



I founded XLX Capital, an advisory firm based in London, dedicating it to providing effective advice on Capital Allocation and Portfolio Management to HNW investors and Family Offices.





The firm's name is important. XLX is derived from the Greek word Exelixi (gr.E ξ έ λ ι ξ η) meaning Evolution. It embodies and explains what we do, our continuous commitment to deploying adaptive and innovative strategies to capture robust returns with favourable risk-reward profiles.

Designing and deploying investment strategies is a very wide and expansive mandate. After all, in any of the variants of this exercise, always with very real implications on the welfare of all agents involved in the process, it is only and strictly the outcome that counts.

How we differ is that rather than simply

engineer a strategy and start deploying it, at XLX we reverse engineer a strategy that assures the desired outcome with a high degree of certainty. Thus, we define the end goal and begin to design a strategy that is most likely to fulfil this predominant expectation.

This can be something as simple as the statement, "make as much money as possible", or, more often than not, as complex as some of the objective functions that constrain the investment processes of large institutional investors such as pension funds and insurance companies.

Be that as it may, the art and science of investment management, with deep roots in the fundamental practical and philosophical concepts of economics, is not a simple exercise in following trends and acting with some degree of common sense – it is a process requiring a high degree of anticipation, taking into account potential changes and shocks to the general economic situation that provide opportunities for achieving the objectives of the process.

As mentioned, objectives can vary quite substantially, depending on the agents. XLX Capital focuses on a particular group of investors and helps define a specific objective function that helps determine capital allocation and portfolio management parameters. Predominantly working with High Net Worth Individuals and Family Offices, we consider the needs of the specific group of investors. We have a particular focus on the word 'family'.

Providing for your Family

HNW families often experience two significant challenges in managing their wealth for both current and future generations. First, their net assets can be invested in such a way as to exhibit an uncomfortable level of volatility and, second, the purchasing power of their wealth is reducing too rapidly over time, such that future generations may risk not enjoying the same standard of living as the present generation.

When approaching the issue of real purchasing power, we must factor in all

of the performance drags, particularly inflation, friction costs, and taxes.

(Family assets can be invested in such a way as to exhibit an uncomfortable level of volatility and the purchasing power of their wealth is reducing too rapidly over time.)

It has been our experience that most Family office (FO) or indeed Private Banks (PB) approach the issue of wealth preservation as a pure investment management issue, seeking for the most part what is perceived as low-risk investments that ensure some minimum return to the stakeholders. We feel that not enough thought is given to ensuring the real value of the disposable wealth and the real purchasing power of future generations.

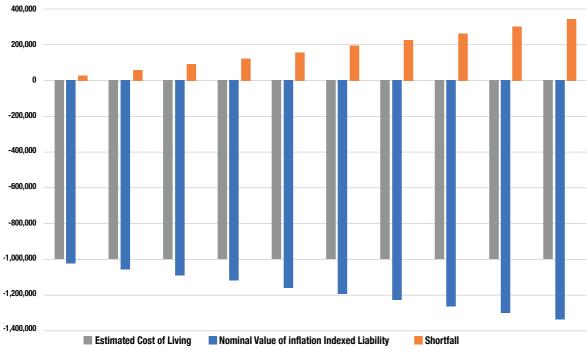
(A Family Office must ensure. inter-generational preservation of wealth, such that successive generations live as well as their parents and enjoy the same purchasing power in real terms.)

The issue of intergenerational preservation of wealth can only be achieved by the application of Asset-Liability Management (ALM), seeking to match the real costs of living (i.e., adjusted for inflation and other above-mentioned costs) with real returns on capital, within the constraint of available capital.

The application of a sophisticated ALM approach to wealth management is, typically, only accessible to either large institutional investors or indeed families and UHNW investors with considerable assets – it is certainly not the norm in the FO and HNW investment management space.

I see our role as bringing an understanding and unique access to alternative asset classes, everything from structured debt to art, that offers the potential for convex pay-outs that underpin a successful multi-generational strategy.





The above graph shows a Planning Discrepancy - Shortfall of Cash at Assumed 3.00% inflation per annum

Let us illustrate this process for greater clarity. The ALM process seeks to initially determine the real cost of living of multiple generations of a family and treats these costs over time as a Liability that needs to be matched by a performance

of Assets (investments).

