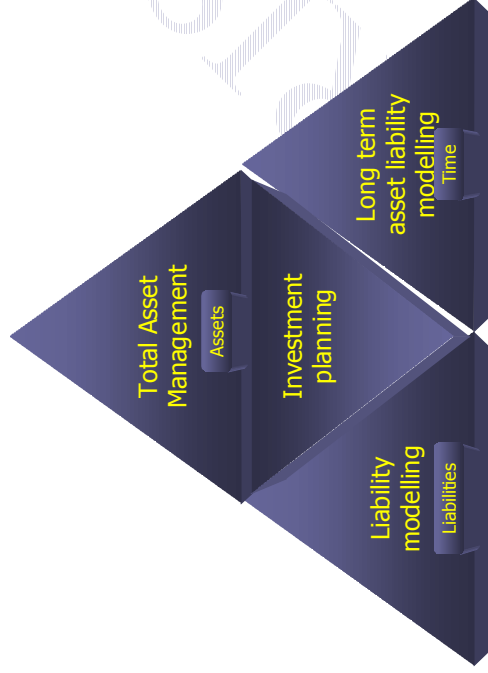


# The TAMRIS CONSULTANCY

## Investment Planning & Asset Management



*"How does a camel pass through the eye of the needle? Easy, it only thinks it's a camel!"*

*"If you cannot solve the problem, change the solution!"*

CONTENT	
TAMRIS .....	2
Total asset life cycle wealth management .....	2
Barriers to total asset, life cycle, wealth management .....	3
Asset/liability management framework (1 to 5).....	3
Portfolio optimisation theory .....	4
Long term asset liability modelling & management .....	4
Mean variance optimisation (5) .....	5
The Investment universe & the universe of client portfolio options (6) .....	5
Valuation, allocation and management (7) .....	6
Risk assessment (6) .....	6
Investment planning & Asset Management.....	7
TAMRIS .....	8

## TAMRIS

TAMRIS is an **Investment Planning & Asset Management** consultancy. Its expertise lies in the integration of **Asset Management** and the management of individual liabilities, **Investment Planning**.

It has developed unique systems, processes and methodologies for the management of total financial assets and needs over an individual's lifetime.

While the asset management industry operates in risk/return space, individual investors live in a liability space. Investors need their assets to meet their short and long term financial needs. Investors live in a short term continuum<sup>1</sup>, the management of which has been largely ignored.

TAMRIS's processes are unique. Portfolios are constructed from the client's liability profile first and risk/return relationships second. Key to this process is its short term asset liability modelling and management engine.

Without this engine it is impossible to automate, personalise and centralise the construction, planning and management of all assets to meet short and long term financial needs<sup>2</sup>. With it, all aspects of the investment planning process are simplified and enhanced from risk assessment to planning to low risk and equity portfolio management.

Mean Variance Optimisation, the industry's asset allocation engine, is an inefficient long term asset allocator and an inefficient manager of risk and return. It cannot manage short term financial security since its structure is not determined by "liabilities at risk".

## TOTAL ASSET LIFE CYCLE WEALTH MANAGEMENT

Total Asset, Life Cycle Wealth Management is the management of an investor's total financial assets to meet total financial needs over their lifetime.

Asset liability modelling and management assesses the ability of assets to meet needs over a client's lifetime and optimises the allocation to low risk assets to protect financial needs against significant stock market and economic risk and, to equities to provide long term return. **Sound familiar?**

- In fact, conventional asset liability modelling does not structure portfolios in accordance with a client's short term liability profile, but uses a required rate of return to select a long term asset allocation. The required rate of return is derived from long term historical data which does not model or manage short term financial risks<sup>3</sup>.

- TAMRIS's short term asset/liability optimiser allows you to personalise asset allocation to short term liability profiles. Without this you cannot structure portfolios to meet short term needs in the face of significant stock market and economic risk. If you cannot manage short term risk, you cannot manage short term needs.

