Lonsec

Retirement Portfolio Construction Guide

Building a goals-based investment portfolio

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Executive Summary

Introduction

For many, approaching retirement is often characterised by heightened emotion and anxiety associated with competing life goals and financial objectives. Each of these will typically have different time horizons and be prioritised in different ways. Most retirement portfolio construction approaches rely solely on risk profiling as the primary mechanism to determine the 'optimal' retirement portfolio. While useful, such tools are unlikely to capture all that is important to retirees who typically have multiple investment objectives. Additionally, many investment decisions are product driven, rather than strategy driven. Lonsec believes the focus should be on investment strategy, with product selection simply being a vehicle to execute a strategy, rather than the driver of the strategy.

Lonsec believes that an **objectives-based approach** can enhance and complement existing approaches to retirement portfolio construction in the following areas:

- 1) **Expectations management:** better communicate and manage client investment expectations, including the level of risk required to achieve those objectives
- 2) Alignment of strategy & objectives: Strategies are specifically tailored to individual client objectives, recognising that each client will have different retirement objectives and prioritise those objectives differently
- 3) Alignment of product to strategy: product selection is a result of the investment strategy; it does not drive the strategy. Lonsec believes that this is particularly relevant given ASIC's focus on product selection driven by clients' 'best interests'
- 4) **Engagement**: improves financial adviser-client engagement by focusing discussion on investment strategy and how it relates to client investment objectives, rather than focusing on returns, markets and products.

This paper provides a practical framework to assist financial advisers in constructing an objectivesbased retirement portfolio. It is designed to follow the key steps of the advice process and is broken into the following sections:



This paper can be used to assist financial advisers in constructing objectives-based portfolios for retiree clients, or as support material to the Lonsec Lifestyle Retirement Portfolios.

Defining Objectives

Risk Profiling

Portfolio Strategy

Product Selection

1. Defining retirement objectives

Defining investment objectives is a critical part of any investment strategy. As summarised in Figure 1, accumulation goals focus on maximising wealth, while in retirement; the primary focus is typically on maintaining lifestyle.

Figure 1: Investment objectives

Accumulation		Retirement
Typically single objective	¥	Multiple competing objectives
Portfolios should manage expected return vs. Standard deviation	≠	Trade-off based on goals achievement
Risk tolerance can be summarised with a single estimate	¥	Different attitudes about risk for each goal

The primary goal for most retirees is to have and maintain a certain standard of living. The 'rule of thumb' income replacement goal in retirement is 75 percent of a client's pre-retirement income. The ability to generate that level of income is dependent on a number of factors, most notably, a client's superannuation balance. For many retirees this will be an unrealistic goal and there will be a requirement to prioritise objectives and manage expectations.

While income generation is an overarching goal for most retirees, it is important to segment and prioritise retirement objectives, and then identify investments to achieve each of these objectives. This enables financial advisers to manage client expectations and ensure that the level of risk taken to achieve these goals is appropriate.

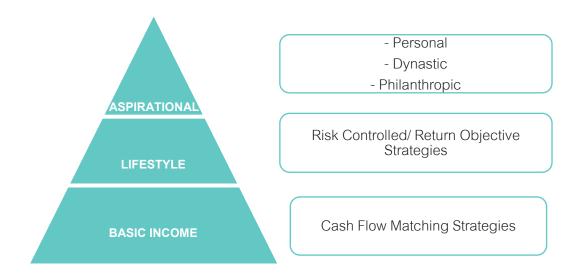
Investors generally do not view their wealth objectively through a single lens; rather they will segment, prioritise and be willing to take different levels of risk to meet different objectives. This concept is sometimes referred to as 'mental accounting' and takes into account elements of behavioural portfolio theory. Shefrin and Statman [2000] ¹ sum it up best when they described the multi-strategy portfolios as *"layered pyramids where investors divide their current wealth between a bottom layer, designed to avoid poverty, and a top layer, designed for a shot at riches."*

Within each of the broad categories depicted in Figure 2, retirees will have a series of smaller objectives. However, framing objectives within these categories provides for a deeper understanding of retirement goals and importantly, provides financial advisers with a clear framework to prioritise objectives, manage expectations and ultimately, develop investment strategies that align to these objectives.

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¹ Shefrin, H., and M. Statman (2000): "Behavioral Portfolio Theory," Journal of Financial and Quantitative Analysis.

