

Discussion of Boon, Briere & Rigot:
Does Regulation Matter?
Riskiness and Procyclicality of Pension Asset Allocation

Con Keating

OECD workshop, Amsterdam, April 2014

Con.Keating@brightonrockgroup.co.uk

The findings

Regulatory factors play a strong role in explaining pension fund's asset allocation choices.

No surprise here – this is their purpose

Regulatory factors have a much larger economic impact than individual characteristics

This may be statistical artefact – to an extent individual characteristics will average

Similar in amplitude to institutional factors

- All regulatory changes induced a **significant reduction in risky asset allocation**. This should raise questions of the purpose of this regulation
- **Risk-based capital requirements have the strongest impact**
 - They induce a strong reduction in risky asset weights, especially equities
 - They have positive impact on alternatives (especially private equity, real estate) and risky fixed income (mainly high yield)

Is this an appropriate system of risk management?

- The choice of the liabilities **discount rate comes as the second largest impact**. This is surprising given the relative volatilities of assets and liability estimates

.

procyclicality

- Origins in the Basel II discussions ca 1997
- At the same time as Danielsson was doing the first “endogeneity of risk” work
- It led to “An academic response to Basel II” LSE Special paper 130
- Which notably omitted discussion of the absence of liquidity regulation.
- The important point is that this was relevant to banks
- Where approaching solvency boundaries could bind
- And trigger depositor runs
- And the business model was maximise return on capital
- And the cult of risk management and belief in the nostrums of efficient free markets was at it height.
- Insurance and pension regulation was late to join this party

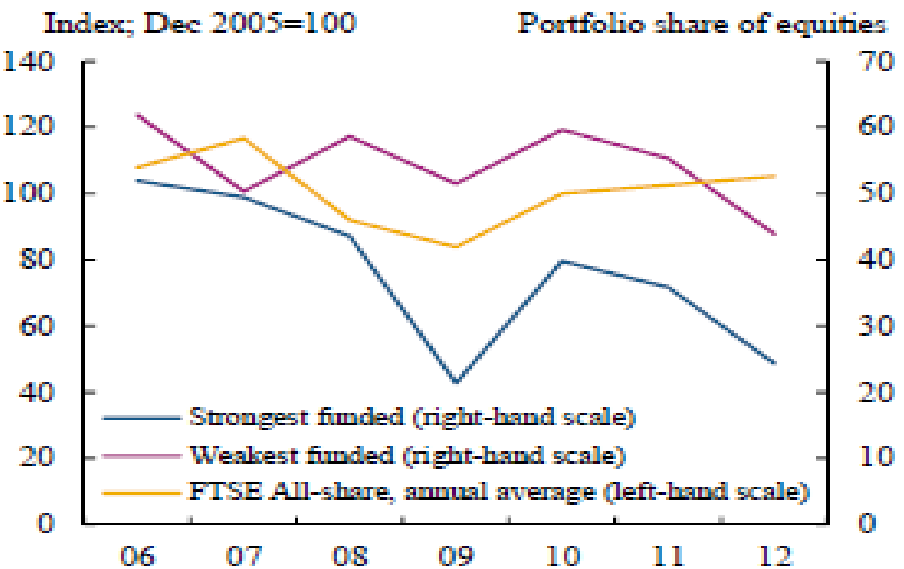
Risk Management

- Developed into a monoculture – Solvency and Capital Adequacy Regimes.
- These are appropriate for “pile it high, sell it cheap, and maximise return on capital” business strategies, for banks where liabilities can run.
- But there are many ways to manage risk – notably: Prevention versus Precaution
- Prevention – we may act on the likelihood of the risk occurring or we may act on the magnitude of the risk should it occur, or both. This is the land of insurance, and is immediate acting.
- This is fundamentally static, though it may be long-term (LDI, SII)
- Precaution is a temporary action when the risk is imperfectly known
- It is strongly related to the arrival of new information over time – it is dynamic
- This is the land of prudence and management action. It is the land of the super-secure business strategy, where cost is a second order concern.
- 1992 Rio Declaration Principle 15
 - *In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.*

