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# **The Evolution of Value-Added in Private Wealth Management and the Asset-Liability Management Approach**

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# EDHEC-Risk Institute

## Combining academic excellence and industry relevance to impact practices

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- Corporate governance and internal/external validation processes to maintain focus on issues central to the profession and guarantee that all activities combine **academic excellence** with **industry relevance**.
- Particular attention given to **dissemination of research** towards end-users via a multifaceted communications policy, industry outreach activities, and executive education programmes.

# Outline

- **Challenges in PWM**
  - Post-crisis interrogations
  - Responding to client needs
  - Diversification and Hedging: The concepts
- **The Value-added of ALM in PWM**
  - Illustration 1: Preparing for Retirement
  - Illustration 2: Preparing for Real Estate Acquisition

# The Market for PWM

## Post-Crisis Questioning

- The value-added of legal/fiscal advice of private wealth managers is widely recognised.
- In the aftermath of the financial crisis, however questions on the investment solutions of private wealth managers arise, as clients perceived that risk management has failed
- From products to solutions?

# Challenges in Private Wealth Management

## Responding to Client Needs

- Private Wealth Managers generally see **customised** advice as a key source of their value added.
- The close client relation allows PWMs to address specific investor objectives and risk definitions.
- The academic literature on asset allocation provides insights on a range of factors that affect investors' optimal portfolios including
  - consumption and bequest objectives ('liabilities')
  - background income (e.g. human capital)
  - time horizon
  - risk aversion
- However, implementation of customised asset allocation models remains a challenge in practice.

# *Diversification and Hedging*

- All private investors need to invest in two distinct portfolios (“fund separation theorem”)
  - **Performance-seeking portfolio (PSP).** This portfolio maximizes the Sharpe ratio through **diversification**.
  - **Liability-hedging portfolio (LHP).** This is the risk-free asset from an ALM perspective, typically invested in nominal or inflation-linked bonds with duration matching the investor’s investment horizon. Liabilities have to be **hedged** away.
- The allocation to the PSP is increasing in PSP Sharpe ratio and decreasing in PSP volatility and investor’s risk-aversion.
- This separation can be extended to a situation where additional hedging portfolios arise: For example, investors should hedge against adverse changes in background income

