

Hedge Funds in Asset & Liability Management

How to Implement Hedge Funds in a Pension Fund Portfolio

Harcourt Hedge Fund Seminar

**Dr. Andreas Reichlin, Partner PPCmetrics AG
Financial Consulting, Controlling & Research
www.ppcmetrics.ch**

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- ALM for Pension Funds – Methods and Objectives
- Should Hedge Funds be included in the Strategic Asset Allocation – Some Criteria would help!
- Do Hedge Funds meet these Criteria?
- Alternative Ways to Implement Hedge Funds in a Pension Fund Portfolio
- Summary

- Legal requirements
 - „The Pension Plan has to carefully select, manage and monitor it's investments“

Additional aspects are:

- Security
- Financial Status
- Structure and Changes of Liabilities

with a clear emphasis on meeting liabilities.

Challenges

- As an investor you have to decide whether „new“ strategies will help you to achieve these goals.
- Blindly implementing hedge funds and other strategies without considering the facts can be costly.
- Giving up possible positive contributions from such strategies can be costly as well.

- Classical Asset-Liability-Analysis (“Actuarial View”)
 - Static ALM
 - Dynamic ALM
- Market-based Asset-Liability-Analysis (“Market View”)

ALM Methods: Actuarial vs. Market View

Actuarial View

- The present value of future liabilities is derived by applying a constant technical interest rate.

→ Actuarial Value of Liabilities

- Liabilities have no interest rate risk.

Market View

- The present value of future liabilities is derived by applying the current interest rate structure.

→ Market Value of Liabilities

- Interest rate risk corresponds to a long term bond portfolio.

⇒ As a rule of thumb both values differ by approx. 10%

ALM Methods: Consequences for the Optimal Investment Strategy

Actuarial View

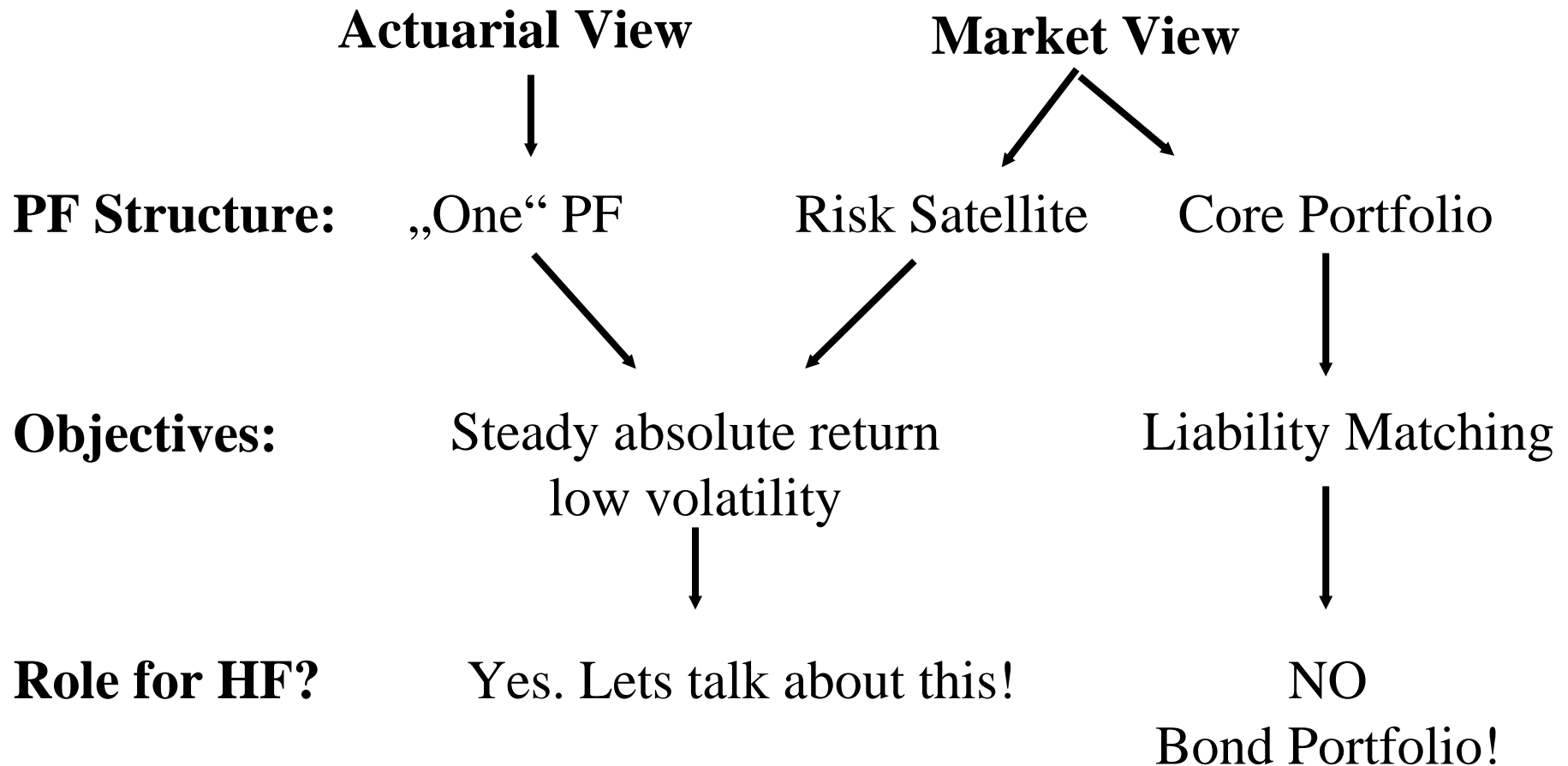
- The optimal strategy achieves a return that is equal to or higher than the required actuarial rate of return and has a low absolute volatility.