- Conventional asset liability modelling was developed for institutions not individuals. It provides a long term asset allocation structure incapable of managing short term risks to personal financial security.

Portfolios are constructed in accordance with the interaction of client liability and risk profiles and a firm's investment strategy and, exactly reflect client needs, preferences and expectations.

The amount allocated to low risk assets, to cash, to fixed interest and specific maturities, to equities, to each global market, to each specific market allocation (market cap, style, and yield) is unique to each client.

- It is only possible to personalise low risk allocation through short term asset liability modelling and management. The liability management framework provides a structure that can run an infinite number of low risk portfolios from one central allocation and security selection.
- TAMRIS's Valuation, Allocation & Management structure, delivered through liability management frameworks, manages an infinite number of personalised equity portfolios.
- In other words, the management of assets within a liability management framework.

Total risk assessment ensures that all factors affecting portfolio structure, performance and management are dealt with at outset.

Today's standard risk assessment is derived from mean variance optimisation structures. TAMRIS's risk assessment assesses the real physical universe; assets, and asset risks, liabilities and liability risks within a time continuum.

## BARRIERS TO TOTAL ASSET, LIFE CYCLE, WEALTH MANAGEMENT

There are major barriers to the personalisation and management of assets and liabilities over time.

1. Every client's financial needs, assets, preferences and size and timing of portfolio inflows and outflows are different and have a unique impact on portfolio structure, planning and management.
2. Investors have a finite amount of capital. How do you balance short and long term financial needs against the short and long term structure of the portfolio?
3. If you are managing financial security, you need to ensure that significant risk should not affect the portfolio's ability to meet planned short and long term financial needs.
4. You cannot manage financial needs without managing all assets and, you cannot manage assets to meet needs without knowing all financial needs and a framework to structure and manage.
5. Modern portfolio theory has hindered the development of asset liability management. Mean variance optimisers do not construct efficient portfolios, lack a liability framework needed to manage all assets and financial needs and short term financial security.
6. Every asset manager operates in and every investor exists in the same value and risk universe, but they occupy different positions within it.
7. How do you deliver personalised asset management without having to personally manage? Model portfolios are by nature only applicable to a broad objective. How do you deliver a model portfolio structure personalised to liability and risk profiles? How do you deliver portfolios that can be managed individually yet run centrally?

The management of personal financial needs and assets over time is complex and the solution requires a multi disciplined approach. This has in itself been a significant barrier to change.

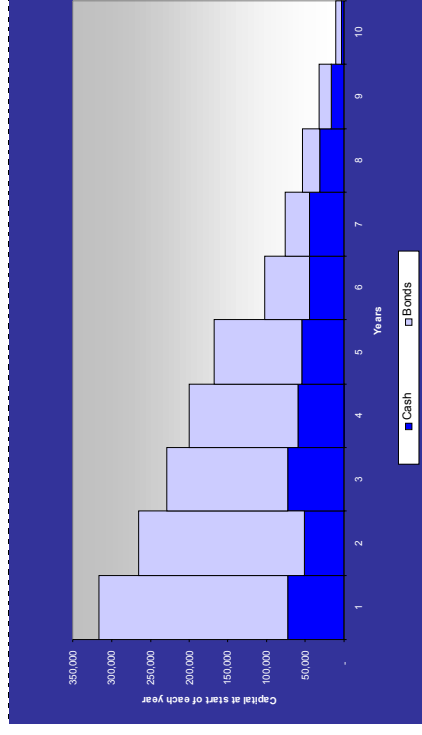
## ASSET/LIABILITY MANAGEMENT FRAMEWORK (1 TO 5)

TAMRIS's short term liability modelling and management optimiser solves problems 1 to 5.

The model takes a client's short term liability profile (inflows of income and capital less outflows), passes it through a low risk allocation and security selection framework and optimises the allocation to individual low risk securities and the equity portfolio. Its outputs are detailed and specific providing a personalised recommended structure and an allocation, benchmark and liquidity analysis for the management of existing portfolios.