Figure 2: Retirement goals



Basic income

The non-negotiable level of income required to meet everyday living expenses, such as utilities, food, shelter and clothing. Determining the level of basic income will generally be captured in the fact find questionnaire, which typically includes an assessment of an investor's individual balance sheet (i.e. income and expenses). For the majority of Australians, the Age Pension will form at least part of their basic income requirements.

Lifestyle

Lifestyle goals will generally include a mix of income and capital objectives that will match individual lifestyle goals eg. annual holiday, new car, or building long term wealth.

Aspirational

Meeting basic income and lifestyle objectives will satisfy retirement objectives for most retirees. However, for some with sufficient assets, aspirational goals such as intergenerational wealth transfer or philanthropic goals will be relevant. The characteristics associated with these objectives will generally have different timeframes and tolerance to risk associated with them. This paper largely focuses on the basic income and lifestyle segments as they are relevant to most Australians.

Key points

Investment objectives in retirement differ from those in the accumulation phase of investment. A clear framework to segment and articulate retiree objectives is an important step to determine an appropriate investment strategy for clients. Most retirees will have multiple investment objectives, different time horizons and sensitivity to risk. Lonsec broadly segments these goals into basic income, lifestyle and aspirational goals.

This segmentation of objectives considers behavioural finance theory, which recognises that investors typically apply 'mental accounting' to their assets, segmenting assets according to goals and outcomes, rather than viewing their assets as a single pool with a single objective and outcome.

2. Risk profiling

There are numerous risk profile tools used to determine a client's attitude to risk, ranging from detailed psychometric questionnaires through to very simple short form documents. The output of these questionnaires will typically map to a predetermined risk profile that reflects the client's optimal asset allocation, taking into account their attitude to risk. The risk profile questionnaire plays an important role in a dealer group's compliance framework, which aims to ensure clients do not deviate from the 'optimal' asset allocation.

However, this part of the financial planning process is limited in its ability to incorporate investor objectives, particularly more complex retiree objectives. Also, many risk profile questionnaires base their definition of risk on measures such as standard deviation and do not account for risks particularly relevant to retirees, such as longevity risk (the risk of outliving savings) and inflation risk. Ultimately, the challenge is aligning a multi-dimensional client fact finding mission to a one-dimensional risk profile questionnaire.

In Lonsec's view, the risk profiling process is useful to determine a client's attitude to risk, however, risk profile questionnaires generally fail to determine how much risk a client needs to take to achieve their specific objectives, or their capacity to take that risk. Measuring an investor's capacity to take on risk is the key factor to aligning an investor's objectives with an appropriate risk profile.

Key points

Risk profiling provides an indication of an investor's **propensity** to take risk, or an inherent attitude to taking risk. Understanding an investor's **capacity** to take risk, or how much risk an investor needs to take to achieve their investment objectives, is just as relevant. Engaging clients on their capacity to take risk is critical to manage investor expectations; there may be a disconnect between an investor's propensity to take risk (the output of the risk profile) and their capacity to take risk (the amount of risk required to meet investment objectives).

It is important to use a tool that takes account of multiple objectives and the likelihood of achieving those objectives. It should also be capable of simulating a range of future outcomes under various market conditions such as bear and bull markets, tail risk events and different inflationary environments. The outcome of this analysis may require a reprioritisation of objectives or reassessment of expectations.

Risk Profiling

3. Portfolio construction & strategy

Within the standard advice process there is a direct relationship between the risk profile and a client's asset allocation. In contrast, when using an objectives-based investment approach, investor objectives drive portfolio strategy.

Figure 3: Traditional Profiling versus Objectives-based investment approach

Traditional Risk Profiling		Objectives-Based Risk Profiling		
Single Strategy	VS	Multi-Strategy Approach		
Risk Tolerance	-	Goals + Risk		

Typical portfolio construction approaches rely heavily on a singular view of risk, generally standard deviation and tracking error, and do not account for other risks that become increasingly relevant to retirees such as drawdown risk, longevity risk or inflation risk. Such measures also fail to capture market behaviour and their relevance from an individual investor's perspective. Leslie Kiefer [2000] ² summarised the following challenges of integrating the risk perspectives of the financial adviser and the individual client as follows:

'Investment managers talk about risk as volatility, a tendency that leads them to frame the discussion of risk in terms of the kinds of volatility that can be diversified away. Individual clients, however, are usually much less focused on volatility. Their perceptions of risk are often driven by emotions and, therefore, are easily misunderstood or ignored by managers who take a strictly rational approach to risk.'

