

An EDHEC Risk and Asset Management Research Centre Publication

Reactions to an EDHEC Study on Asset-Liability Management Decisions in Private Wealth Management

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ORTFCfinance



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Asset Management Research

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Foreword

The publication that we are pleased to present here covers the industry reactions to an EDHEC study entitled "Asset-Liability Management Decisions in Private Banking," which was drawn from EDHEC's ALM and Asset Management research programme. That paper discussed the sources of added-value in private wealth management, and argued through a series of illustrations that asset-liability management is the natural approach for the design of truly client-driven services in private banking.

The objective of the current paper is to compare the conclusions drawn by the "Asset-Liability Management Decisions in Private Banking" study with current industry perceptions. The basic question we are asking is: what do practitioners think about using asset-liability management in private wealth management?

The present publication is part of a research chair in private asset-liability management, led by Professor Lionel Martellini, Scientific Director of the EDHEC Risk and Asset Management Research Centre, which the centre is pursuing in partnership with ORTEC Finance.

Research in this programme will focus on the superiority of the ALM approach in private wealth management (PWM), with special attention being given to life cycle asset allocation. Subsequent research in

the course of the three-year project will examine the shortcomings of current PWM practices, putting them in perspective in relation to best practices for ALM in PWM, and also look at the consequences of high levels of inflation for ALM in PWM. The latter will involve general inflation (global price index) or particular cases of inflation, e.g., the inflation exposure of HNWIs.

We hope that you will continue to monitor and contribute to our research in this area and we would like to thank all the respondents who took the time to react to our study. Without their participation, this publication would not have been possible.

We would also like to extend warm thanks to our partners at ORTEC Finance for their commitment to this research chair and their close involvement with our research.

We hope that you will find the results of our call for reactions both interesting and informative.



Noël Amenc, PhD,
Director of the EDHEC Risk and Asset
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About the authors



Noël Amenc is Professor of Finance and Director of Research and Development at EDHEC Business School, where he heads the Risk and Asset Management Research Centre. He has a Masters in Economics and a PhD in Finance and has conducted active research in the fields of quantitative equity management, portfolio performance analysis, and active asset allocation, resulting in numerous academic and practitioner articles and books. He is Associate Editor of the *Journal of Alternative Investments* and a member of the scientific advisory council of the AMF (French financial regulatory authority).



Felix Goltz is a senior research engineer and co-head of the indices and benchmarking research programme with the EDHEC Risk and Asset Management Research Centre. His research focus is on asset allocation involving alternative investments, such as hedge funds and derivatives, and on equity indexing strategies. Felix holds a Ph.D. in Finance from the University of Nice Sophia-Antipolis, and has studied economics and business administration at the University of Bayreuth, the University of Nice Sophia-Antipolis and EDHEC.



David Schröder is a senior research engineer at the EDHEC Risk and Asset Management Research Centre. David obtained his PhD in Economics from the University of Bonn. During his doctoral studies, he was also affiliated with the Centre de Recherche en Economie et Statistique (CREST) in Paris. His research focuses on empirical asset pricing, the predictive power of equity analysts' forecasts, and decision making under ambiguity. He is a member of the Econometric Society, and has presented at many international economic and finance conferences.

Introduction

With the great economic growth of the past decade, private wealth management has become a very profitable business for banks worldwide.¹ As a result, more and more asset management firms have jumped into the fray and competition has increased steadily. These industry changes have led to renewed attempts to improve client relationships and to develop tools and methods to enhance advisor effectiveness. Catering to the client's specific needs is thus a central concern of private wealth managers. To take the client objectives into account, investments are frequently adapted to the client's risk aversion, tax situation, and investment horizon.

The specific requirements of portfolio decisions in private wealth management have recently been examined in great detail by academic financial economists. Campbell (2006)² argues that the development of optimal decision-making models for private households "is challenging because households face a number of constraints not captured by textbook models". Campbell (2006) lists a long planning horizon, substantial holdings in non-tradable or illiquid assets, taxation, and borrowing constraints as key ingredients that put private investment decisions at odds with the assumptions in most academic asset allocation models.

Interestingly, there are tools and methods in institutional asset management that have been designed precisely to incorporate the specific constraints and objectives of long-term investors. Many pension funds or insurance companies adapt their portfolio management processes to deal with the presence of future financial

objectives or constraints.³ Although widely used by institutional investors and their asset managers, this approach to money management is not often used in private wealth management. A recent publication⁴ of the EDHEC Risk and Asset Management Research Centre has assessed the potential benefits of using ALM techniques in private wealth management. The bottom line of the study is that the presence of specific financial objectives significantly changes the composition of the optimal portfolio, and that taking these constraints into account with suitable ALM techniques leads to significant reductions in shortfall risk.

The objective of this paper is to compare the conclusions drawn by the paper and current industry perceptions. The question we pose is: what do practitioners think about using ALM in private wealth management? For an idea about private bankers' view of the potential benefits of ALM, we called for reactions from private bankers and asset managers. This study not only describes these reactions, but also provides a short review of the fundamental idea of making ALM a part of private wealth management. ALM in private wealth management appeals to most practitioners, as reactions show, but there are still concerns about successful implementation, or about the idea of transferring the rather industrial ALM techniques to the private wealth management sector as such.

This paper proceeds as follows. After the Executive Summary, we present the basic ideas of ALM decisions in private banking. We then turn to the EDHEC call for reactions and outline industry views of using ALM in private banking. Detailed survey results can be found in the final section of this paper.

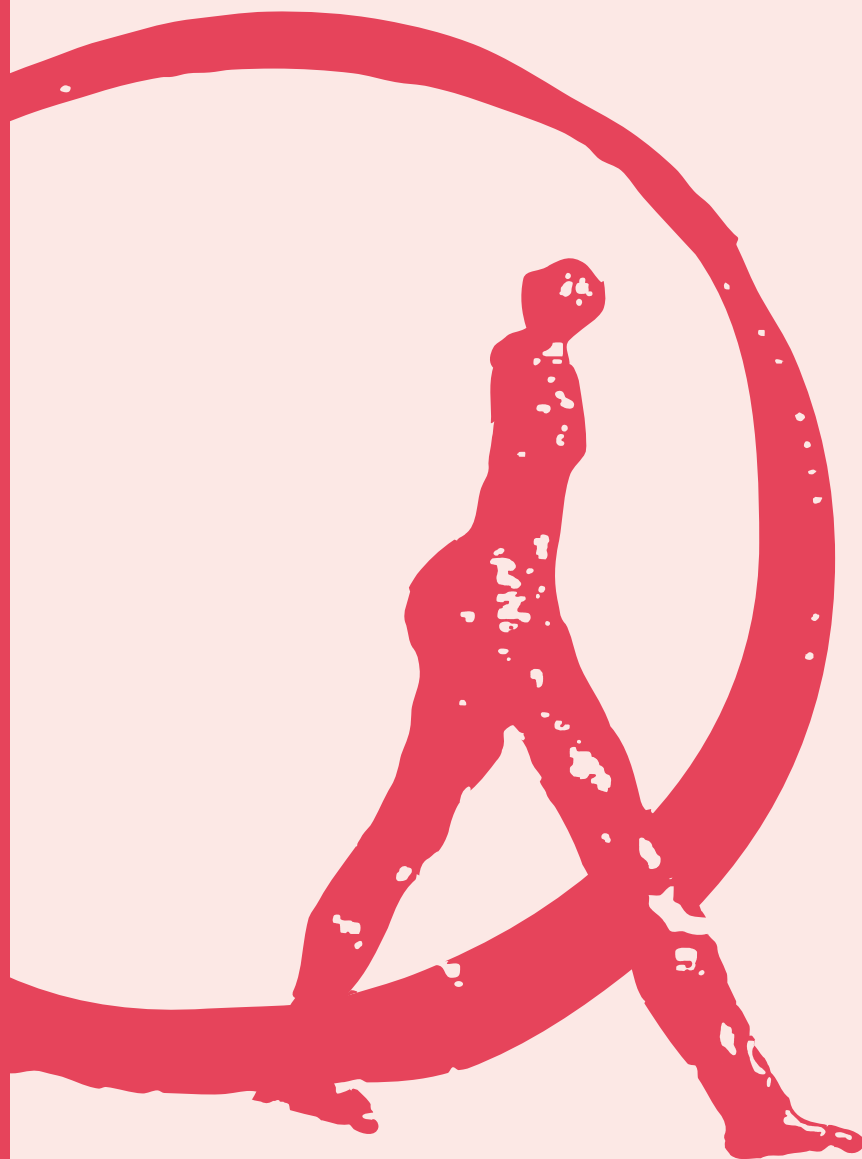
1 - Merrill Lynch (2006): *Merrill Lynch and Caggemini World Wealth Report*, available at www.us.caggemini.com/worldwealthreport06.