It is the only structure which is derived from an individual's liabilities at risk and optimises the short and long term portfolio structure to short and long term financial needs.

The following is a graphical illustration of the short term asset/liability income and capital security modelling. Under fair market conditions "realistic" investors would, on average, be allocated sufficient low risk capital to meet needs in the event of significant risk.



The chart illustrates the security provided by low risk securities in the event that equity investments could not or should not be sold<sup>vi</sup>. This allows investors to ride out periods of risk without having to sell equities to meet needs, provides a stable platform for the provision of long term income security and a discipline for equity return management.

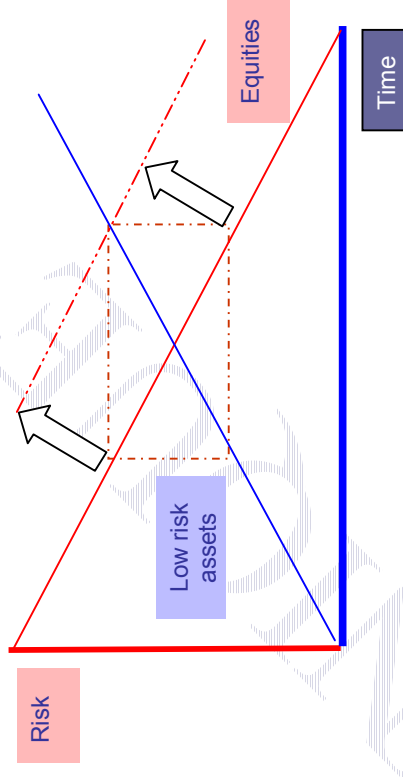
## PORTFOLIO OPTIMISATION THEORY

The rationale for the asset liability allocation and management framework is based on the following fundamentals; together they represent the basis for “Portfolio Optimisation in Liability Space”, replacing Mean Variance Optimisation as the primary asset allocation engine:

- The return on cash, fixed interest and equities are all components of the same return; the return on capital. Over the long term there are no risk reduction benefits of holding cash and fixed interest investments.
- Over the short term, an investment in equities is exposed to stock market (valuation risk) and economic risk. Where liabilities need to be met from assets, equities cannot be relied upon to meet short term financial needs.
- Over time low risk assets are exposed to inflation risk. Analysis of the risks to equities and the risks to low risk assets show that beyond certain time frames the risks on lower risk investments exceed the risk on equity investments.
- There is therefore an optimal period for holding low risk assets to meet short term liabilities in the event of significant risk. Managing this period is the key to the provision of financial security and determines the actual low risk allocation relative to liabilities.

This optimal holding period is one which also neutralises the impact of short term stock market volatility (standard deviation) on financial security. The structure therefore manages liability risk (guarantees short term financial liabilities), volatility risk (volatility has no impact on financial security), economic risk (time frame covers risks of recessions), valuation risk (covers risk of stock market crashes) and inflation risk (optimises allocation to real assets); four risks in one, instead of one risk alone.

The above four points provide the basis for a theoretical and practical framework for the optimisation and management of portfolios in liability space. The following is a graphical illustration of the structure.



The red line shows the risk on equities falling over time (relative to return), the solid blue line, shows the effect of cumulative inflationary risk over time on cash and fixed interest. The dashed red line shows the effects of excessive market valuation on short term investment risk and expanded time frames needed to cover this risk. Conservative management dictates a minimum threshold to cover the risk of uncertainty.

## LONG TERM ASSET LIABILITY MODELLING & MANAGEMENT

If you cannot assess the risks of planned future expenditure on the ability of assets to meet needs, you cannot advise on the planning of assets to meet needs.

Most retail asset liability modelling is restricted to simple compound interest calculations with side by side capital withdrawals. While the simple compound interest models may be fine for projecting future capital values, they neither relate financial needs to portfolio structure nor do they provide a framework for managing either.