Market View

The optimal strategy consists of two parts:

- „Core“ Portfolio: Matches liabilities with least risk
⇒ Bond portfolio with “long” benchmark
- „Risk“ Satellite: Achieves risk premiums over bonds (equities, real estate, hedge funds?)

ALM Methods and the Role for Hedge Funds?



Hedge Funds and Strategic Asset Allocation

- Should Hedge Funds be included in the Strategic Asset Allocation (SAA)?
 - What categories are in the SAA?
 - What categories are not in the SAA?
 - What are the criteria for inclusion/exclusion as a category?
 - Why is Alpha not there today?

What are the criteria for inclusion/exclusion?

1. Systematic Risk based on an independent asset category
 - Independent means that it adds an investment dimension in an Arrow-Debreu-World: an asset that cannot be constructed from the other asset categories.
 - Systematic means, that you cannot eliminate the risk through diversification.

AND

2. Investors are compensated for bearing the risk.

AND

3. It should be repeatable.

What categories are in/not in the SAA?

In:

- Domestic and Foreign Bonds (with various subcategories)
- Domestic and Foreign Equities (with various refinements)
- Property/Real Estate
- Commodities

NOT In:

- Forex
- Derivatives
- Convertibles

Do Hedge Funds meet the stated criteria?

- Are there *additional systematic* risk categories that enhance the existing investable universe?
 - If there are new risk categories:
 - Are we compensated for bearing the risk?
 - Will the risk premium remain?
 - And can there be a reliable structural or skill-based alpha?
- Answering these questions will tell us a lot about how we have to deal with Hedge Fund Investments!