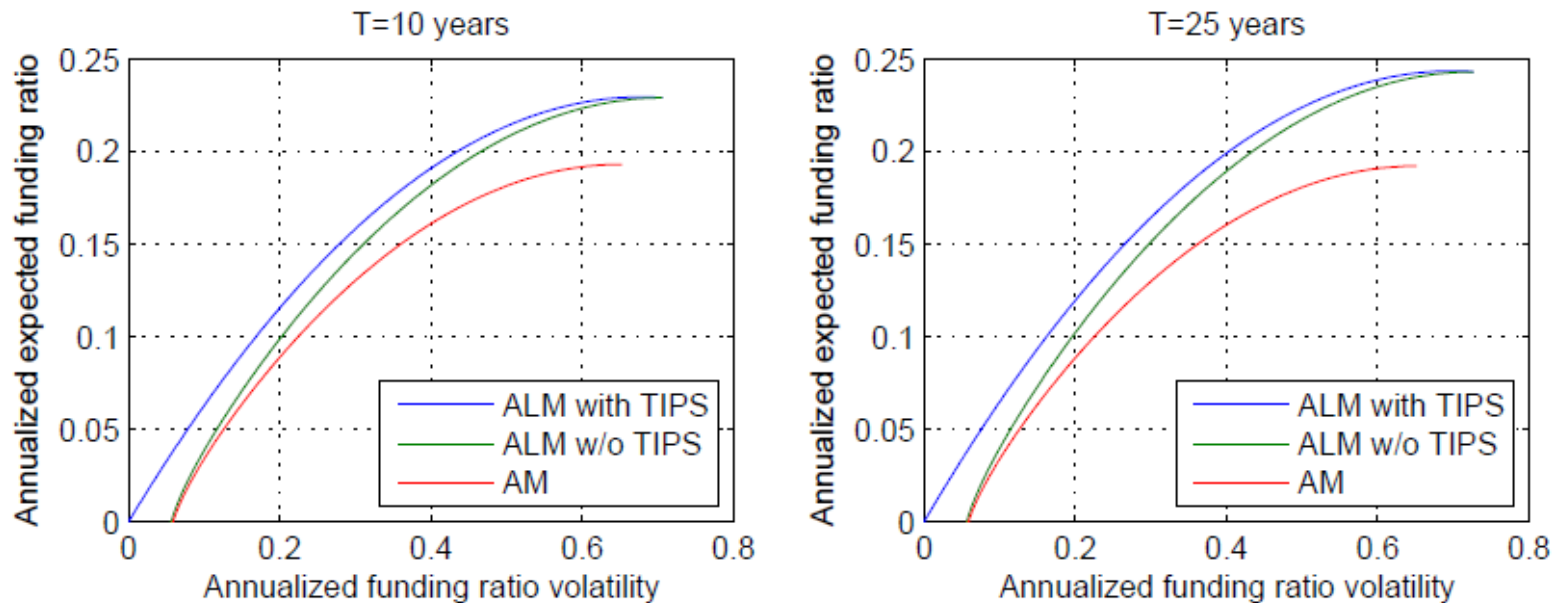
# *Preparing for Retirement*

- Client problem:
  - We consider an individual preparing for retirement.
  - His/her goal is to ensure inflation-protected payments (normalized at €100) at a given time-horizon ( $T=10$  or 25 years).
- This illustration is highly stylized in nature, and the presence of additional ingredients would need to be accounted for:
  - Differential tax treatments for different forms of investment
  - Flexible contribution as well as consumption schedules.
  - Revisions of SAA and additional hedging demands
- A number of useful insights can still be learnt from this stylized analysis, in particular that failing to adopt an ALM approach will generate very substantial opportunity costs for the private investor.

# *ALM versus AM*

- The ALM exercise consists of finding the portfolios that are optimal for protecting investors' liabilities, while recognizing the horizon-dependencies in risk-return parameter estimates.
- Two versions exist:
  - ALM+: liability-matching with investable proxy for liabilities available
  - ALM-: liability-hedging with investable proxy for liabilities not available
- A pure asset management exercise, on the other hand, has a myopic focus on designing portfolios with the optimal risk-return trade-off, without taking into account the presence of liabilities nor the time-horizon.

# ALM versus AM



A portfolio efficient in an AM sense (nominal wealth) is not necessarily efficient in an ALM sense (real wealth); introducing the inflation-matching asset allows for further reduction in risk (relative to liabilities). When risk-aversion decreases,  $ALM = AM$  because hedging demand disappears.

