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Macroeconomic Effects of the Credit Crunch for Pension Plans.

Presentation for the Joint Meeting of the Faculty of Actuaries Student Society and Our Changing Future

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Summary

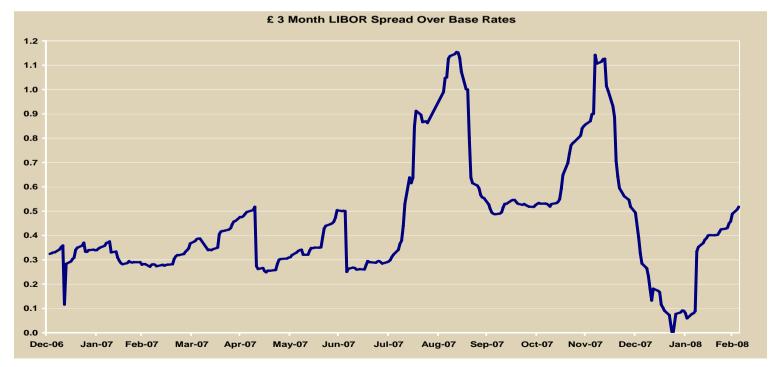
- Investment for defined benefit pension schemes
- Background
- Implications for hedging
 - Interest rate risk
 - Inflation risk
 - Credit risk
 - Liquidity risk
- LIBOR
- Conclusions

Trends in defined benefit pension fund investing

De-risking Strategies Diversifying Return Ongoing Dynamic Generation **Risk Management** Separation and management of risks and sources of excess return **Liability Driven Active manager skill Market Return** ("alpha") Investment ("beta") **Composition of Investment Policy**

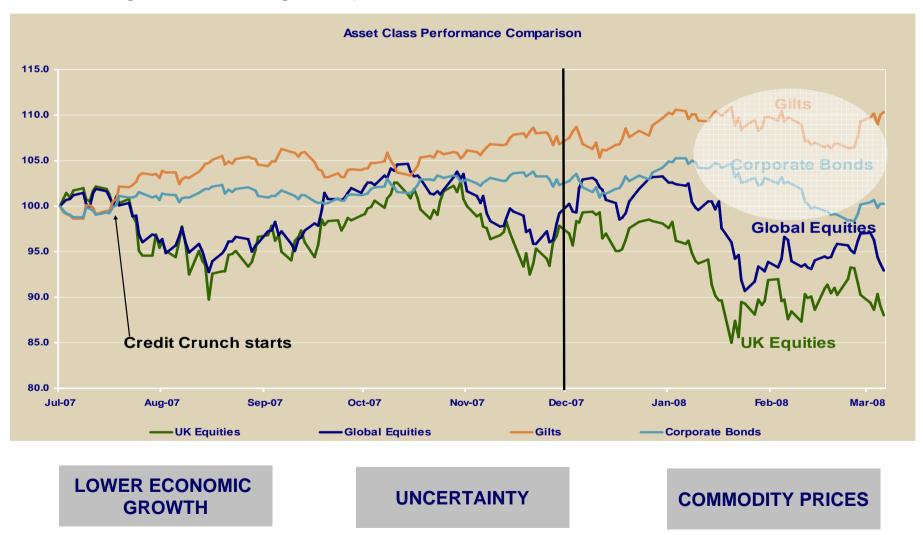
Background

- Trigger: US housing market
 - US sub-prime mortgages are resetting to <u>much</u> higher interest rates
 - US house prices peaked in 2006 and are now weakening.
- Credit concerns are far more wide-spread than US sub-prime:
 - Uncertainty about how to assess credit risk = Increase in the cost of borrowing
 - Banks have become very reluctant to lend to each other = Lower liquidity
 - Forced selling of failed/distressed securities (especially structured credit)

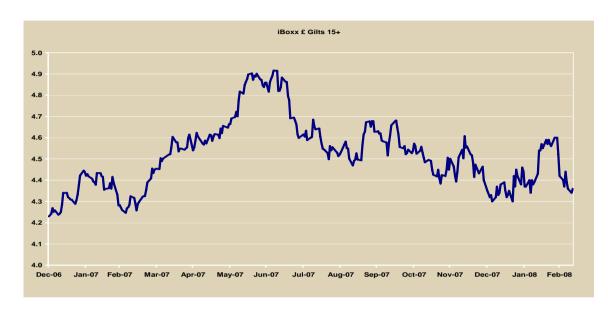


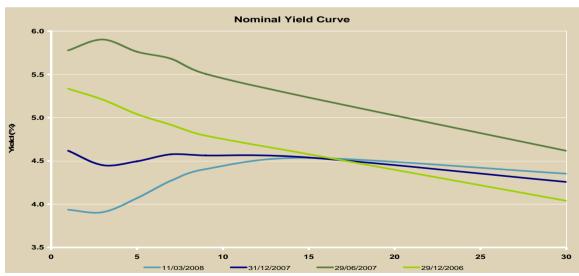
Impact on asset prices

 Generally, prices of return-seeking assets have gone down and (risk free) matching assets have gone up