- Neither Regulation nor the Market binds as rigorously as with banks
 - *We define two original measures of procyclicality²⁶ of pension funds' investment. They all involve comparing the sign of deviation of the actual weights of the funds in the risky asset classes with **a specified reference weight that the fund would have if it had no procyclical behavior**, and with the sign of the market return.*
 - This reference weight is an average of the weights, over time, which includes periods in which regulation may have been binding. To a degree it captures elements of the solvency status
 - **Should solvency status not be an explicit explanatory variable?**
the peaks in the asset drift procyclicality measure in 2001-2002 and 2007-2008 (actual risky asset weights of the funds decreased more sharply than implied by asset drift during these two episodes).
- Should we not also consider the riskiness of the equity assets held? When I am bullish I buy high beta stocks and vice versa when markets are distressed.

Funding strength

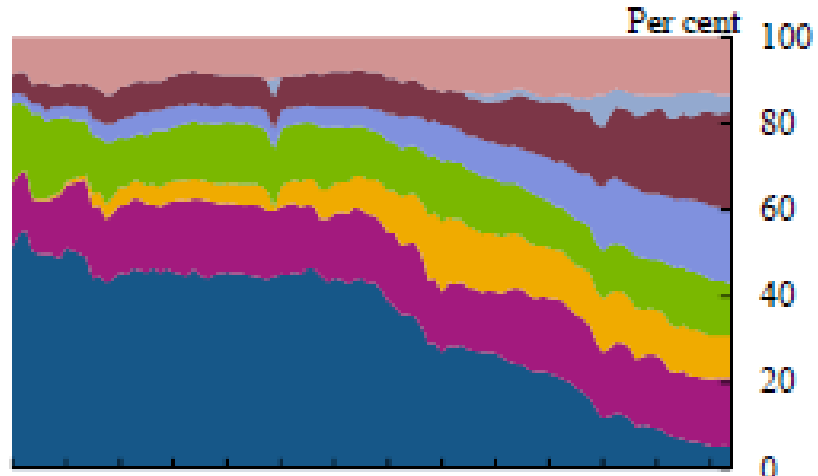
Chart 8 Portfolio share of equity of the UK DB PFs split by funding strength^(a)



Source: Pension Protection Fund and Bank calculations
 (a) The chart plots top 25% and bottom 25% funds each year given the strength of their funding positions. The funding position is calculated as a percentage of assets relative to liabilities, with higher percentage indicating a stronger funding position. The allocation to equities is taken as a proxy for the riskiness of a scheme (i.e. a higher allocation to equities indicating a more risky investment strategy). The sample includes all observations from the PPF dataset, for which the asset allocation reported was calculated in the reporting year or no earlier than 13 months prior to that. The values of asset holdings have been deflated using appropriate price indices for each asset class to illustrate the changes in asset allocation due to active re-allocation decisions rather than valuation changes

Patient capital?

Chart 7 Asset allocation of UK insurance companies and pensions funds



- UK equities
- UK corporate bonds
- Overseas bonds
- Derivatives
- Overseas equities
- UK government bonds
- Mutual funds' shares
- Other