2 - Campbell, J. (2006): "Household finance", *Journal of Finance* 61(4), 1553-1604.

3 - See e.g. Zenios, S. A. and Ziemba, W. T. (2006): *Handbook of Asset and Liability Management*, North-Holland, Amsterdam.

4 - Amenc, N., Martellini, L., and Ziemann, V. (2007): *Asset-Liability Management Decision in Private Banking*, EDHEC Publication, Nice.

Executive Summary



Executive Summary

A recent publication⁵ by the EDHEC Risk and Asset Management Research Centre highlights the potential benefits of using asset-liability management (ALM) techniques in private wealth management. The fundamental idea of ALM is to incorporate future financial liabilities directly into portfolio optimisation, thereby providing a better match between investment returns and payment obligations. ALM is predominantly applied to entities such as pension funds or insurance companies that have uncertain future payment obligations. The EDHEC paper proposed to model a private client's objectives—such as purchasing a house or maintaining a certain consumption level during retirement—as liabilities and thus to transpose the advantages of institutional ALM techniques to private wealth management.

Following the publication of this paper, EDHEC issued a call for practitioner reactions to the notion of using ALM in private wealth management. Reactions show that there is overwhelming support for applying ALM techniques to private wealth management. However, while most practitioners are convinced of the potential advantages offered by ALM, they also express concern about successful implementation.

Conclusion of the EDHEC study: ALM is a unique device to deliver personalised solutions to the multiple and complex needs of the private wealth management clientele.

The key motivation for making ALM a part of the private wealth management sector is to tailor personalised investment

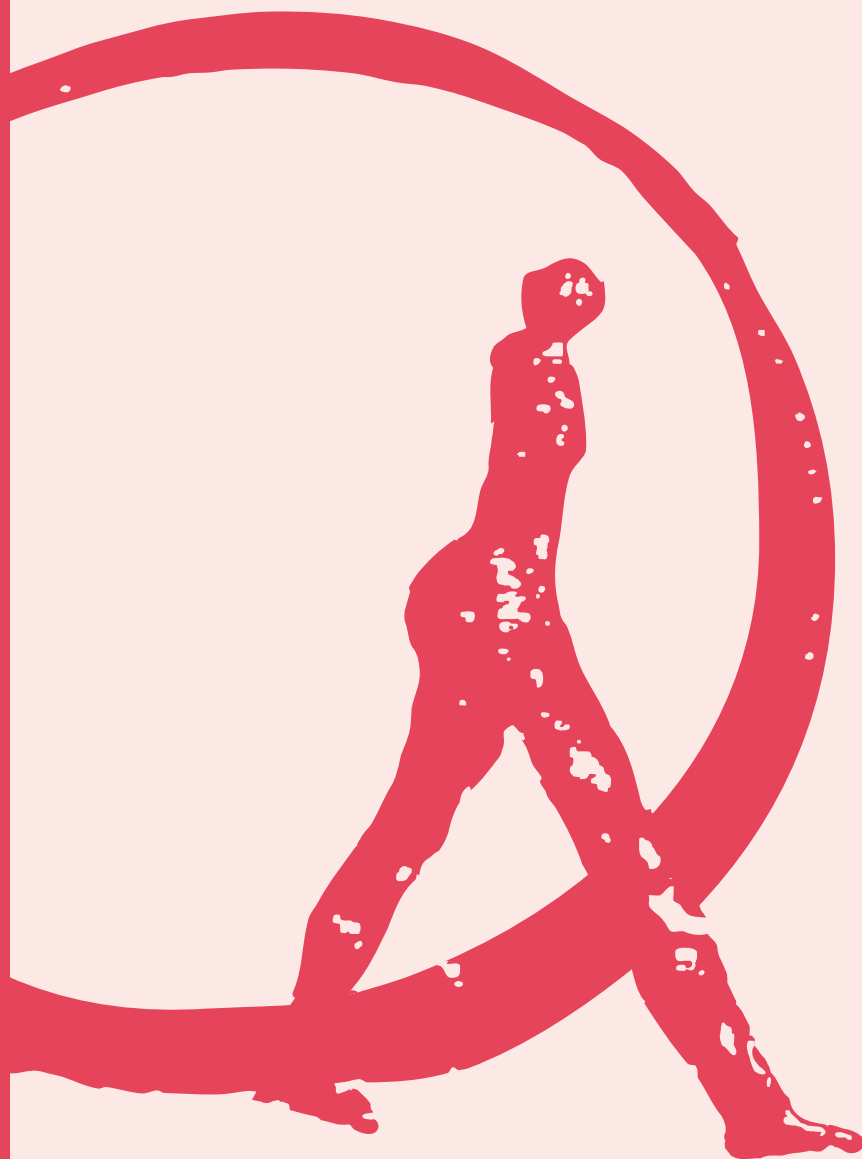
strategies that not only take the risk-return preferences of the clients into account, but also reflect the specific objectives and time horizons of their investments. As the EDHEC study showed, ALM leads to the construction of more efficient portfolios than does standard asset management by explicitly making personal liabilities a part of the asset allocation equation.

The industry perspective: most practitioners believe that ALM could become a considerable source of progress for private wealth management.

Overall, making ALM a part of private wealth management decisions is a good idea to most practitioners: 87% of the respondents to our call for reactions see the potential benefits of ALM for the private wealth management business. The main benefit they see is its ability to manage the clients' multi-term risks. Other noted benefits of ALM are its clear focus on the clients' specific objectives and the positive impact ALM could have on the client relationship. However, there are some concerns as well. Many practitioners perceive ALM techniques as highly complex. They thus fear not only rejection of it by the wealthy, but also the challenges of using this new tool or method. In addition, bankers foresee obstacles to transferring the institutional ALM approach to private wealth management. The bottom line is that practitioners see ALM as a way forward in private wealth management, but are nonetheless hesitant to express full acceptance of this new technology.

5 - Amenc, N., Martellini, L., and Ziemann, V. (2007): *Asset-Liability Management Decisions in Private Banking*, EDHEC Publication, Nice.

I. ALM Decisions in Private Wealth Management



I. ALM Decisions in Private Wealth Management

Proximity to clients is often seen as the reason for the existence of private wealth management. A private banker's ability to come up with customised responses to the objectives of individual clients is important for a successful private wealth management business. Yet for the moment there is no consensus in the industry on how to tailor a private client's investment strategy to take into account not only the client's risk preferences but also his exact spending objectives and the time horizon of his investments.

Asset-liability management (ALM), widely used now by institutional investors, may be a suitable response to the complex demands of private wealth management. The basic idea of all ALM tools and methods is to incorporate future liability, such as pension payments, directly into the portfolio optimisation process, thereby providing a better match between investment returns and payment obligations. ALM could thus help private bankers meet their clients' investment objectives.

In this section, we first summarise the rise of ALM concepts for institutional investors, and the standard methods they use. We then discuss the possible advantages that ALM could bring to the private wealth management industry. At the end of this section, we present the example of a person investing for a subsequent real estate purchase.

Asset-Liability Management Techniques for Institutional Investors

In the years before the stock market downturn—in other words, from 2000 to

2003—institutional investing was often seen as a simple asset management task: the search for the optimal portfolio with a clear focus on high expected returns. In the years that followed, however, these investments—generally heavily tilted towards equities—lost so much value that these funds could no longer meet their obligations, i.e., making defined benefit pension payments. In many cases, the pension plan sponsor had to make up for the shortfall, sometimes with considerable financial consequences.

As a result of this disastrous experience, pension funds started to pay attention again to their primary obligations: future pension payments. This change led to renewed interest in money management approaches that explicitly take liabilities into account, an approach also called asset-liability management. We describe below some of the most widely used ALM techniques.⁶

The first technique, known as cash-flow matching, involves ensuring a perfect static match between the cash flows from the portfolio of assets and the commitments in the liabilities. In a very simple way, this match can be made by holding a portfolio of inflation-indexed zero-coupon bonds that mature just as commitments (pension payments) must be made good on. Although this technique is very simple (leaving aside the complexity relating to the uncertain life expectancy of the retiree, and the divergence between specific wage evolution and general inflation), it comes at the cost of very low average returns.