Once an individual has retired, asset allocation becomes critical as it directly impacts a client's ability to achieve their investment objectives. Many investors recognise they cannot invest their entire savings in cash-like securities, as this will severely impact the longevity of their portfolio.

Aside from investment objectives, other factors will have an influence on portfolio strategy. These factors will be particular to the individual client and include:

- Total size of the investment portfolio.
- Tolerance to absolute risk i.e. how much money is a client willing to lose to grow their capital base or supplement their income?
- How much liquidity will be sacrificed to guarantee income?

Using the three broad retirement objective groups outlined earlier, the remainder of this paper provides guidance about appropriate investment strategies to achieve these objectives and, importantly, considers the trade-offs involved.

² Kiefer, Leslie S. "Building a Client's Risk Profile: Working with Clients to Identify Risk." AIMR Conference Proceeding, Investment Counseling for Private Clients II, 2000 Lonsec Investment Solutions Pty Ltd ACN: 608 837 583, a corporate authorised representative (CAR number: 1236821) of Lonsec Research Pty Ltd ABN: 11 151 658 561 AFSL: 421 445

1. Basic income

The 'basic income' layer aims to meet essential income needs to ensure all non-discretionary costs are satisfied. While the primary objective is to ensure essential income needs are met, there is also an overarching goal to manage longevity risk or not outlive savings. For many Australians, the Age Pension will be a source of basic income as well as being the last line of defence against longevity risk. However, most retirees will not be able to live solely on income provided to them by the Age Pension and will need to supplement this via their superannuation.

Figure 4 shows just over half of the 3.9 million persons aged 45 years and over who indicated that they intended to retire from the labour force, reported their main expected source of personal income at retirement as 'superannuation/annuity/allocated pension'. Another commonly reported main expected source of personal income was a 'government pension/allowance'.

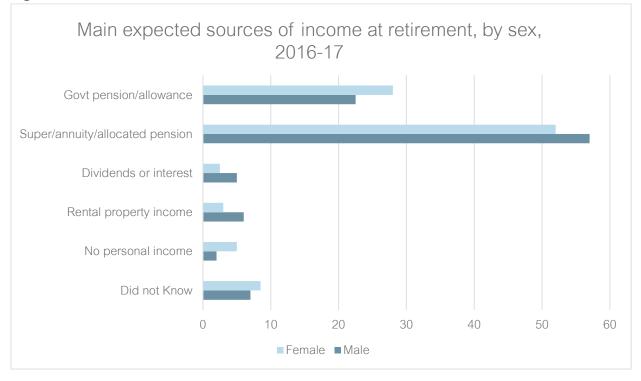
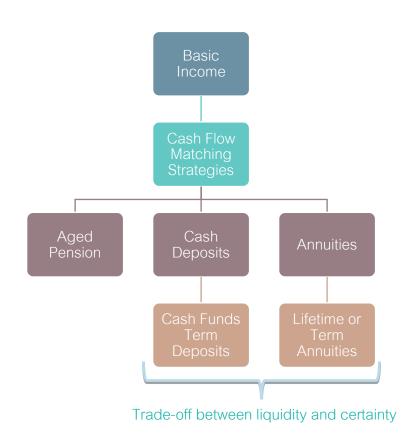


Figure 4: Sources of income in retirement

Source: Australian Bureau of Statistics

The main investments that meet basic income needs are relatively narrow and include bank deposits, term deposits and annuities. Each of these investments provide a relatively certain level of income, usually with some margin over the official cash rates. There is typically low risk to capital, however each differs significantly in terms and liquidity and inflation risk. Key investment risks are outlined in the Appendix.

Figure 5: The basic income layer



2. Lifestyle

The 'lifestyle' layer is the most complicated retirement objective set for the financial adviser/client to determine; lifestyle objectives will vary considerably from client to client. Furthermore, unlike the basic income objective, the lifestyle goal will typically involve elements of capital growth, yield and potentially capital protection. Therefore, to select the appropriate mix of products for this layer, financial advisers need to determine each client's priorities - for example, capital growth over capital volatility, or income over capital growth.