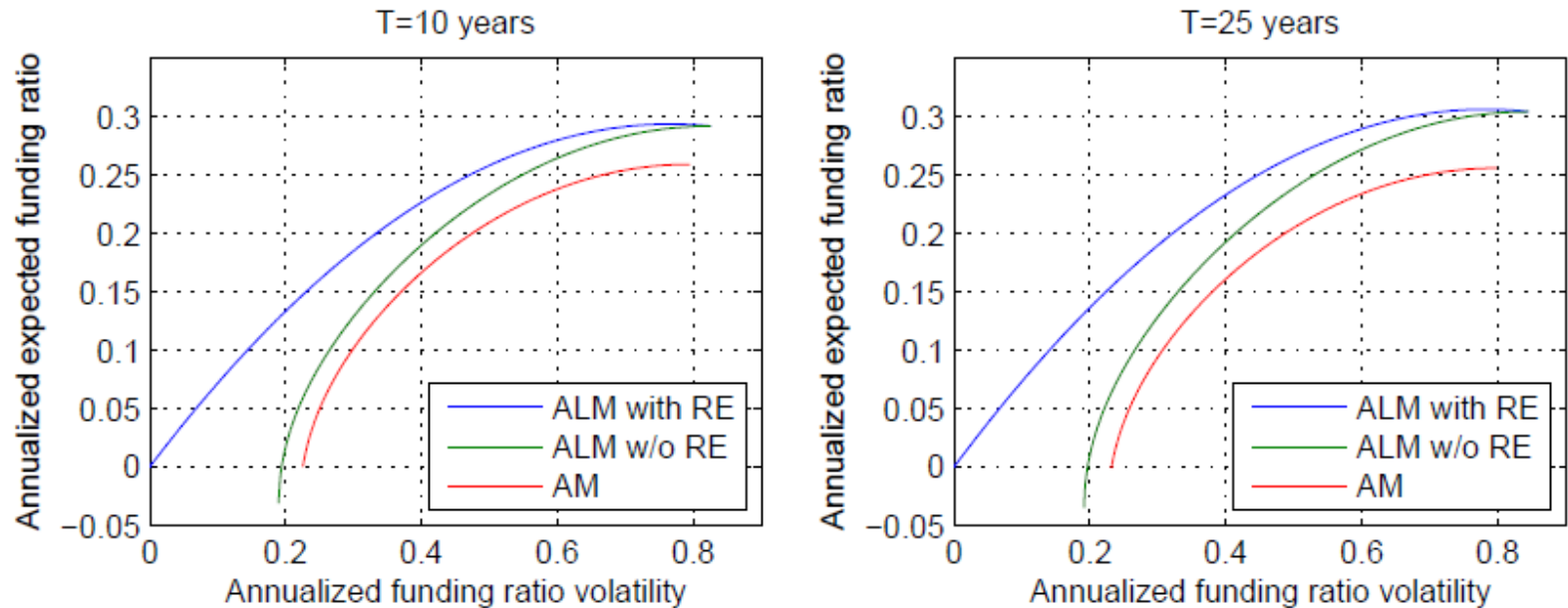
# *Inflation Hedging*

- These results emphasize the benefits of a focus on liability/inflation hedging.
- Inflation-linked securities, and most importantly inflation-linked bonds, are a priori the most natural hedge against inflation, but they are a costly investment opportunity and market capacity is limited.
- Other asset classes (commodities, real estate) exhibit attractive inflation-hedging properties, which are under-estimated when staying at the broad asset class level.
- In fact, one may envision to select securities or subcategories within asset classes on the basis of their liability hedging properties, as opposed to selecting them on the basis of their expected abnormal performance.
- Separation of the portfolio into PSP and LHP allows to be disciplined when selecting asset classes and allocating to them.

# *Preparing for Real Estate Acquisition*

- We now consider an investor who wishes to prepare for a future expenditure, e.g., buy a property in  $T$  years, which current value is normalized at 100, and which future value evolves according to some stochastic property index value.
- We consider several cases:
  - We distinguish between the AM and ALM case
  - Within ALM, we distinguish between the case where the real estate asset is present versus absent in the asset mix.

# ALM versus AM



A portfolio efficient in an AM sense (nominal wealth) is not necessarily efficient in an ALM sense (real estate used as a numeraire); introducing the real estate asset allows for further reduction in risk (relative to liabilities).

## *Conclusion: ALM+ > ALM- > AM*

- The introduction of a single additional state variable, the value of the household liability portfolio, allows accounting for investors' specific constraints and objectives in a parsimonious and tractable way.
- Our analysis has shown that adopting an ALM perspective to private wealth management generates two main benefits.
  - it has a direct impact on the selection of asset classes (leads to a focus on the liability-hedging properties).
  - it leads to optimize risk and return in relative, as opposed to absolute, terms, with the liability portfolio used as a benchmark or numeraire.
  - In asset management, the risk-free asset for any investor is cash. In ALM, the risk-free asset is not unique. It is the asset that best hedges the future consumption needs of the investor (e.g. real estate as in the last example).

# References

- Amenc, N., F. Goltz and D. Schröder, 2009, “Private Bankers on Private Banking: Financial Risks and Asset Liability Management”, *Journal of Wealth Management*, 12(3), 39-50
- Amenc, N., L. Martellini, V. Milhau, V. Ziemann, 2009, “Asset-Liability Management in Private Wealth Management”, *Journal of Portfolio Management*, 36(1), 100-120