6 - We can give only a short summary here. For a more detailed exposition, please refer to the EDHEC study mentioned above.

I. ALM Decisions in Private Wealth Management

In an attempt to improve the profitability of the assets, and thus to reduce the level of contributions, it is necessary to include in the portfolio (stocks and bonds) asset classes that are not perfectly correlated with the liabilities. The objective is then to find the best possible trade-off between the risk thereby taken on, and the excess return that the pension fund hopes to earn. To implement these surplus optimisation techniques, one must build a comprehensive model to capture the risk factors and their interrelations. The optimal portfolio can then be constructed, given some specified level of risk. Surplus optimisation leads to higher expected returns than cash-flow matching, and hence to lower contributions. However, the risk exposure can be significant.

Finally, it is worth mentioning a technique referred to as liability-driven investment (LDI). While they may vary greatly from one provider to the next, LDI solutions usually involve a hedge of the duration and convexity risks via standard building blocks, while keeping some assets free for investing in higher yielding asset classes. In general, a fraction of the assets (known as the liability-matching portfolio) is allocated to risk management, while another fraction is allocated to performance generation. This technique may actually be seen as a combination of immunisation strategies (for risk management) and standard asset management (for

performance generation). It stands in sharp contrast to more traditional surplus optimisation techniques, in which both objectives (liability risk management and performance generation) are pursued simultaneously in an attempt to achieve the portfolio with the highest possible relative risk/relative return ratio.

The table below shows how these three approaches correspond to well-known approaches to pure asset management.

Applying ALM to Private Wealth Management

Given the recent increase in interest in ALM for institutional investment, as well as the available expertise, it is logical to ask whether these techniques could also be useful for the private wealth management industry. In private wealth management, clients are usually asked about their savings objectives, i.e., whether they want to set aside money for their retirement or perhaps for their children's education. These are the client's "liabilities". The time horizon of the investment is also discussed. Next, sometimes using even more sophisticated methods, the client's personal risk-return preferences are analysed to optimise his portfolio. Finally, to design the best possible investment plan, the contribution scheme must be taken into account, i.e., how much money the client is ready to set aside regularly.

Investment Management Approaches in Asset Management and their Counterparts in Asset-Liability Management

Risk/Return Profile	Asset Management	Asset-Liability Management
Zero risk – no access to risk premia	Investment in risk-free asset	Cash-flow matching
Optimal risk return trade-off	Optimally diversified portfolio of risky assets	Surplus optimisation
Fund separation	Capital market line: mix of cash and optimal risky portfolio	LDI solution: mix of liability matching portfolio and optimal risky portfolio

I. ALM Decisions in Private Wealth Management

The problem with current private asset management is that these important factors are rarely sufficiently combined. So, although the banker's advice might be beneficial from a risk perspective, the client's liabilities are not adequately taken into account. ALM, by contrast, makes it possible to merge the various needs for tailored banking solutions. By explicitly including the individual liabilities in the asset allocation decision, it is possible to construct portfolios more efficient than those relying on standard asset management. The reason is that solutions that might be optimal from an asset management perspective are usually no longer efficient when the liabilities are taken into account.

In what situations could ALM add value for private wealth management clients? First of all, and quite naturally, ALM could be useful for private retirement accounts. Much as with pension funds, the expected real pension is then the client's liability. Second, using ALM-based investment would provide protection from inflation risk superior to that provided by standard asset management. A similar case might be a wealthy retiree, who wishes to maintain a certain (real) standard of living but also to maximise her bequest to her children. Finally, wealthy families might be interested in making a large acquisition in the near future, such as buying property. ALM techniques allow for sound risk management of the related real-estate price risk of such an investment, as the following example will show.

7 - The example is adapted from the EDHEC study. For more details, such as the dynamic model of real estate and other asset prices, please refer to this document.

An Example: Acquisition of a House

As an illustration of the ALM concept within private wealth management, consider the situation of a family who plans to purchase a house for their daughter once she has finished her studies. Suppose that she is expected to finish her studies five years from now, and that the current value of the projected house may be at €1,000,000. The family wants to set aside the required money through fixed annual contributions. The essential risk the family faces is hence unexpected changes in real estate prices. Given an appropriate model for the dynamics of property prices and reasonable parameter values⁷, one may show that the expected price of the house in five years is at about €1,570,000, with a standard deviation of about €270,000.

The standard asset management approach in private wealth management would be then to find an investment solution that has a maturity of five years, with an expected value at maturity of €1,570,000. Usually, such an investment will consist of both bonds and stocks. If real estate prices rise at a slower pace than expected (and hence the value of the portfolio exceeds the price of the apartment), the family is lucky and saves some money—if not, it must close the gap with another source of money.

The ALM approach instead directly takes the known liability of the investor, i.e., the house to be purchased in five years, into account when searching for the optimal saving strategy. Assuming that there exists an investment vehicle which is linked to real estate prices (such as

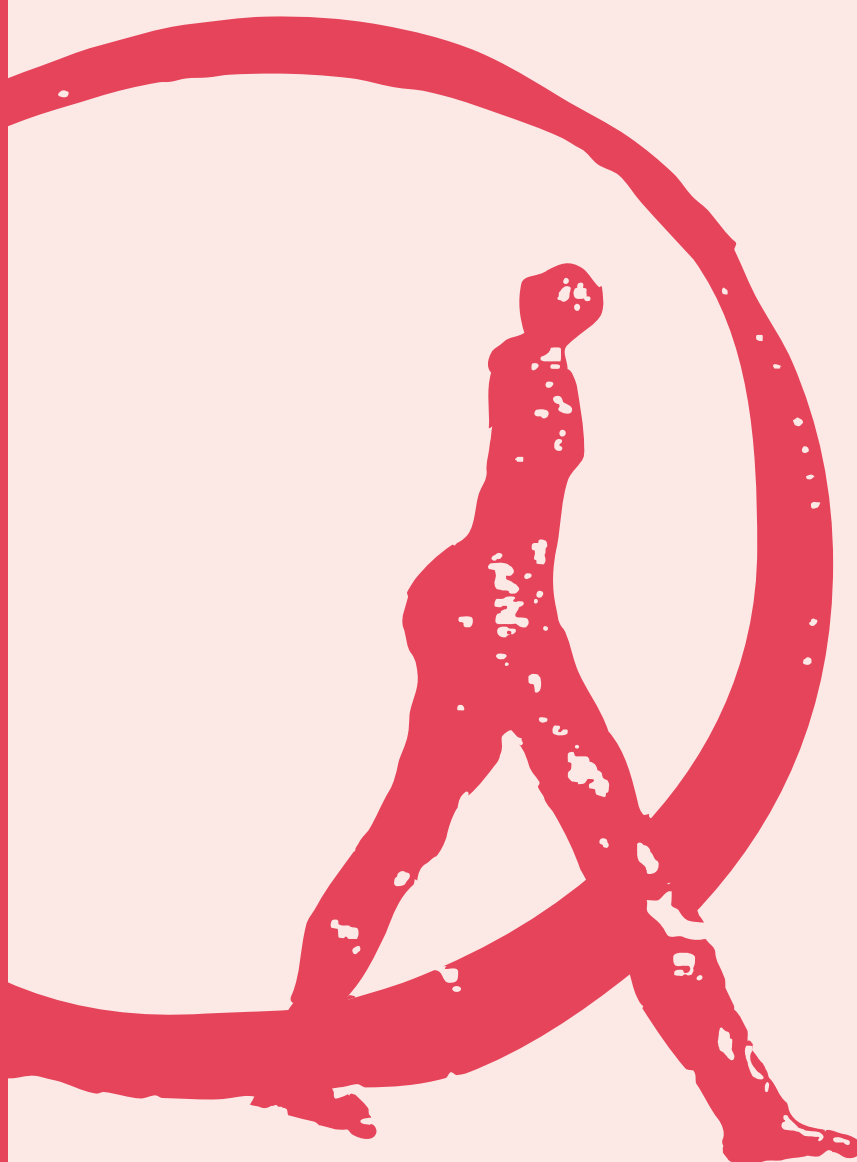
I. ALM Decisions in Private Wealth Management

REITS), one can decrease the variance of the difference between investment return and property prices (also called surplus volatility) significantly. Because of the link between investment return and house prices, the family can reduce expected shortfalls at maturity. If real estate prices rise at a much higher rate than expected, the investment return will increase accordingly. On the other hand, if property prices slump, the investment will also yield lower (even negative) returns—which is not a problem given the clear objective of the household. Although REITS do not hedge the investment risk perfectly, their positive correlation with the price of the envisaged acquisition can help to reduce the client's risk exposure significantly. Through a trade-off of increased risk for an increase in expected returns, the client's optimal portfolio may of course not only consist of REITS, but will generally include stocks and bonds as well. The objective of the ALM technique is to tailor the investment to the objectives of the family in a better way than through simple asset management approaches, which ignore the future purchase.