Many of these models use historic return or simulations of historic data to generate future return assumptions. While an historic average long term return may be realistic if the market is at an average historical valuation, it can produce over optimistic return assumptions on which to base the management of short and long term financial security. TAMRIS’s return assumptions do not extrapolate the past, but the risks of present economic and market conditions on future return.

Because TAMRIS's long term modeling has a short term asset liability optimizer, it can integrate the management of all financial needs and assets (Insurance, school fees, retirement, estate planning) within one central, integrated planning, allocation and management framework. This is investment planning & asset management.

- Do the clients need to reduce expenditure, increase savings (before retirement)?
- Can they afford to defer taking their pensions? What is the maximum amount they can spend in early retirement? What is the most appropriate level of pension to take from pension funds? What is the best allocation of assets between pension funds and personal assets?
- Is there an estate planning problem? What gifts can they make from their estate without affecting their financial security? How do they balance their wish to leave assets to their children against the need to support their own needs?
- Is there a life insurance requirement? Is insurance a viable cost given the capital available? Do they have enough assets to cover nursing home needs etc?

## MEAN VARIANCE OPTIMISATION (5)

Mean variance optimisers are long term structures derived from an average historical risk, return and relative price movement. Because structure is based on long term averages, they are incapable of dealing with current valuation risks and return opportunities.

Because the structure is derived from a long term average of a short term risk, the structure is not designed to protect short term financial needs against significant stock market and economic risk.

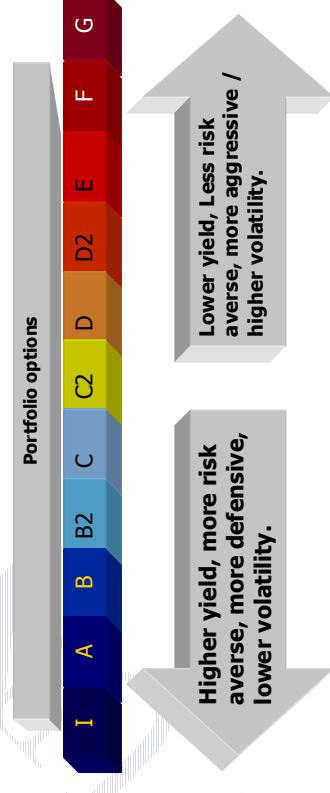
By replacing the mean variance optimiser TAMRIS has taken away the rationale for simple portfolio construction and delivery systems that needed minimum investment expertise to operate.

The implications are important. Investment planning services need a direct relationship with asset management expertise. The question is how to integrate equity portfolio management with the management of liabilities.

## THE INVESTMENT UNIVERSE & THE UNIVERSE OF CLIENT PORTFOLIO OPTIONS (6)

*"Every asset manager operates and every investor exists in the same value and risk universe, but they occupy different positions within it."*

Additionally, each investor's position in the universe will also be a function of his or her liability profile. To provide equity solutions for the management of personal financial wealth you need to be able to define your position in the universe of risk and return and your position relative to the universe of client liquidity and yield requirements and performance risk preferences. For example, note the following.



The primary structure is a liquidity/yield one. Because of the short term asset/liability model, the yield relationship with the client's net yield requirement does not need to be direct.

Your universe of portfolio options is defined by your investment discipline, your resources and your choice of allocation vehicles, all of which act as constraints on the allocation universe and determine the universe of portfolio options. Your position within the universe is more difficult to determine, but it is essentially determined by your investment preferences.

- In general, investors prefer greater security and certainty of earnings to uncertainty and, more earnings growth to less. Because they prefer more or less the same characteristics, they all tend to congregate in the same areas of the market. As the market is efficient in matching demand and supply and all information is more or less available to all investors, it is difficult, but not impossible to outperform with conventional risk preferences.