Alternative Ways to Implement Hedge Funds in a Pension Fund Portfolio

1. Hedge Funds as an asset class
 - Traditional multistrategy / multimanager FoHF

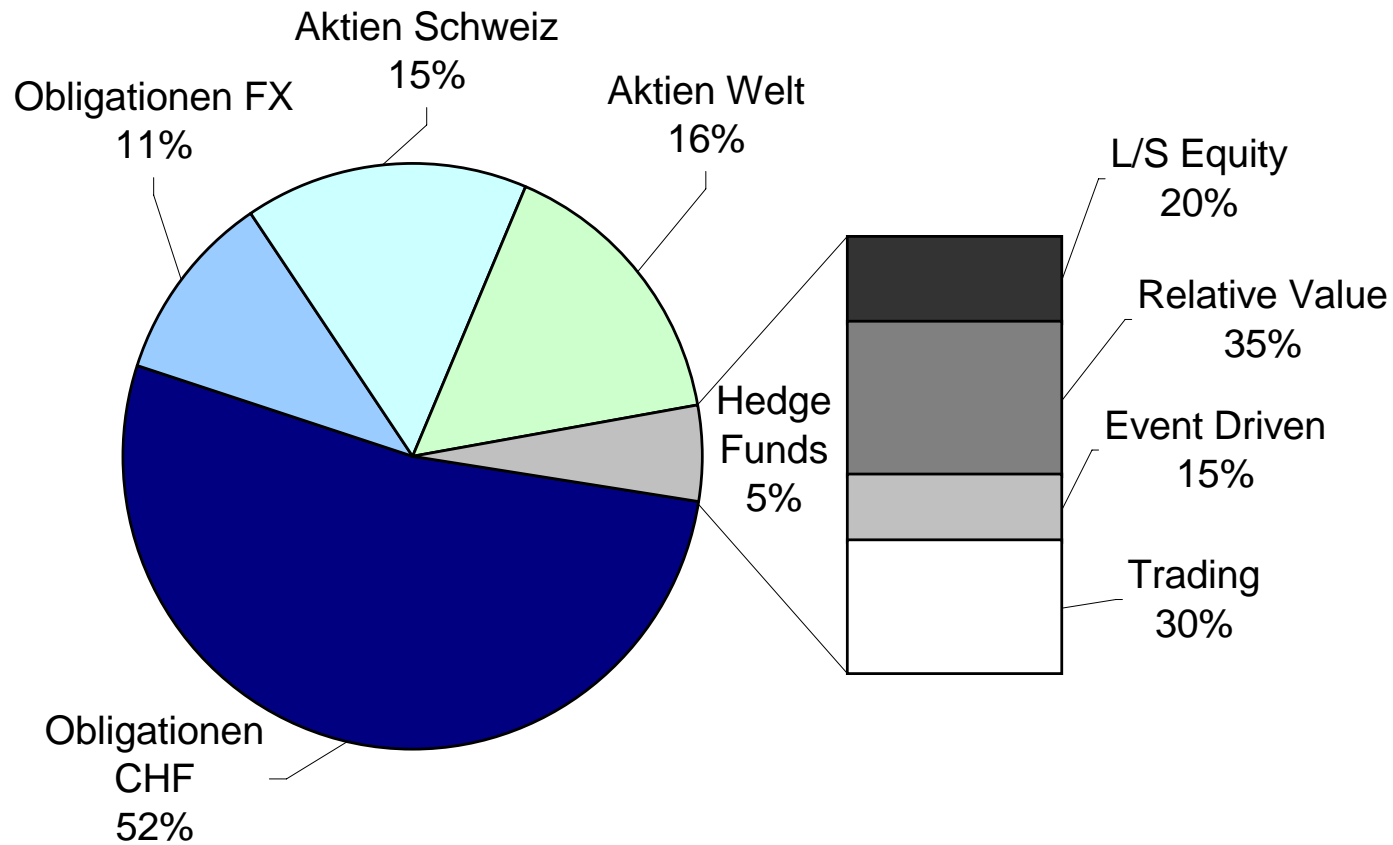
2. Hedge funds as an integral part of the asset allocation and portfolio structure
 - Hedge funds as a complement to the traditional investment universe
 - Hedge funds as a substitute for traditional active investment management

Hedge Funds as an Asset Class (1)

Beispiel Mandatsspezifikation FoHF Investment		
Referenzwährung	CHF	
Anlagebetrag	CHF 25 Mio.	
Anlageziele:	CHF Libor 3M p.a. + 5%	
- Zielrendite (Netto)	< 7%	
- Zielvolatilität	< - 10%	
- Max. Draw Down	keiner	
- Strategischer Leverage	Min. 15	Max. 45
- Anzahl Manager	Min. 2%	Max. 10%
- Position pro Manager	Min.	Max.
Anlagestile	10%	40%
- L/S Equity	30%	60%
- Relative Value	10%	20%
- Event Driven	0%	30%
- Trading	Quartalsweise, 95 Tage Ankündigung	
Liquidität	max. 3 Monate	
Kündigungsfrist (Lock Up)		

Hedge Funds as an Asset Class (2)

Beispiel: FoHF als Anlagekategorie



Hedge Funds as an Asset Class (3)

- Advantages
 - Typical first step investment
 - Simple implementation
 - Selection of product independent of current asset allocation
 - Comparability with other products (peer group)

- Disadvantages
 - Includes traditional beta
 - Increases potentially your strategy risk
 - Is overpaid as there are more efficient ways to access trad. beta
 - Can not be optimal with respect to your asset allocation / objectives
 - Potential of industry is not exploited

Hedge Funds as an Integral Part of the Asset Allocation and the Portfolio Structure

Strategy Level	Traditional risk premium <ul style="list-style-type: none">• Bonds• Equities• Real estate	Alternative risk premium <ul style="list-style-type: none">• ILS• Structured Finance• Credit markets• Energy markets
Implementation Level	<ul style="list-style-type: none">• Active vs. passive?• Hedge funds as alpha provider in combination with passive core investments → substitute	<ul style="list-style-type: none">• Hedge funds as „Door Opener“ and/or risk carrier!• Alpha & Beta component → complement

Hedge Funds as a Complement to the Strategic Asset Allocation

- Access to new markets and new, alternative risk premiums
- Examples:
 - Agro Financing
 - Alternative risk transfer (cat risks, weather)
 - Natural resources (energy, CO2 certificates, commodities)
 - Specific credit markets (CDO, MBO, ABS)
 - Structured finance