The EDHEC study on asset-liability management decisions in private banking has presented evidence that this new concept has decisive advantages over standard asset management, and may thus deliver dedicated value added to clients of private bankers. But what do practitioners actually think? For an idea of what private bankers and asset managers really believe to be the important aspects of their business, and of their views on the potential benefits of the use of ALM concepts in the private wealth management industry, we called

for reactions from them. The following section describes the results of this call for reactions.

II: The Practitioners' View on Introducing ALM Techniques into Private Wealth Management



II: The Practitioners' View on Introducing ALM Techniques into Private Wealth Management

We describe below the main results of this call for reactions. We group responses into several major points.

ALM restores the focus on the client's objectives

In principle, practitioners are extremely positive about the idea of using ALM techniques in the private wealth management sector. 95% of private bankers agree that financial consulting should go beyond tax and legal advice, that it should also take the clients' financial constraints and private wealth objectives into account. In addition, 75% of the respondents see the ability to deliver customised financial management as the predominant benefit private bankers can offer their clients—and hence it would be their primary added value. 87% of the private bankers and asset managers who responded argue that ALM techniques, which would make it possible to focus on the clients' individual financial constraints, could become a considerable source of progress for their business. Some bankers even believe that ALM in private wealth management could become irreplaceable, as it might be one of the few methods that allow private bankers to differentiate themselves from their competitors. In this vein, a participant noted that ALM would create a "new value chain in a sector which is becoming more and more capital market driven".

ALM is difficult to understand and implement

This point is seen as the main drawback of this promising methodology. And the main concern is not only that some clients will probably not fully understand this rather

complex approach to asset management. Indeed, 55% of respondents assume that the biggest challenge for implementing ALM is with the private wealth management teams themselves. In fact, whether ALM is used or not, the client "is exposed to the competencies of the banker—this seems to be the biggest risk", as one of the private bankers confessed. As one respondent argued, there are already many tools and methods available. "The [...] fundamental problem is that private banks [and] wealth managers do not always use them!" Adding ALM to the menu may not be the logical next step if other more basic tools or methods are not well understood by the private wealth manager.

ALM would have to include taxation

As mentioned above, many bankers agree that financial consulting should go beyond tax and legal advice. At the same time, taxes and unforeseen changes in taxation seem to be very important for private wealth management. It is even the most important part of some bankers' business: "Tax efficiency is [...] often overlooked. A good private banker might not be able to make [...] money [for the client], especially in uncertain markets, but should be able to help the client keep from giving the taxman more than [necessary]." The question then is how to make tax considerations part of an ALM framework.

Liabilities are hard to define in private wealth management

In addition to the alleged complexity of ALM and the possible incompetence of private bankers, there are some other concerns about

II: The Practitioners' View on Introducing ALM Techniques into Private Wealth Management

the idea of transferring the ALM concept from institutional investment to private wealth management. Most of all, some bankers see too many differences between both investment style and objectives: "private banking supposes a very tailor-made approach, which means that an industrial approach is difficult". Or, as one banker puts it: "the liabilities of a wealthy individual are largely discretionary, in contrast to those of a pension fund". Indeed, modelling the liabilities of a private client may be more challenging than modelling those of a pension fund, for which future liabilities are an aggregate of individual pensions. Private bankers point out that the risks in private banking are mostly of a very individual nature, such as sudden changes in the employment or family situation, or—on a larger scale—unexpected changes to the client's business risk. Consequently, in private wealth management, the liabilities may be more difficult to specify than they are for institutional investors.

ALM ensures better risk management

Our call for reactions reveals that private bankers are quite critical of current practices in their profession: in addition to the remarks on lack of competence mentioned above, 56% of respondents believe that the main risk factors for private clients' portfolios (inflation risk, interest rate risk, and asset price risk) are at present not well managed. Likewise, two-thirds of the

respondents are outright dissatisfied with the risk tools and devices at hand. Here, ALM could come into play, as it seems to address critical needs. Most bankers (59%) argue that the main advantage of ALM is its ability to manage the clients' major multi-term risks.

ALM strengthens the relationship with clients

Finally, ALM could also help private bankers strengthen ties with their clients. One respondent states: "I believe that developing a complete ALM approach is a key factor to ensure long-term relationships with the clients". Or, as another banker says, ALM "enables us to better understand the clients' investment goals, which in turn helps us in our investment process". Some private banks have already chosen to use institutional money management practices in private banking: "We offer an institutional approach to private wealth management, which in our view is the way forward for the private banking industry", says one respondent.

From these points, it is clear that private bankers are drawn to the notion of using ALM in their industry. The vast majority is convinced that ALM is an interesting concept for the future of wealth management. However, there are some concerns as well: Is it really appropriate to transfer the rather industrial ALM technique to the very individual private wealth management

Practitioners' views: advantages and challenges of ALM in Private Banking as stated by respondents to the call for reactions

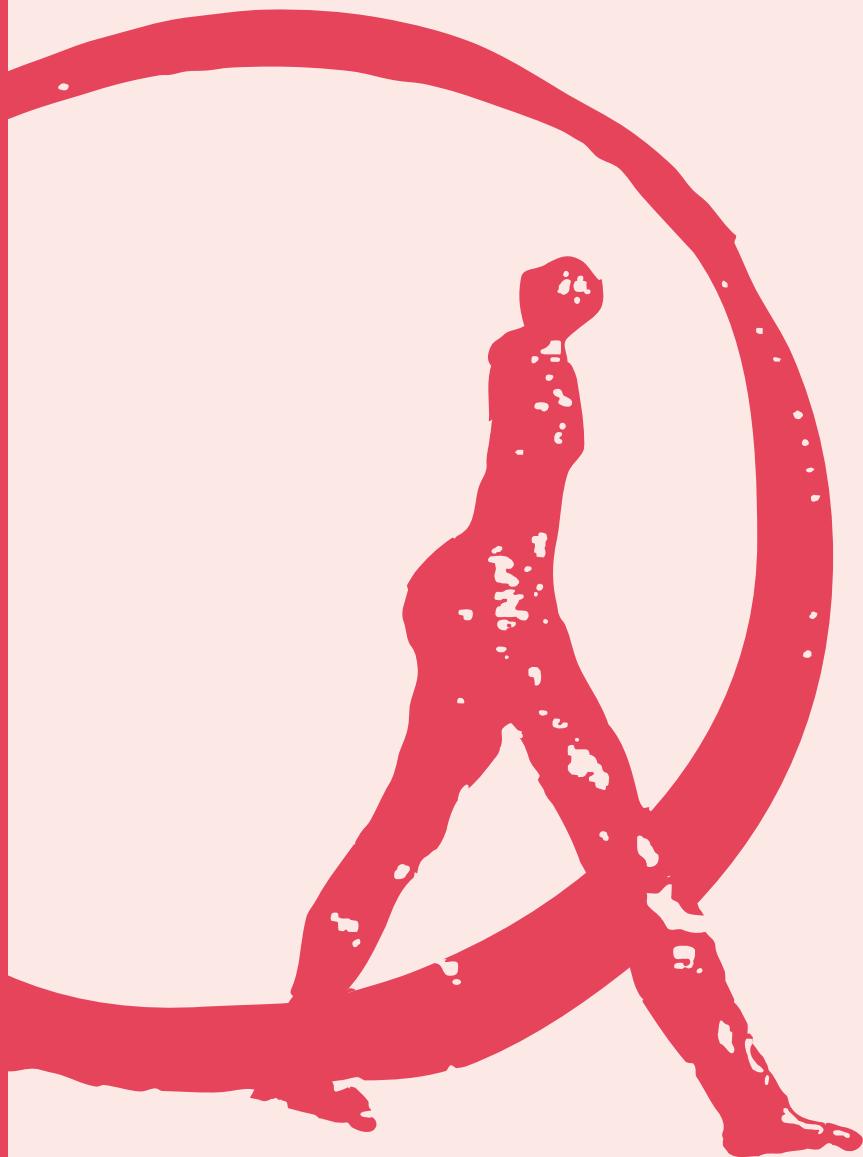
Advantages	Challenges
Focus on client's specific financial objectives	High level of complexity for both private bankers and clients
Better multi-term risk management	Challenge of including taxes in ALM
Improvements of client relationship	Difficulties when transferring ALM from institutional investment to private wealth management

II: The Practitioners' View on Introducing ALM Techniques into Private Wealth Management

sector? Can the institutions train their private bankers well enough to benefit from the technique? Overall, it seems that private bankers strongly believe that the adoption of ALM techniques can provide additional

value added, while implementation is seen as a major challenge. After this first broad overview of the results, we now turn to the next section for a more detailed analysis of the results and the full methodology.