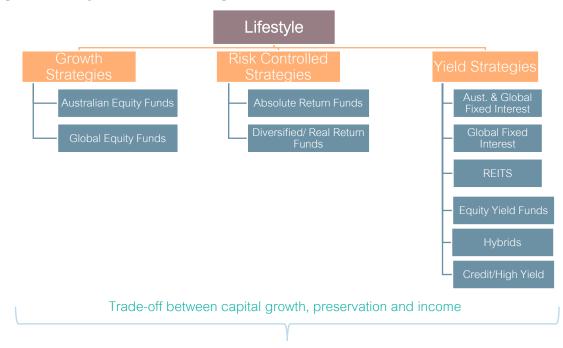
In most instances the client will need to supplement their basic income requirements with additional income to allow for discretionary spending. Unfortunately, this can occur at the expense of understanding the risks associated with the additional income.

Some retirees are happy to generate a modest level of income but may be motivated to leave a larger bequest or ensure that their savings grow to afford significant costs such as medical costs or assisted living arrangements. It is therefore important to understand the trade-off between capturing yield and preserving or growing capital.

More aggressive asset allocations might have the potential to deliver higher average returns or higher average yields, and thereby support longer retirement periods (longevity risk); however, their higher risk and volatility also significantly increases the danger of depleting assets early (sequencing risk).

Products that are appropriate for achieving lifestyle goals have been categorised into three groups – growth, risk control and yield. These have been further divided based on the types of assets/products that may be suitable to consider in executing on lifestyle objectives.

Figure 6: Lifestyle investment strategies



Growth strategies include assets that are expected to generate growth over the long term, primarily equities, which can be further broken down into domestic and global equities and the relevant subsector such as emerging markets and small caps. The primary purpose of these assets is to grow capital over the long term, which is a core element of a diversified retirement investment strategy.

Risk controlled strategies refer to investment approaches that aim to manage some of the risks which impact retiree portfolios such as downside risk, inflation risk and sequencing risk, and will generally look to achieve an absolute return target instead of a return relative to a market benchmark. Such strategies are particularly important for retirees, who in most cases require exposure to growth assets to meet their retirement objectives, but are also sensitive to market and sequencing risk, which can have a material impact on the longevity of investment portfolios.

The devastating impact of sequencing risk on retirees can be shown in the following simple example which shows the capital growth of a \$500,000 superannuation investment over a 10-year period during the accumulation and pension / retirement phases.

	Starting	Annual	Closing	Annual	
Year	Balance	Return	Balance	Return	Withdrawal
0	\$500,000		\$500,000		
1	\$525,000	5%	\$570,000	14%	\$0
2	\$367,500	-30%	\$627,000	10%	\$0
3	\$330,750	-10%	\$683,430	9%	\$0
4	\$353,903	7%	\$806,447	18%	\$0
5	\$414,066	17%	\$967,737	20%	\$0
6	\$496,879	20%	\$1,132,252	17%	\$0
7	\$586,317	18%	\$1,211,510	7%	\$0
8	\$639,086	9%	\$1,090,359	-10%	\$0
9	\$702,995	10%	\$763,251	-30%	\$0
10	\$801,414	14%	\$801,414	5%	\$0
Average		6%		6%	\$0

Accumulation Phase

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Retirement Ph	ase				
	Starting	Annual	Closing	Annual	
Year	Balance	Return	Balance	Return	Withdrawal
0	\$500,000		\$500,000		
1	\$493,500	5%	\$535,800	14%	\$30,000
2	\$324,450	-30%	\$556,380	10%	\$30,000
3	\$265,005	-10%	\$573,754	9%	\$30,000
4	\$251,455	7%	\$641,630	18%	\$30,000
5	\$259,103	17%	\$733,956	20%	\$30,000
6	\$274,923	20%	\$823,628	17%	\$30,000
7	\$289,010	18%	\$849,182	7%	\$30,000
8	\$282,320	9%	\$737,264	-10%	\$30,000
9	\$277,552	10%	\$495,085	-30%	\$30,000
10	\$282,210	14%	\$488,339	5%	\$30,000
Average		6%		6%	

The tables show that during the accumulation phase, the initial \$500,000 investment grows to the same final amount, despite the order of returns being reversed over the 10-year period. However, during the pension / retirement phase where regular withdrawals are made, the order of returns significantly impacts the final balance. Negative returns, particularly early in retirement, reduce investment balances quickly due to the early crystallisation of losses. Prudent use of risk-controlled strategies can help mitigate sequencing risk.