Hedge Funds as a Substitute for Traditional Active Investment Management (1)

- Idee: Separation of Alpha an Beta

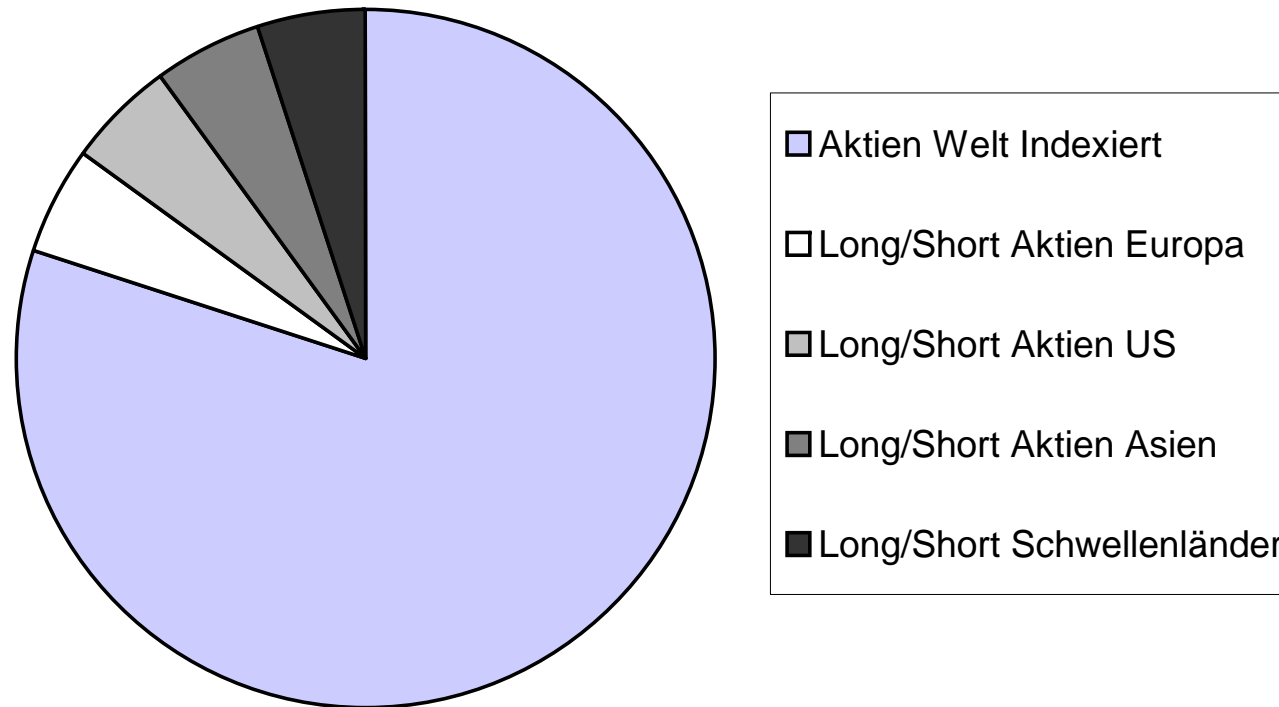
Beispiel: Trennung von Alpha und Beta in einem traditionellen Mandat			
	Manager A Aktien Portfolio	Benchmark Gewichtung	Manager A Aktive Positinierung (PF - BM)
Aktie A	20%	18%	2%
Aktie B	35%	38%	-3%
Aktie C	10%	13%	-3%
Aktie D	5%	4%	1%
Aktie E	30%	27%	3%

Focus of hedge fund



Hedge Funds as a Substitute for Traditional Active Investment Management (2)

Beispiel Core/Satellit durch Hedge Funds im Bereich Aktien



Hedge Funds as a Substitute for Traditional Active Investment Management (3)

- Other examples: Make use of Fund of Hedge Funds with a clear style focus
 - Active credit management and enlargement of the fixed income universe => Fixed Income Arbitrage Funds
 - Active currency management => currency FoHF
 - Active tactical overlay => Global Macro FoHF
- ➔ Note: with this objective hedge funds are part of the implementation policy and not the the investment strategy

How to Implement Hedge Funds in a Pension Fund Portfolio: Summary

- HF as part of the liability matching portfolio NO!
- HF as part of the risk satellite Yes!
- Ways to implement hedge funds
 - On the strategy level => complement to the actual asset allocation
 - On the implementation level => substitute for traditional investment management mandates
- Typical Hedge Fund products sometimes capture several elements (traditional and alternative beta, alpha):
 - ⇒ Know your products and understand their economic rationale!