III: Detailed Survey Results



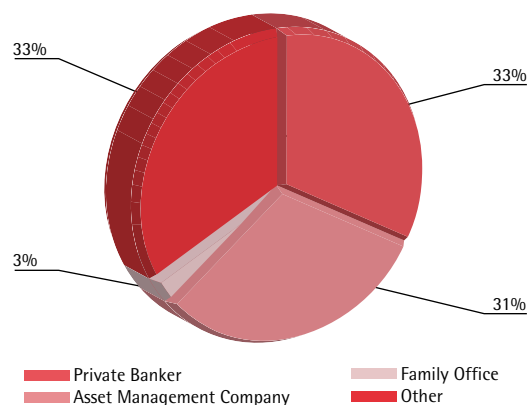
III: Detailed Survey Results

Methodology and Survey Participants

Our call for reactions contained a questionnaire consisting of eight multiple choice questions, including the possibility to add some further comments related to this issue. The questionnaire was sent to private bankers and family offices as the target audience for the study on ALM, but also to asset management firms and related institutions that are interested in optimal asset management strategies for wealthy clients. Most of our 59 respondents are based in Europe. The survey period is from 17/01/2008 to 07/03/2008.

The exact breakdown of the respondents' professions is shown in exhibit 1. Private bankers—the target group for the EDHEC study—make up 33% of survey respondents, the largest professional category in this study. Asset management companies follow directly after, with roughly 31% of the sample. Professionals working at family offices represent another 3% of respondents. The remaining 33% are other professionals in the financial services industry, such as risk managers or financial consultants.

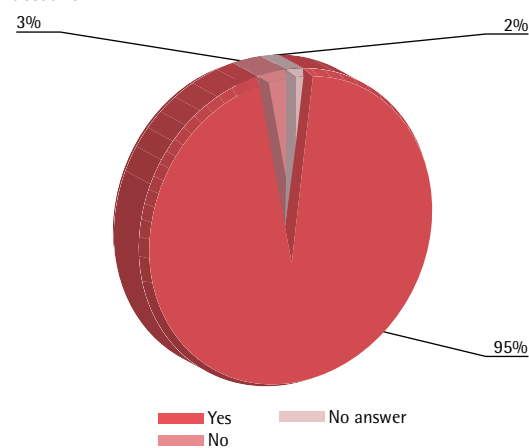
Exhibit 1: Type of Activity of the Respondents



The Mission and Challenges of Private Wealth Management

In a first series of questions, the survey participants were asked about their views on the major task of financial management for the wealthy and the private banker's fundamental source of added value. As exhibit 2 shows, a large majority (95%) of respondents agree that financial management, rather than merely provide tax and legal advice, should also take client constraints and wealth objectives into account.

Exhibit 2: Do you agree with the idea that financial management, rather than simply legal and tax consulting, should take the client's constraints and private wealth objectives into account?

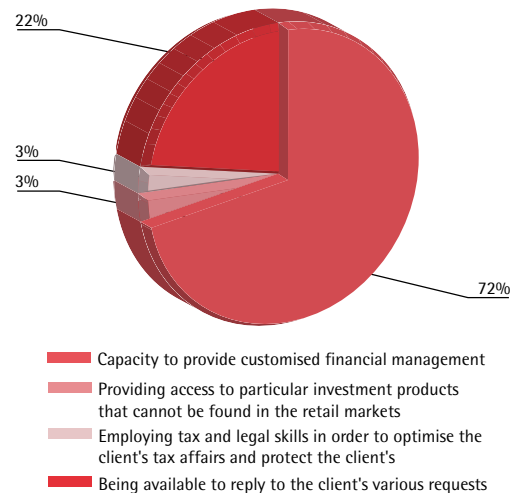


Survey respondents were then asked what they view as the private banker's principal source of added value. As can be seen in exhibit 3, 71% believe that the ability to provide customised financial management is the predominant benefit for their clients. 22% of the participants see their main added value in their availability to act as a contact person for their client's multiple financial requests. Only 3% think that the principal added value of private bankers is to provide access to special investment products which are not available in the

III: Detailed Survey Results

retail banking segment. Similarly, a mere 3% stress the importance of tax and legal advice as a key skill for private bankers, which is consistent with the answer to the previous question. The bottom line is that private bankers see the provision of personalised financial advice as the most important aspect of their day-to-day business.

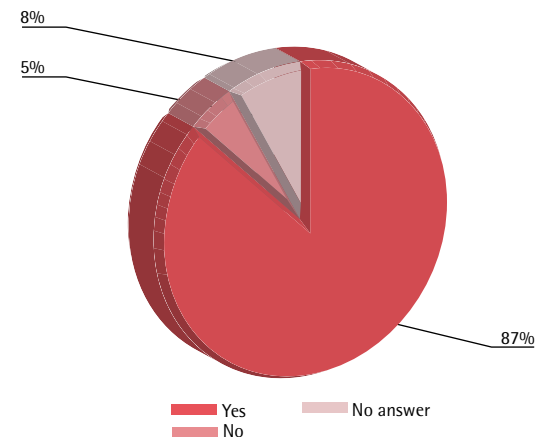
Exhibit 3: What do you think is a private banker's principal source of added value?



Applying asset-liability management techniques to private wealth management

The next set of questions turned to the central issue of the study: the role ALM techniques could play in the private wealth management industry, including an analysis of possible advantages and disadvantages encountered during implementation of the techniques. The large majority of survey respondents (87%) agree that ALM techniques could be a considerable source of progress for private wealth management; a mere 5% see no potential benefit in using ALM in the private wealth management sector (see exhibit 4).

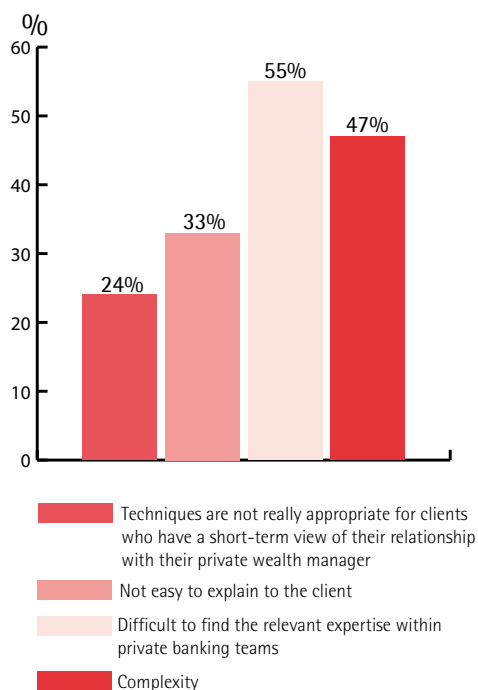
Exhibit 4: Do you agree with the idea that the use of asset-liability management techniques could be a considerable source of progress and added value for private banking?



The next question, to which multiple responses are possible, attempts to shed light on the potential obstacles, as perceived by survey respondents, to the adoption of these new techniques. As exhibit 5 shows, the main drawback of using ALM in private banking is the private banking teams themselves: 55% of respondents express concern about finding bankers sufficiently expert to generate added value with this new method. The much talked about complexity of ALM is seen as the next great obstacle to successful application (47%). Many financial managers also fear that this complexity—once they themselves have mastered it—will befuddle their clients (33%). Another 24% mention that the multi-term ALM techniques are not really appropriate for clients who have rather short-term views of their relationship with their private wealth manager.

