Nordic Alternative Investment Forum

Moving away from traditional asset allocation

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Outline

- Problems of traditional asset allocation
- Downside risk control
- Diversification and alternative assets
- Innovative solutions to deliver desired objectives
- Conclusion

Traditional approach for long-term investors

- Traditional attitude: Manage returns and **TAKE** risk
  - Passive acceptance or even welcoming of risk
  - High ‘expected’ returns from risky equities

- Modern approach: Manage returns AND **MANAGE** risk
  - Active attention to risk control
  - Reduce risk of sharp losses

Problems of traditional approach

- ‘Expected’ returns, not same as *achieved* returns
- Relies on equity risk premium to outperform
- What are the investment objectives?
  - Inflation plus x%?
  - Pension liabilities plus y%?
- Avoiding big losses can be vital

Avoiding big losses important

- Falling markets are very damaging
- If market halves then doubles, only back where started
- If can protect from severe falls, required returns lower

	£100 invested	£100 invested	£100 invested
Yr. 1	- 30%	- 30%	- 3%
Yr. 2	+ 30%	+ 43%	+ 5%
End value	**£91**	**£100**	**£101.85**

- Is switching to bonds right way to control downside?

Do bonds reduce risk?

- Bonds reduce ‘risk’ as measured by volatility of return
  - But in exchange for much reduced upside potential
- Bond investments also still contain ‘unrewarded’ risk
  - E.g salary inflation, credit, longevity, duration
- So, switching to bonds does not ensure **all** risks reduced
- Need to control downside risk, without removing all the upside
  - reducing pension deficit requires *outperforming* liabilities

Relying just on equities too 'risky'

- Equity returns carry two kinds of risk

1. volatility associated with equity risk premium – can hope to be rewarded for this
2. risk of not keeping up with pension liabilities, as interest rates, inflation and mortality change - unrewarded risk

- Other risks caused damage as not been controlled
- Large losses can be fatal!

Modern thoughts on risk control

- Diversification of sources of investment return and risk
  - Low correlation, wide range of asset classes
- Seek diversified sources of return from inefficient markets
- Equities only one source of risk premium for good returns
  - Many different sources in inefficient global markets
- Why rely on just one source of beta and alpha?
- Diversification offers prospect of smoother returns
- Remember moves to international equities in 1980’s?

Diversifying beta and alpha

- More than just equities and bonds
  - Alternative assets portfolio – hedge funds, private equity, commodities, property, currency
- High long-term returns, but selecting right manager vital
- Gives access to more sources of market inefficiency and manager skill
- But may need to protect against unanticipated losses
  - Derivatives can be more effective than bonds

Using swaps for downside insurance

- Swaps help managing interest rate and inflation exposure
- Swaps more liquid and flexible than bonds
- Can achieve specific durations to fit with liabilities
- Protect downside risk of assets relative to liabilities
- Leaves extra capital to invest in high return seeking assets

Not easy for investors...

- No one right answer – complexity, lot of governance time
- Derivatives can be useful – BUT essential for investors to understand them
- Experienced management of derivatives vital
  - Administration and collateral can be very complex
- Alternative assets can offer high long run returns
- Could asset managers offer structures for protection *plus* upside to help trustees with complexity?

Integrated solutions possible

- Investment approaches offering asymmetric returns
- E.g. invest £100m, capital and inflation protected
    - Downside protection against much worse deficit
- Plus high return investments – could be leveraged too
    - To help eliminate deficit/mortality risk over time
- No administrative hassle with derivative agreements if all done by one provider in an integrated solution
    - Essential to find reliable alpha generators for added returns – could expect 8-12% above inflation!

An example – 3 step strategy

- Invest £100m today
- <u>Step 1</u>: inflation swap - choose maturity e.g.
  - 15 year inflation swapped for 3% fixed – cost £55m
- <u>Step 2</u>: ensure you have the £55m to pay for swap in 15 years – 15 year bond yield implies £80m needed today
- <u>Step 3</u>: with £20m spare capital left today, invest in high return seeking assets to generate extra returns needed
  - Exchange real yield for possibility of much more

Step 1: Inflation swap

2006

2021 MATURITY

INVESTORS AGREE TO PAY FIXED 3%PA FOR 15 YRS -
NO MONEY PAID NOW

INVESTORS MUST PAY £55m ON MATURITY

BANK AGREES TO PAY RPI FOR NEXT 15 YEARS TO INVESTORS

BANK MUST PAY INVESTROS THE RPI INCREASE ON £100m

Step 2: Need £155m in 2021

2006	2021 MATURITY
BANK REQUIRES £80m NOW TO PAY £155m IN 15 YEARS USING 15 YEAR BOND YIELD	RECEIVE £155m ON MATURITY TO PAY FOR INFLATION SWAP
ZERO COUPON BOND STRUCTURE MEANS ALL COUPONS PAID ONLY ON MATURITY	RECEIVE INFLATION INCREASE ON £100m FROM MATURING SWAP
£20m SPARE CASH LEFT NOW TO INVEST FOR HIGH RETURN	HAVE INSURED £100m AGAINST INFLATION RISK

Step 3: Invest £20m to generate high returns

2006

2021 MATURITY

INVEST £20m IN HIGH EXPECTED RETURN PORTFOLIO → **RECEIVE INVESTEMENT RETURNS GENERATED ON £20m INVESTMENT TO OFFSET DEFICIT AND/OR FUND MORTALITY RISES**

LIMITED LIABILITY STRUCTURE SO CAN'T LOSE MORE THAN £20m → **PLUS THE VALUE OF THE INFLATION SWAP TO COVER INFLATION RISK ON £100m**

Expected performance

- Investors receive:

1. Initial £100m
2. Plus inflation increase
3. Plus £20m
4. Plus increase in value of £20m invested in high return portfolio – extra 8-12% pa

- Need to ensure this outperforms the real yield on index-linked gilts after fees

Worst case scenario

- £20m high-return asset portfolio becomes worthless
  - Using limited liability structure caps downside
  - Have given up the real yield on index-linked gilts

On maturity, investors receive capital and inflation protection i.e. would get back:

1. Initial £100m
2. Plus Ipi

Conclusion

- Importance of diversification and low correlation
- New investment approaches may provide better chance of paying pensions than relying on just bonds or equities
- But no one right solution – it's not easy!
- Using derivatives for downside protection
- Plus alternative assets for asymmetric return profile
- More reliable returns targeting liabilities through diversification