- The only way to outperform the market over time is to take a contrary position to the market, to have non conventional risk preferences, to buy areas where there is less demand, less certainty and greater perceived risk.

It is this deviation from the market which is the starting point for determining the investment universe and the universe of portfolio options. The universe is large, ranging from smaller companies and global emerging markets to larger companies and mature global markets, from active styles to index investment. The universe will need to adjust to both liability and risk profiles.

This is complex and requires expertise in valuation, allocation, security selection, portfolio construction, risk and return management.

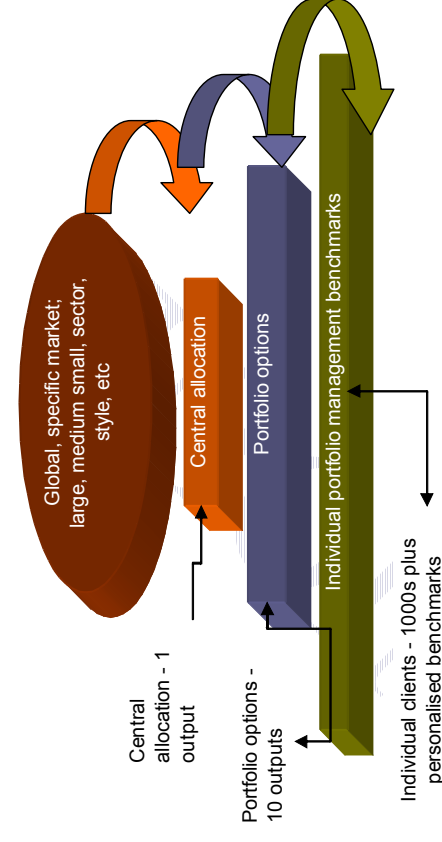
## VALUATION, ALLOCATION AND MANAGEMENT (7)

Valuation lies at the heart of asset management. If you cannot value you cannot manage risk or allocate and, if you cannot allocate you cannot personalise the automation of allocation and management.

If you can value then you can place your valuation parameters and disciplines into a framework. You can then adjust this framework to produce allocations for the universe of client net yield requirements and return objectives. These allocations can then be used to construct portfolios and benchmarks to manage them. Effectively 1,000s of personal portfolios can be run centrally.

From one central allocation to the domestic and global market, thousands of personalised allocations can be produced reflecting liability and risk profiles. Manage the central allocation and, the relative framework manages the rest. Please see TAMRIS; Valuation, Allocation & Management and TAMRIS; Personalised Model Portfolio.

TAMRIS has developed a relative valuation framework that dynamically manages global and specific market allocations and replaces MVO as a more effective manager of short term risk and return.



Personalisation is a cost if not properly managed. In the past, because of the complexities of managing all assets and personalising portfolios, this cost has been passed to the client. TAMRIS provides a solution to managing this cost and one that adds value while simplifying and managing complexity.

Critically, the foundations of personalisation are laid by TAMRIS's liability management framework. This links all assets to financial needs, thereby creating a direct relationship with portfolio structure.

Without such a framework the costs and complexity of applying central investment expertise to the personalised management of assets, liabilities and risk preferences have prohibited its effective distribution.

## RISK ASSESSMENT (6)

A liability management framework and a clearly defined set of equity portfolio options provide an effective basis for education, communication and risk assessment.

A liability management structure ensures that the client has an effective benchmark for assessing attitude towards liability or stock market risks. The client is faced with an allocation which is designed to protect his financial needs against the most significant of risks likely to affect him or her over time. Instead of trying to work out what allocation they need or what portfolio is most appropriate to them as with conventional risk assessment, the decision is "do I want more security or more return, or is

the security provided enough? See TAMRIS; Weaknesses of Conventional risk assessment for further information.

As with regard to the equity portfolio, the investor is able to fully assess the risks of the portfolio not just in terms of price movement, but more importantly in terms of performance risks. The investor decides the risks he or she wants to take, more or less diversification, more or less performance risk or none at all (index option).