Yield strategies generally look to maximise yield, either by targeting investments that generate a relatively high level of yield or by adopting certain trading strategies to maximise yield. Assets that generate yield will span a wide range of investments, from equity strategies that look to generate a yield higher than that of the market, to fixed income products that generate a yield higher than the cash rate.

These products also span the risk spectrum in terms of capital volatility and other risks, such as sector risk, interest rate risk and so on. Understanding risk in a yield targeting strategy is critical. For example, many fixed income products that generate a high level of yield may be exposed to significant credit risk, while some high yielding equity funds are exposed to increased capital volatility. Furthermore, particularly in the case of equity yield based strategies it is important to assess the sustainability of those yields, particularly in environments where yields are relatively high. In some cases, yield is generated at the expense of capital growth, hence balancing the two is important. Therefore, a retirement strategy solely comprising yield targeting strategies may be sub-optimal to achieve suitable client outcomes as clients will also need to grow their capital base to extend the life of their portfolio in retirement.

As with the basic income component of a portfolio, the lifestyle layer is exposed to several key risks, as detailed in the Appendix.

3. Aspirational

For the majority of clients, achieving basic income and lifestyle goals will meet their retirement objectives. However, some clients will have 'aspirational' goals they want to achieve, often the desire to leave a bequest to the next generation, thereby adding to the complexities of building a retirement portfolio.

It is difficult to manage expectations for such clients because it is often about the level of income and/or capital security they are willing to sacrifice to build a larger portfolio. Such clients would typically be classified under the 'personal' grouping as depicted in Figure 7. Individuals in this

category may be willing to take on additional risk in exchange for increasing the potential value of their remaining assets at the time of their death.

The remaining two groups, dynastic and philanthropic, are typically those fortunate enough to live off the income from their amassed wealth and the portfolio will not move into drawdown as a result of the client's retirement. The needs and objectives for such clients are specialised and fall outside of the realm of this paper.

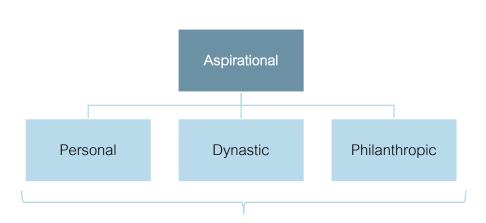


Figure 7: Aspirational objectives

Trade-off between capital growth, preservation and growth

k Profilinc

4. Product selection

The first three steps in the process are the most critical components to building a retirement portfolio as they establish the risk/return parameters. Lonsec believes that a sound strategic approach to constructing retirement portfolios will be the main driver of portfolio outcomes, with product selection being the vehicle for executing the strategy. Product selection should take into account several factors, including:

- 1) Applicability to client circumstances and objectives
- 2) Quality of the product e.g. product research and the financial adviser's own due diligence
- 3) Role within the portfolio e.g. yield generating, risk control, capital growth
- 4) How the products blend with each other understanding of factor risks within the portfolio, strategy diversification, style, market cap bias, sector concentration
- 5) Position sizing how much exposure should the portfolio have to factors such as credit versus duration exposure, large cap versus small cap etc

Lonsec believes retirement products (such as annuities) can be used with the age pension and account-based pensions (or market linked investments) to produce an income profile shown in Figure 8. In this example the age pension and retirement products are used to satisfy basic income needs while an account-based pension is used for lifestyle goals.

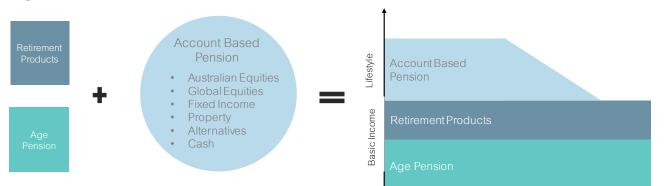


Figure 8: Retirement Income Profile

Lonsec has written a paper titled "Model Portfolio Structure Review - Retirement Lifestyle Model Portfolios" which formulates a set of objectives-based portfolios focused on delivering a sustainable level of income in retirement, as well as generating capital growth. Specifically, the portfolios are designed to assist advisers in constructing portfolios to meet basic and discretionary income needs in retirement, while generating some capital growth to meet investor lifestyle goals.