III: Detailed Survey Results

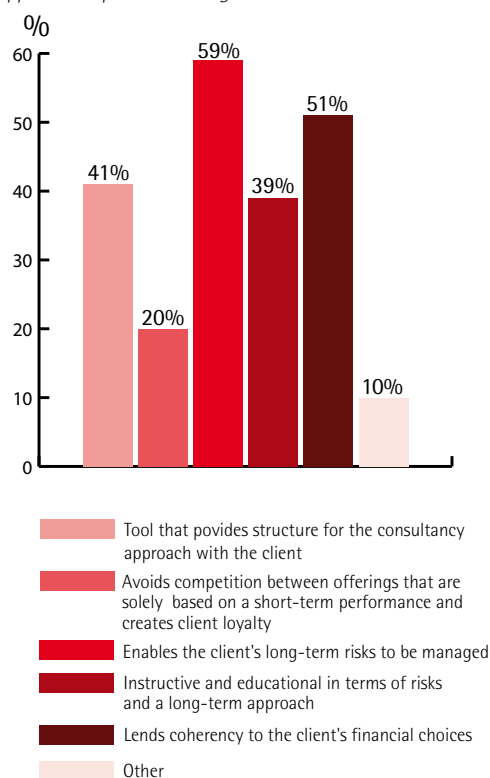
Exhibit 5: What would limit the use of ALM techniques in private banking?



In the last question of this section, the focus shifts to the potential benefits of ALM in private wealth management. Here again, multiple responses are possible. Most respondents (59%) think that the main advantage of ALM is its ability to manage the client's long-term risks, which is indeed its main objective (see exhibit 6). Roughly 51% argue that ALM methods help to make the client's financial choices more coherent. Likewise, many bankers (41%) see in ALM a welcome opportunity to provide additional structure to client advisory services. ALM is believed to have educational benefits as well: 39% of respondents point out that by using ALM in their everyday financial advisory business their clients could increase their awareness of their risk exposure and its role in multi-term investment strategies. Another 20% of the respondents also believe that ALM could avoid the current practice of banker's offerings that are solely based on short-term performance and thus might

create client loyalty. Finally, 10% mention other reasons for which ALM could be helpful in the private banking business. Some of these additional comments indicate that ALM is likely to improve the understanding of the client's true financial goals; others see ALM as one of the ways for private bankers to stand out from the competition.

Exhibit 6: What do you see as the advantages to an ALM approach to private banking?



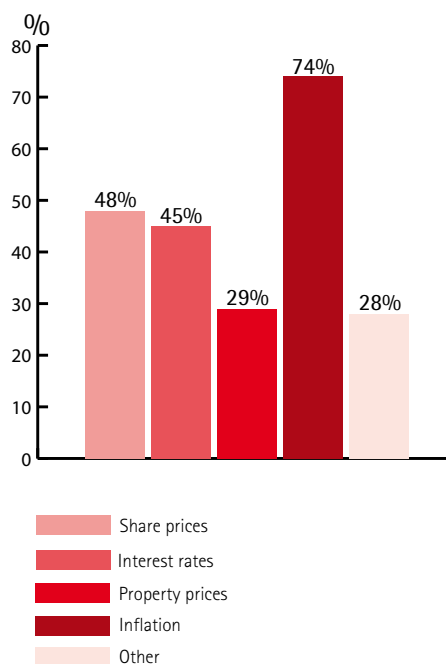
Sources of Risk and Managing Risks in Private Wealth Management

In the final set of questions, we ask survey respondents for their views on the greatest risks for private wealth management clients and whether these risks are currently well managed. Naturally, we first ask respondents to identify the greatest financial risks faced by their clients (multiple responses are possible). As exhibit 7 shows, most

III: Detailed Survey Results

respondents (74%) report that inflation is one of the greatest risks for their clients. The next greatest risk—as seen by financial managers—is the risk induced by share price movements (48%), followed by the risk related to changes in interest rates (45%). Finally, 29% argue that property prices and changes thereof are a source of financial risk for private wealth management clients. 28% mention other sources of risk as well: unexpected changes in taxation (10%), misleading advice by the bankers themselves (5%), and very individual risks such as sudden changes to the client's family or employment situation (5%).

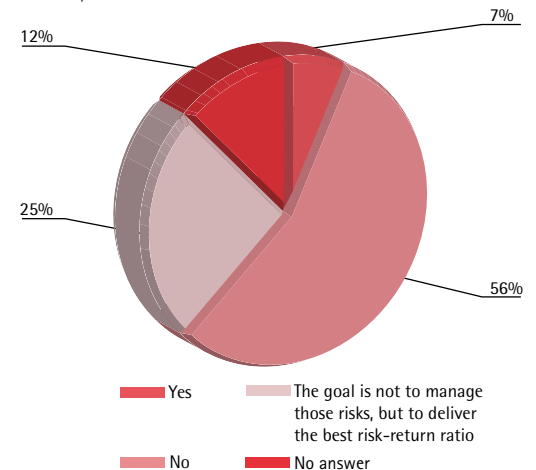
Exhibit 7: What are the main financial risks to which private wealth clients are generally exposed?



Next, we ask respondents whether they think the risks mentioned above are well managed in current private wealth mandates. As exhibit 8 shows, a solid majority respond "no" (56%). A quarter (25%) argue that the goal in private wealth management is not to manage those risks but to deliver the best risk-return

ratio. Only 7% are satisfied with the way asset and personal wealth managers cope with the risk exposure of their clients. Interestingly, private bankers and family officers—about half of our sample—are somewhat less critical of their own performance in dealing with the financial risks of their clients: only about 38% of this subgroup is dissatisfied with the risk management for their clients—many more think that the risk-return trade-off is what really matters (43%).

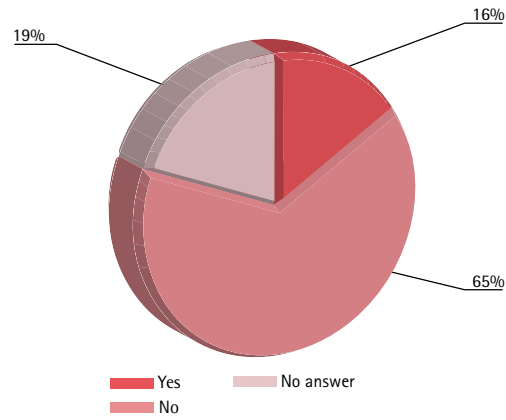
Exhibit 8: Do you think that these risks are well managed within current private wealth mandates?



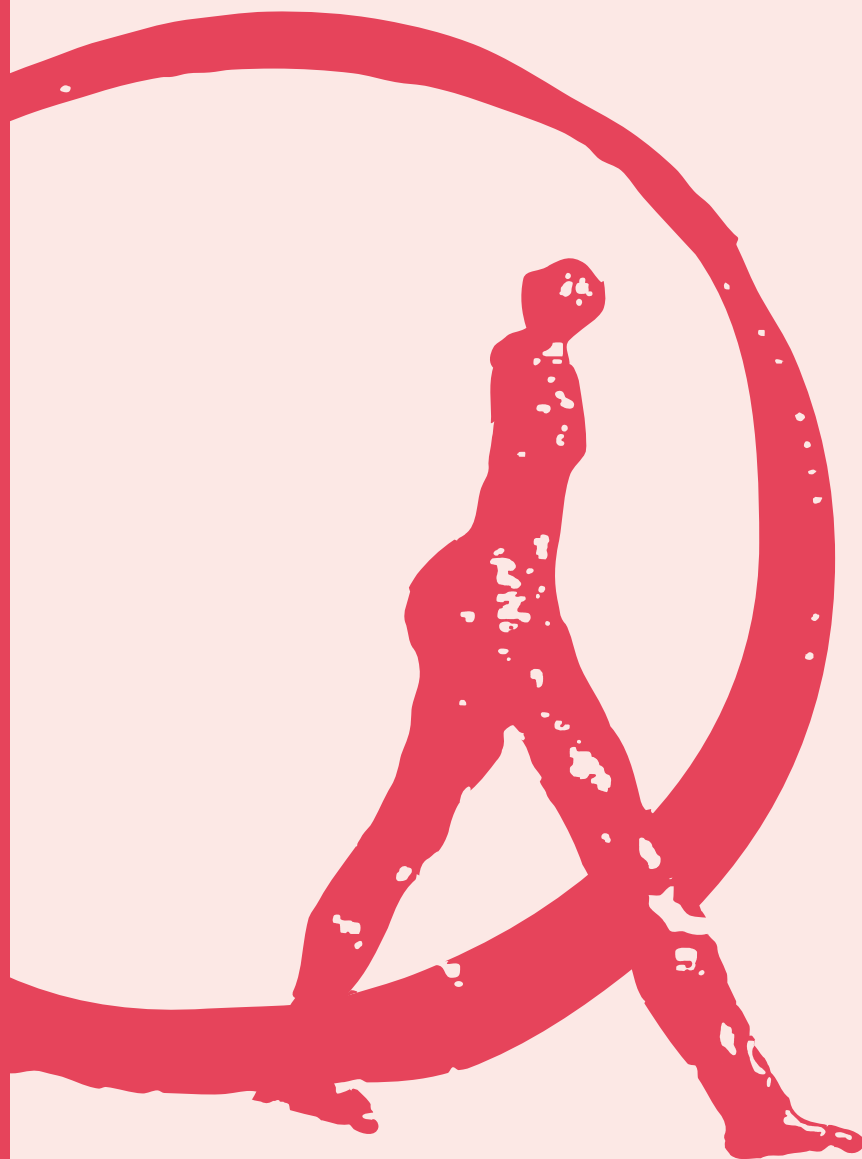
Finally—turning to a more practical issue in private wealth management—the investment professionals are asked about their satisfaction with the allocation and risk profiling tools private wealth managers have at hand when advising their clients. Two-thirds (66%) of respondents are dissatisfied with these tools; only about 16% report that they are satisfied (see exhibit 9).