There should be no doubt as to what the investor is getting and provided the investment input supporting the service is sound, impartial and disciplined, the investor should get more or less what they have agreed to.

Critically, the TAMRIS process is a service based process, its risk assessment is designed to reaffirm long term client advisor relationships. Education and regular communication of risks, rewards and relevance of risk assessment to the structure and requirements of the portfolio important is critical.

Within TAMRIS's risk assessment there are no vague questions regarding time frames, there are no vague questions regarding objectives. A liability management framework as opposed to a risk/return framework performs a detailed analysis of the client's financial needs and assets both now and in the future. The time horizons, size and timing of withdrawals and portfolio objectives are all clear from the asset/liability relationship and it is the relationship which determines the primary portfolio structure.

## INVESTMENT PLANNING & ASSET MANAGEMENT

Investment Planning (liability management) & Asset Management is an integrated business and investment led service process; expertise (liability management & asset management), systems (IP&AM decision rules), services (Investment Planning/Total Asset, Life Cycle, Wealth Management).

- IP&AM systems are not tools which can operate independently of the investment expertise needed to support and manage them. They need a central investment resource to operate them.

- The concept of IP&AM systems is different from traditional software solutions. Most software is designed for independent operation, not a dependent relationship to a centralised expertise.

- Investment planning is not a financial planning but an investment management discipline.

If you want to manage assets and liabilities you need IP&AM systems that can analyse complex financial needs over time, construct portfolios to meet these needs, distribute and adjust investment strategy, allocations and recommendations for individual needs and preferences and, dynamically update, strategy, allocations and recommendations in response to market movements. These systems do not exist at the present moment in time.

You also need IP&AM disciplines that determine the integration of asset management with the management of liabilities over time, define decision rules that personalise portfolio structure and management to liability profiles and, automate the relationship between risks (liability, volatility and performance risks) and portfolio structure. TAMRIS is the only consultancy with these disciplines.

A central investment unit (CIU) responsible for system use, system management, asset management research and development, security selection, asset allocation, central portfolio management, system development and quality control

Organisations that do not have either an internal central investment resource or an integrated relationship with a third party CIU resource capable of managing IP&AM systems will not be able to deliver this service.

- If your objective is to sell products and earn transaction returns, the service based proposition of TAMRIS Total Asset, Life Cycle, Wealth Management, is not for you.
- If your objective is to focus solely on an asset management components as opposed to private client portfolio management, Total Asset, Life Cycle, Wealth Management is not for you?

---

## TAMRIS

---

TAMRIS is the only consultancy currently offering **IP&AM** expertise, the only consultancy with expertise in running **IP&AM** services and the only consultancy that has developed and run integrated **IP&AM** systems.

TAMRIS is not selling software, nor does it provide a central investment resource, these are not its objectives. There are many companies capable of developing software and managing assets.

Every organisation has a different way of working, a different investment discipline, different market segments and business objectives. TAMRIS's objective is to use its expertise to help these companies develop their own solutions to the management of assets and financial needs.

---

<sup>i</sup> This is not a criticism. A manager of smaller companies is not running his stocks to meet the universe of portfolio objectives, but a portfolio manager charged with managing financial needs should have this brief.

<sup>ii</sup> Short term continuum; long term is the future short term, as time passes the future continuously shifts into the present, to all intents and purposes there is no clear break between the present and the future.

<sup>iii</sup> See TAMRIS Investment Planning.

<sup>iv</sup> See TAMRIS Asset Liability Modelling for further information on the problems of required return and historical data simulation.

<sup>v</sup> A realistic investor is someone who accepts the organisation's recommended allocation for the client's long term liability profile. For further information see TAMRIS Risk Profiling.

<sup>vi</sup> The low risk portfolio is not designed to be run down. During periods of fair to high market valuations, equities are realised to rebuild the low risk portfolio.