confidence, calculated using ALT 2010-12 with 25 year improvement factors, is 28 years, 3 years longer than life expectancy.
Spender

Case Study

• If live just 3 years longer than life expectancy:

Chance of $60,000 'needs' and 'wants' income being met

• Protected against longevity risk using an Income Layering strategy

Analysis completed using Challenger’s Retirement Illustrator analysing 2,000 future market scenarios provided by Willis Towers Watson. Allows for current Age Pension rules, rates and thresholds. $2,500 annual admin fee increasing annually with inflation, growth investment fee 0.8%, defensive investment fee 0.6%. Number of years expect at least one of Mark and Cassie to live to with 25% confidence, calculated using ALT 2010-12 with 25 year improvement factors, is 28 years, 3 years longer than life expectancy.
In conclusion…

- You may have a goal to Grow, Preserve or Spend savings during retirement
- Use the GPS Framework to check you are heading in the right direction
- Some retirement income strategies work better than others
  - Grow = target high real returns
  - Preserve = cashflow strategy
  - Spend = income layering
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