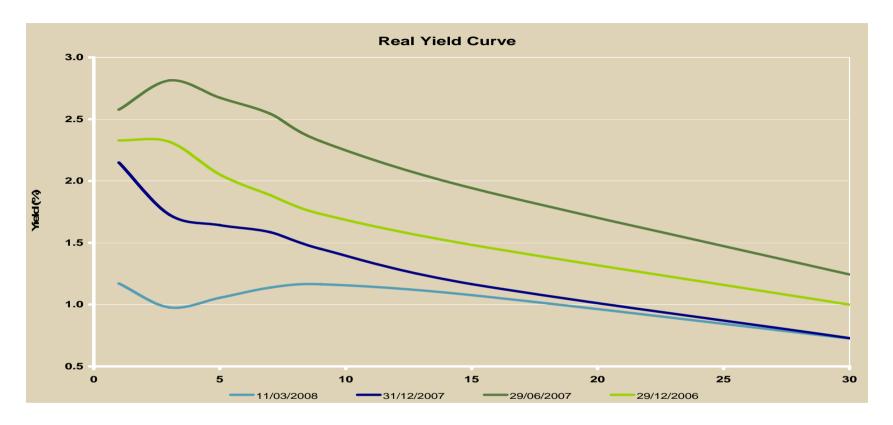
UK Government bond yields





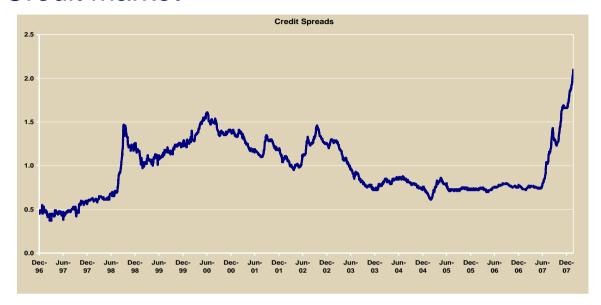
- Economic and credit uncertainty have led to a flight to quality, to (risk free) bonds and certain commodities (e.g. gold). This has pushed yields back down across the curve, increasing the cost of hedging strategies
- Expectation of lower short term interest rates has flattened yield curve, reducing the yield drag cost of implementing hedging overlays

UK Government bond yields and inflation

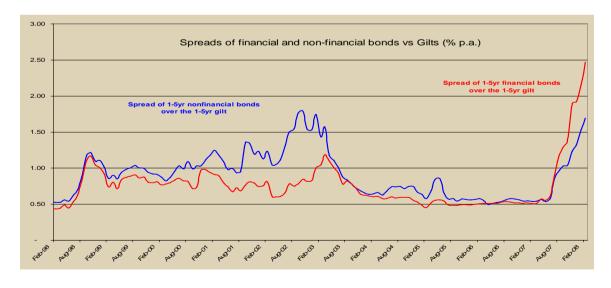


- Expectation of lower short term real yields has flattened real yield curve
- Inflation protection is now more expensive, for a combination of reasons:
 - Inflation risk premium
 - High demand relative to current supply at long end
 - Inflation expectations have risen are we heading for Stagflation?

Credit market



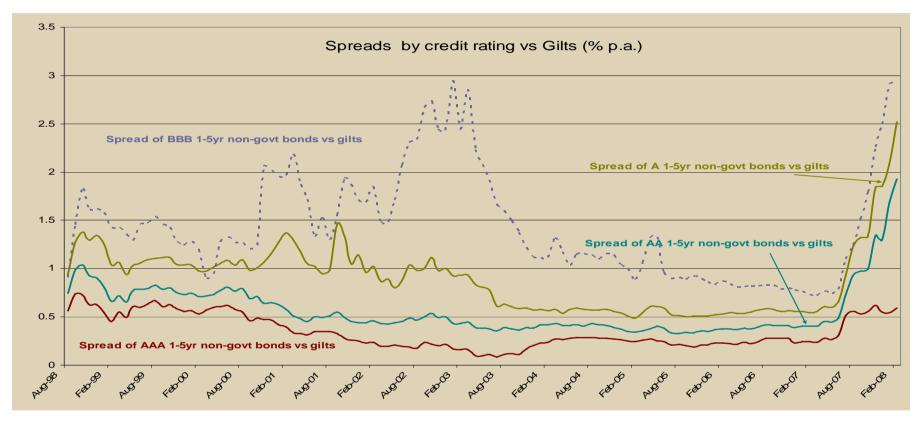
- Spreads have widened significantly
- Premium is compensation for credit (and liquidity) risk



- Financials v Non-Financials
- AA / A stocks have experienced significant yield widening.
- Darling Put

Liquidity is king

• Forced (distressed) selling and sharp value mark downs



- Pension funds are typically long term long only investors and have limited need for liquidity
- Liquidity demands a premium in the current environment

LIBOR generation

 Swap contracts used for hedging interest rate risk require investor to deliver 3 month LIBOR to the counterparty/bank



- 3 Month LIBOR is a challenging target need to take **risk**
 - Credit risk
 - Interest rate (duration) risk
 - Currency or country risk
 - Liquidity risk

Conclusion

Interest rate risk

- Economic outlook putting pressure on (risk free) rates
- Flatter yield curve means lower running cost of overlay strategies

Inflation risk

- More uncertainty about inflation, but demand remains high
- High premium to hedge

Credit risk

- Spreads at a 10 year high implies opportunity
- Spreads may widen further before they revert
- Outlook may vary by sector/rating
- Opportunities for good active managers in this environment
- Market timing and cost are critical

Liquidity risk

- Banks cautious about lending to one another
- Banks need liquidity
- Creates opportunities but also issues with running swap contracts generating 3 month LIBOR

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