III: Detailed Survey Results

Exhibit 9: Are you satisfied with the allocation and risk profiling tools that private wealth managers have at their disposal?



Conclusion



Conclusion

In this call for reactions we asked industry practitioners for their views on the potential advantages and challenges of using ALM techniques in the private wealth management sector. And as this paper shows, practitioners see major advantages to using these techniques. Clearly, private bankers are drawn to ALM, as 87% of the respondents to our call for reactions report that it is a potential source of progress and value-added for their business. Still, there are some concerns about the successful implementation of this new method. The complexity of ALM and the difficulties of transferring the institutional ALM approach to private wealth management are seen as hurdles by bankers. As proposals to use ALM in private wealth management are recent, the existence of these hurdles comes as no surprise. Additional research into the application of ALM to specific client contexts, as well as the education of private wealth management teams, would in all probability make it possible to clear these hurdles with greater ease.

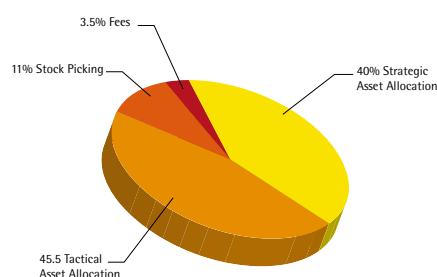
About the EDHEC Risk and Asset Management Research Centre

EDHEC is one of the top five business schools in France. Its reputation is built on the high quality of its faculty (110 professors and researchers from France and abroad) and the privileged relationship with professionals that the school has been developing since its establishment in 1906. EDHEC Business School has decided to draw on its extensive knowledge of the professional environment and has therefore focused its research on themes that satisfy the needs of professionals. EDHEC is also one of the few business schools in Europe to have received the triple international accreditation: AACSB (US-Global), EQUIS (Europe-Global) and Association of MBAs (UK-Global). EDHEC pursues an active research policy in the field of finance. The EDHEC Risk and Asset Management Research Centre carries out numerous research programmes in the areas of asset allocation and risk management in both the traditional and alternative investment universes.

The choice of asset allocation

The EDHEC Risk and Asset Management Research Centre structures all of its research work around asset allocation. This issue corresponds to a genuine expectation from the market. On the one hand, the prevailing stock market situation in recent years has shown the limitations of active management based solely on stock picking as a source of performance.

Percentage of variation between funds



Source: EDHEC (2002) and Ibbotson, Kaplan (2000)

On the other, the appearance of new asset classes (hedge funds, private equity), with risk profiles that are very different from those of the traditional investment universe, constitutes a new opportunity in both conceptual and operational terms. This strategic choice is applied to all of the Centre's research programmes, whether they involve proposing new methods of strategic allocation, which integrate the alternative class; measuring the performance of funds while taking the tactical allocation dimension of the alphas into account; taking extreme risks into account in the allocation; or studying the usefulness of derivatives in constructing the portfolio.

An applied research approach

In an attempt to ensure that the research it carries out is truly applicable, EDHEC has implemented a dual validation system for the work of the EDHEC Risk and Asset Management

Research Centre. All research work must be part of a research programme, the relevance and goals of which have been validated from both an academic and a business viewpoint by the Centre's advisory board. This board is made up of both internationally recognised researchers and the Centre's business partners. The management of the research programmes respects a rigorous validation process, which guarantees the scientific quality and the operational usefulness of the programmes.

To date, the Centre has implemented six research programmes:

Asset Allocation and Alternative Diversification

Sponsored by SG Asset Management and Newedge

The research carried out focuses on the benefits, risks and integration methods of the alternative class in asset allocation. From that perspective, EDHEC is making a significant contribution to the research conducted in the area of multi-style/multi-class portfolio construction.

Performance and Style Analysis

Part of a business partnership with EuroPerformance

The scientific goal of the research is to adapt the portfolio performance and style analysis models and methods to tactical allocation. The results of the research carried out by EDHEC thereby allow portfolio alpha to be measured not only for stock picking but also for style timing.

Indices and Benchmarking

Sponsored by Af2i, Barclays Global Investors, BNP Paribas Investment Partners, NYSE Euronext, Lyxor Asset Management, and UBS Global Asset Management

This research programme has given rise to extensive research on the subject of indices and benchmarks in both the hedge fund

About the EDHEC Risk and Asset Management Research Centre

universe and more traditional investment classes. Its main focus is on analysing the quality of indices and the criteria for choosing indices for institutional investors. EDHEC also proposes an original proprietary style index construction methodology for both the traditional and alternative universes. These indices are intended to be a response to the critiques relating to the lack of representativeness of the style indices that are available on the market. In 2003, EDHEC launched the first composite hedge fund strategy indices.

Asset Allocation and Derivatives

Sponsored by Eurex, SGCIB and the French Banking Federation

This research programme focuses on the usefulness of employing derivative instruments in the area of portfolio construction, whether it involves implementing active portfolio allocation or replicating indices. "Passive" replication of "active" hedge fund indices through portfolios of derivative instruments is a key area in the research carried out by EDHEC. This programme includes the "Structured Products and Derivatives Instruments" research chair sponsored by the French Banking Federation.

Best Execution and Operational Performance

Sponsored by CACEIS, NYSE Euronext, and SunGard

This research programme deals with two topics: best execution and, more generally, the issue of operational risk. The goal of the research programme is to develop a complete framework for measuring transaction costs: EBEX ("Estimated Best Execution") but also to develop the existing framework for specific situations (constrained orders, listed derivatives, etc.). Research also focuses on risk-adjusted performance measurement

of execution strategies, analysis of market impact and opportunity costs on listed derivatives order books, the impact of explicit and implicit transaction costs on portfolio performances, and the impact of market fragmentation resulting from MiFID on the quality of execution in European listed securities markets. This programme includes the "MiFID and Best Execution" research chair, sponsored by CACEIS, NYSE Euronext, and SunGard.

ALM and Asset Management

Sponsored by BNP Paribas Investment Partners, AXA Investment Managers and ORTEC Finance

This research programme concentrates on the application of recent research in the area of asset-liability management for pension plans and insurance companies. The research centre is working on the idea that improving asset management techniques and particularly strategic allocation techniques has a positive impact on the performance of asset-liability management programmes. The programme includes research on the benefits of alternative investments, such as hedge funds, in long-term portfolio management. Particular attention is given to the institutional context of ALM and notably the integration of the impact of the IFRS standards and the Solvency II directive project. It also aims to develop an ALM approach addressing the particular needs, constraints, and objectives of the private banking clientele. This programme includes the "Regulation and Institutional Investment" research chair, sponsored by AXA Investment Managers, the "Asset-Liability Management and Institutional Investment Management" research chair, sponsored by BNP Paribas Investment Partners and the "Private Asset-Liability Management" research chair, in partnership with ORTEC Finance.

About the EDHEC Risk and Asset Management Research Centre

Seven Research Chairs have been endowed:

Regulation and Institutional Investment

In partnership with AXA Investment Managers

The chair investigates the interaction between regulation and institutional investment management on a European scale and highlights the challenges of regulatory developments for institutional investment managers.