We then seek to generate real returns i.e. adjusted for inflation and other costs. Let us consider one of these costs, inflation, in a hypothetical scenario with a 3.00% inflation rate each year for the following 10 years and

an expected outflow of EUR 1 million per year. Our investor would thus have a profile such as we can see in the graph.

To maintain the purchasing power of the projected cost of living, our Assets would have to generate a return at least equivalent to the total value of, in this case, Inflation-Indexed Liability (ie, the real cost of living) to preserve the purchasing power of initial capital.

In the example, our total cost of living over 10 years is EUR 10 million, however, our real cost is EUR 11.8 million. The Objective Function we need to optimize, therefore, is:

 $Return(Portfolio)_{t} \ge Expected\ Outflow_{t}^{*} (1 + Rate\ of\ Inflation_{t})^{t}$

As such, in each period 't', the portfolio return at least matches the projected cost of living adjusted for the expected loss of purchasing power in that time. This approach is equivalent in periods of either inflation or deflation – the Objective Function adjusts to both (a) current expectations of inflation as well as (b) periodic changes in inflation outlook over time.



In practice, a typical FO investor will hold a variety of assets generating returns by the Objective Function. We use the notion of Expected Future Outflow to optimize the Objective Function (OF), irrespective of whether these outflows are paid out to the investor or capitalized in the portfolio. The OF simply ensures that some minimum condition for portfolio allocation is met. We seek to create a custom-made portfolio based on risk premia diversification as opposed to simple diversification of assets and asset classes. This is because each asset can be described as a linear combination of a bundle of risks plus some idiosyncratic value attributed to that particular asset.

As a very simple example, consider holding the shares of Apple. We can describe the Return on holding the shares of Apple at a particular point in time as a portfolio of all associated risks with this particular stock (and/or company) such that:

 $Return(Apple)_{t} = \alpha(Apple)_{t} + \beta 1(Risk\ Free\ Interest\ Rate)_{t} + \beta 2(SnP500)_{t} + \beta 3(NASDAQ)_{t} + \beta 4(US\ TECH\ SECTOR)_{t} + ... + \beta n(Factor\ n)_{t} + \varepsilon_{t}$

At any given time 't' we can identify several factors 'n' that contribute to or influence the value of the shares of Apple (β 1 to β n) as well as the idiosyncratic risk of the company,

designated Apple, which is the risk premium of holding Apple shares. The implication here is that, to take risk on Apple on its own, we would need to hedge all other risk factors designated $\beta 1$ to βn .

Our simplified example can be generalised to an entire portfolio of risk premia covering all major tradeable asset classes.

Risk premia portfolios

Individual clients of the FO will hold different portfolios of the underlying risk premia, based on their capital constraint and Objective Function, whilst the investment manager will offer a global risk premia diversified portfolio to its clients as well as ensure individual portfolio allocation following individual constraints and needs.

One clear advantage of this type of Portfolio Allocation is that it results in simple and manageable portfolios containing a minimum number of instruments or strategies. Given that most assets can be described as a bundle (or a portfolio) of individual risks, we seek to only hold the assets that best represent a given set of risk premia as opposed to a large number of assets.

This way, we minimize the total risk of the portfolio whilst increasing the Expected Return, with the obvious benefit of keeping the costs of the management low.

Diversification process

Our approach is a departure from the very classical approach in finance commonly termed "diversification" of assets. The diversification, in this context, stems from empirical properties of returns on financial instruments as well as, quite simply, the mathematical properties of variance. Going one step further, we consider assets in and of themselves to be bundles of risk premia and apply the diversification process on these constituent parts of asset returns.

Assets and asset classes are, nonetheless, the starting point of our analysis and we will delve into the details of our approach in the next article. This will also examine the performance of a live investment portfolio, particularly during the period from January 2020 to September 2020, including, arguably, the worst financial crisis since 2008.

We will present our thoughts and ideas for the future implementations of our strategy, in line with the new macro-economic paradigm which we believe will underlie both the economic recovery and the economic evolution over the foreseeable term.