Company Pension Plans And Financial Crisis: Lessons Learned?

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The economic situation:

- Huge losses of pension funds in 2008:
  - OECD reports worldwide losses of 5.4 trn. USD, i.e. 23% of their previous market values
  - Many US 401(k) plans lost 30% and more of their value
  - UK pension funds:
    - losses of over one third of their value
    - Equity ratio of 80% decreased to 50%
  - Contrary, German Pensionskassen and Pensionsfonds with very moderate losses.
- Should well accepted “solutions” and “actuarial tools” be questioned?

Questions should be raised to:

- regulators, e.g. accounting bodies (like IASB, FASB and local bodies)
- employers and pension plan managers
- employers and employees (questioning their relation)
- investment consultants on their “tools”

Questions to regulators (accounting bodies)

- Fair Value Accounting as a catalyser of the crisis?
- The long-term nature of pension obligations requires long-term financing.
- Should accounting rules (like IAS 19) support that?
  - No volatile accounting measures (fair value at balance sheet date) with respect to pension obligations and pension plan assets in the financial statements of the employer!
- Or should asset allocation obey accounting rules?
- Should pension plans be reported “off balance”, although not “off risk”?

Questions to employers and pension plan managers

- Must pension obligations be funded at all, or has the traditional German way of unfunded (but reserved) pensions its merits?
- Do long term hedging instruments really exist?
- Shouldn't companies limit their risks to their core business, where they are experts?
- Should pension funds invest their monies in equities..
- ... or only in bonds, even in nearly risk free bonds?
- ... and put equity investments preferably in the private sphere of well informed individuals (tax, risk appetite)

Questions to employers and employees

- Is the trend from DB to DC a “solution”? For whom?
- Can employees bear the pension risks?
- Modern DC plans are even “individual savings accounts”.
- Aren’t collective DC plans and collective hybrid plans (with more insured elements) better?
- What about “employer responsibility” when <u>pure</u> DC plans turn out as <u>poor</u> DC plans?
- Are <u>pure</u> DC plans really “risk less” to the employer?
  - Employees are forced to work longer as planned?

Questions to investment consultants

- All seven years a “one in hundred event”!
- Are ALM (and VaR) models really “correct”?
  - The right probabilities to bad scenarios (which then last for several years, and not only one year)?
  - Increasing correlation in bad scenarios!
    - The parameters (e.g. correlations) should depend on the outcome (realisation, path) of the scenario. Nothing new?
    - What are reliable dependencies on correlation?
    - Diversification useless?
    - counter-cyclical instead of pro-cyclical investment regulations.
  - Is the influence of behaviour (greed and panic) reflected in the model?

Questions to investment consultants and plan managers

- What is a “worst case scenario”?
  - It should be the “worst tolerable case” (without being ruined).
  - In traditional VaR:
    - Even worse cases are tolerated with a probability of (e.g.) 2%!
  - No pension fund or employer should bear such risk with such high probability (provided such probability is “correct”)!
  - Pension plan managers request (and always understood it this way) that worse scenarios than “the worst case” should have a tolerable probability of nearly zero.
  - Even if plan members “accept” higher risk, plan managers should avoid it (moral risk)!

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- "The model, the modelling assumptions and their results need to be transparent, understood and regularly debated by management and regulators."
- Re-estimation of many parameters.
- VaR = minimum amount of loss with given probability
- More reliable: TVaR = Tail VaR = expected loss.
- Use of fat-tailed non-normal distributions to avoid underestimating real risk exposures. "But does that help?"
- Sensitivity analysis to extreme or outlier events.
- Assessment of the consequences of uncertainty.

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- Only “off risk” activities should be reported “off balance”.
- Reduce pro-cyclical effects.
- “Counterparty risk” should be understood and measured carefully (and reflected into all risk measures, e.g. VaR).
- Strengthen financial regulation on rating agencies, hedge funds etc.!
- Remuneration incentives should not focus excessively on short term results.
- Re-opening the DB versus DC debate.

Summary

- “The model, the modelling assumptions and their results need to be transparent, understood and regularly debated by management and regulators.”
- ... and by all those people “who finally bear the risks”
- ... and be a bit more prudent than requested!