Asset-Liability Management and Institutional Investment Management

In partnership with BNP Paribas Investment Partners

The chair examines advanced asset-liability management topics such as dynamic allocation strategies, rational pricing of liability schemes, and formulation of an ALM model integrating the financial circumstances of pension plan sponsors.

MiFID and Best Execution

In partnership with NYSE Euronext, SunGard, and CACEIS Investor Services

The chair looks at two crucial issues linked to the Markets in Financial Instruments Directive: building a complete framework for transaction cost analysis and analysing the consequences of market fragmentation.

Structured Products and Derivative Instruments

Sponsored by the French Banking Federation (FBF)

The chair investigates the optimal design of structured products in an ALM context and studies structured products and derivatives on relatively illiquid underlying instruments.

Financial Engineering and Global Alternative Portfolios for Institutional Investors

Sponsored by Morgan Stanley Investment Management

The chair adapts risk budgeting and risk management concepts and techniques to the specificities of alternative investments, both in the context of asset management and asset-liability management.

Private Asset-Liability Management

In partnership with ORTEC Finance

The chair will focus on the benefits of the asset-liability management approach to private wealth management, with particular attention being given to the life cycle asset allocation topic.

Dynamic Allocation Models and New Forms of Target Funds for Private and Institutional Clients

In partnership with Groupe UFG

The chair consists of academic research that will be devoted to the analysis and improvement of dynamic allocation models and new forms of target funds.

The EDHEC PhD in Finance

The PhD in Finance at EDHEC Business School is designed for professionals who aspire to higher intellectual levels and aim to redefine the investment banking and asset management industries.

It is offered in two tracks: a residential track for high-potential graduate students who will hold part-time positions at EDHEC Business School, and an executive track for practitioners who will keep their full-time jobs.

Drawing its faculty from the world's best universities and enjoying the support of

About the EDHEC Risk and Asset Management Research Centre

the research centre with the most impact on the European financial industry, the EDHEC PhD in Finance creates an extraordinary platform for professional development and industry innovation.

Research for Business

To optimise exchanges between the academic and business worlds, the EDHEC Risk and Asset Management Research Centre maintains a website devoted to asset management research for the industry: (www.edhec-risk.com), circulates a monthly newsletter to over 200,000 practitioners,

conducts regular industry surveys and consultations, and organises annual conferences for the benefit of institutional investors and asset managers.

The Centre's activities have also given rise to the business offshoots **EDHEC Investment Research** and **EDHEC Asset Management Education**.

EDHEC Asset Management Education helps investment professionals to upgrade their skills with advanced risk and asset management training across traditional and alternative classes.

Industry surveys: comparing research advances and industry best practices

EDHEC regularly conducts surveys on the state of the European asset management industry. They look at the application of recent research advances within investment management companies and at best practices in the industry. Survey results receive considerable attention from professionals and are extensively reported by the international financial media.



Recent industry surveys conducted by the EDHEC Risk and Asset Management Research Centre

The EDHEC European ETF Survey 2008 sponsored by iShares

The EDHEC European Investment Practices Survey 2008 sponsored by Newedge

EDHEC European Real Estate Investment and Risk Management Survey 2007 sponsored by Aberdeen Property Investors and Groupe UFG

EuroPerformance-EDHEC Style Ratings and Alpha League Table

The business partnership between France's leading fund rating agency and the EDHEC Risk and Asset Management Research Centre led to the 2004 launch of the EuroPerformance-EDHEC Style Ratings, a free rating service for funds distributed in Europe which addresses market demand by delivering a true picture of alpha, accounting for potential extreme loss, and measuring performance persistence. The risk-adjusted performance of individual funds is used to build the Alpha League Table, the first ranking of European asset management companies based on their ability to deliver value on their equity management.

www.stylerrating.com

EDHEC-Risk website

The EDHEC Risk and Asset Management Research Centre's website makes EDHEC's analyses and expertise in the field of asset management and ALM available to professionals. The site examines the latest academic research from a business perspective, and provides a critical look at the most recent industry news.

www.edhec-risk.com

About ORTEC Finance

ORTEC Finance is a leading, global provider of solutions for holistic risk/return management for pension funds, insurance companies and asset managers. The company was founded in 1981 and has more than 130 employees with expertise in areas such as actuarial sciences, economics, econometrics, investment management and information technology. The philosophy of ORTEC Finance is to provide highly specialised decision making support in a transparent and truly independent manner.

ORTEC Finance has a large blue chip customer base and highly values the long-lasting relationship with its clients. With its roots in the pension fund market the total number of clients in this segment exceeds 100. Other institutional clients include premier insurance companies and international asset managers.

ORTEC Finance delivers tailored solutions for pension funds in Asset Liability Management (ALM), risk management and investment consulting. Our ALM is founded on a methodology that has been developed over the last 20 years and is based on stochastic analysis of both assets and liabilities. **ORTEC Finance Risk Management Solution** starts where ALM finishes and provides a continued *ex ante* and *ex post* overview of the risks in a holistic, objective and transparent way.

In the area of investment consulting we specialise in portfolio construction, in particular in alternative asset classes. Our specialists serving pension funds have in-depth understanding of both pension funds' assets and liabilities. The expertise of the team is deep and broad, due to our demanding clientele and specifically due to our position at innovative pension

funds globally. Among our pension fund clients are public sector funds as well as large multinationals. We are also fortunate to have a number of non-governmental pension plans as our clients. ORTEC has experience with the pension systems in a large number of countries (e.g. Austria, Belgium, France, Germany, Holland, Japan, Norway, South Korea, Sweden, Switzerland, UK, US). Over the years ORTEC has performed over 500 ALM studies in these countries.

Our approach is based on a proprietary multi-view and multi-period methodology specifically created to aid complex decision making. We analyse the assets and liabilities in a fully integrated fashion from economic, regulatory and accounting perspectives. The potential trade-offs between these views and the corresponding consequences for the strategic policy decisions (such as asset allocation, contribution, etc.) are in our view of critical importance for the decision making process. Our methodology is built on forward-looking risk measures based on our proprietary scenario analysis.

In addition to the above we have developed modelling techniques for all relevant asset classes. These are based on historical data when available and, in the absence of such data, combine expected characteristics and relations with economic variables to arrive at a relevant forecast. We use advanced techniques to account for phenomena such as illiquidity and irregular pricing (for example in order to understand the impact of smoothing of volatility for direct real estate). In addition we can provide advice on benchmarks and optimal strategic allocations within the asset classes.

About ORTEC Finance

ALM solutions for Private Wealth Management (PWM)

Besides our expertise with pension funds and insurance companies, we are pioneers in making the institutional ALM techniques available to advisors focused on private individuals. Our client-centric methodology allows for an efficient but tailored approach for both the initial advice and for continuous monitoring.

Wealth managers strive to give the best possible investment advice to their clients in view of their clients' own, personal, financial goals. Therefore ORTEC's PWM solutions seek to satisfy the most important objectives set for Private ALM such as establishment of client-specific and individual objectives, taking into account varying risk tolerances, a high level of transparency and the applicable regulatory frameworks (for example KYC and MiFID).

Using the institutional industry experiences and techniques for the benefit of individuals, **ORTEC Finance Private ALM** solutions integrate the following methodologies:

- 1) Economic scenario generation including the underlying economic theories
- 2) Portfolio and asset allocation optimisation techniques
- 3) Risk profiling and behaviour of individuals (behavioural finance)
- 4) Financial Life Planning (objectives and cash flows)
- 5) Legislative framework

In the above client-centric approach, scenario analysis is used to cover the unique circumstances of each individual client, with particular emphasis on their specific level of risk tolerance, including multi-period and multi-target planning.

In order to accomplish the above, our methodology covers the entire advising process from the first inventory of the client's needs to the optimised portfolio/asset allocation selection. The focus of Private ALM is on optimising the probability of reaching the client's objectives whilst giving insight into parameters concerning risk, return and the development of the client's wealth.

Besides the planning phase, the process of reaching the goals needs to be managed. This part is covered in the monitoring phase in which the goals vs. actual situation of total clientele can be included, an important dimension required for efficient firm-wide planning.

In 2008 over 4,000 advisors predominantly in the Netherlands, but also in other European countries, such as Belgium, Luxembourg and Switzerland, use **ORTEC Finance** solutions for PWM. These professionals work for more than 20 asset managers, family offices and (private) banks, but also include independent financial advisors, and financial and wealth planners. **ORTEC Finance** offers customised solutions for each market segment composed of consultancy, software models and training.

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