Importantly, the portfolios have also been constructed to provide advisers flexibility in terms of meeting retiree income and capital objectives, while noting the trade-offs involved between income and capital growth.

Conclusion

Like many developed world populations, Australia has an aging demographic. This is resulting in an increasing number of Australians entering the retirement phase of their investment lifecycle. The financial services industry and specifically portfolio construction approaches and product solutions have been geared to meeting the need of the Baby Boomer investment cohort. The transition of this cohort from accumulation to drawdown will require approaches to portfolio construction and product solutions to evolve to meet the needs of retirees. Furthermore, with the advent of the Future of Financial Advice (FOFA) reforms, Lonsec believes there will be a greater need for strategic based advice, which an objectives-based investment approach is suited to.

Traditional methods of building model portfolios based solely on risk profiles determined by risk profile questionnaires may not address retiree goals and risks adequately. Therefore, the traditional approach to constructing portfolios for retirees needs to be enhanced to incorporate factors that are relevant to retirees such as generating an income stream, reducing the risk of capital drawdown and mitigating inflation and longevity risk.

Ultimately, retiree portfolios should be guided by specific objectives, rather than a simplistic risk tolerance model. This point of difference is demonstrated below.

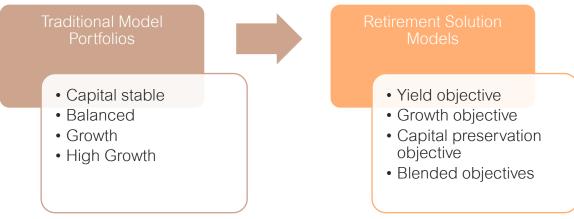


Figure 9: Retirement solutions

Lonsec believes that an objectives-based approach to portfolio construction can assist financial advisers in constructing portfolios that better reflect client goals, while at the same time addressing risks that are relevant to retirees. Ultimately, this approach should assist in reducing any expectations gap between retirement goals and outcomes achieved via investments. In addition, Lonsec has developed a set Retirement Lifestyle Model Portfolios, which may further assist advisers in constructing objectives-based portfolios for retirees.

Appendix – Defining and understanding risks

RISK	DESCRIPTION
Liquidity risk	The risk that arises from difficulty in selling an asset or security and/or a higher cost in selling the security. For example, term deposits are not tradable. They should be held to maturity and should be considered illiquid. Penalties apply for early redemption.
Inflation risk	The risk that inflation leads to an erosion of the real purchasing power of retirement income.
Sequencing risk	The risk of receiving lower or negative returns early in a period when withdrawals are made from the underlying investments. The order or the sequence of investment returns is a primary concern for those individuals who are retired and reliant on the income and capital of their investments.
Longevity risk	The risk that life expectancy increases, eroding one's ability to finance the increasing length of retirement.
Market risk (capital volatility)	The value of investments may decline over a given time period simply because of economic changes or other events that impact large portions of the market. It is effectively the risk that the entire market will fall.
Interest rate risk	The risk that interest rates fall, leading to lower returns on future financial capital.
Legislative risk	The risk that a new law or a change in an existing law could have a significant impact on an investment.
Counterparty risk	The risk that a financial institution providing guaranteed benefits fails, resulting in a loss in retirement income or wealth.

	Tail Risk	Liquidity Risk	Capital Volatility/ Market Risk	Interest Rate Risk	Sequencing Risk
Term Deposits	Low	Med/High	Low	High	Low
Annuities	Low	Med/High	Low	High	Low
Fixed Income (Sovereign & High Grade Credit)	Low/Med	Low	Low/Med	High	Low
High-Yield Fixed Income	Med/High	Low	Med	High	Med
Australian Equities	High	Low	High	Med	High
Global Equities	High	Low	High	Med	High
REITS	High	Low	High	High	High
Equity Yield Funds	High	Low	High	High	High
Variable Beta Equity Funds	Med/High	Low	Med/High	Low	Med
Absolute Return Funds	Med/High	Low	Med/High	Low	Med
Diversified Strategies	Med/High	Low	Med/High	Low	Med