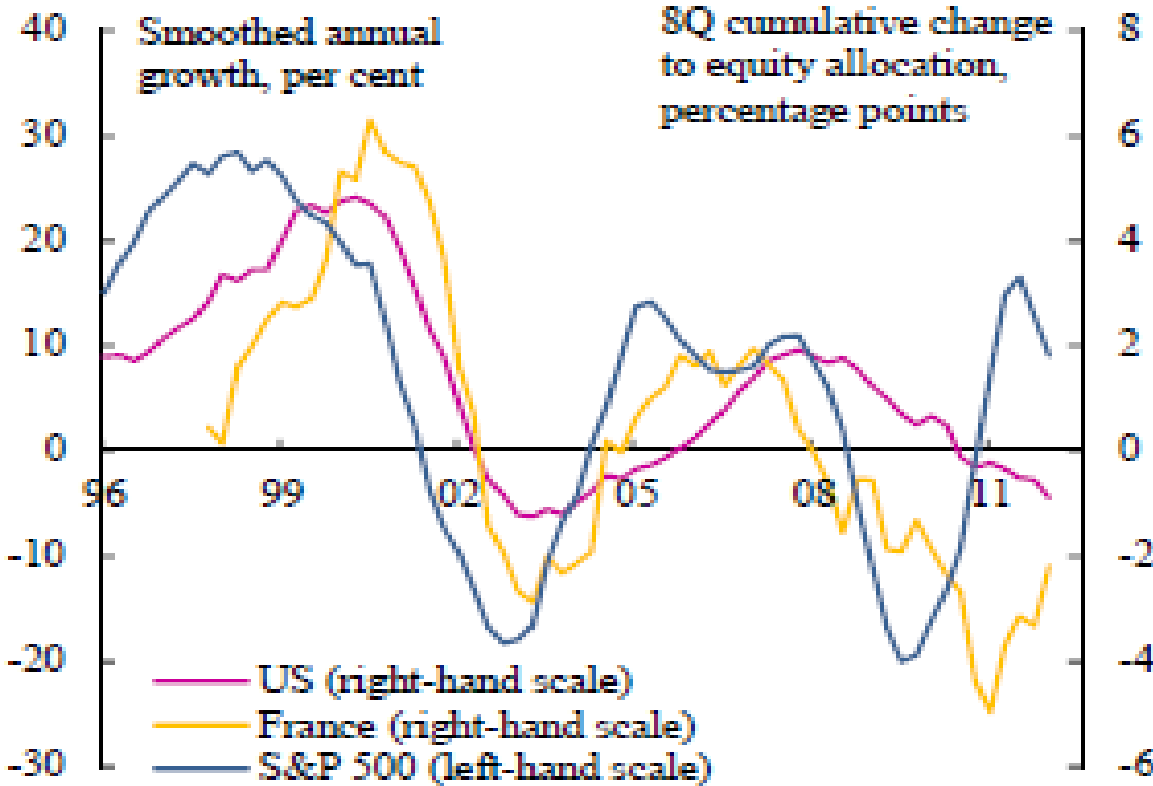
Source: ONS and Bank calculations
 (a) Bonds includes money market instruments, medium and long term bonds. The split of overseas bonds by issuer is not available.
 (b) Other includes currency, deposits, loans, other accounts receivable and insurance technical reserves.
 (c) Derivatives data begin in 2004, but prior to 1997 are included in corporate bonds.

Insurance Schemes

- Isn't the purpose of an insurance scheme, explicitly to allow investment to be pursued in the context of the sponsor and scheme's finances
- Rather than externalities such as the performance of markets?
- The maintenance or expansion of risky asset holdings only constitutes moral hazard when this is conditioned on the poor health of the sponsor.
- Accounting is also interesting. I have published a paper showing how this can be done in a manner endogenous to a scheme – circulated one pager.
- Could it be that the managers of schemes recognise the arbitrary nature of the liability valuation, and discount this (to some extent) in their choice of asset allocation?
- Suggestions – could we see a matrix of variable correlations
- Do we need to use a multicollinearity robust estimation technique – PLS
- A good paper in a field where much more needs to be done.
- Watch for the forthcoming Bank of England study on procyclicality in insurance and pension funds

Chart 6 Change in equity allocation of US and French life insurers over time^(a)

Given the authors



Source: National flow of funds
 (a) The 8Q cumulative change to equity allocation is calculated using an 8 quarter moving-sum. Reallocation into equities is calculated as the difference between the allocation in equities at time t and allocation into equities at time t-1, measured in percentage points. Thus a negative number indicates a reduction in percentage allocation to equities, and may not indicate a reduction in total exposure to equities (if total flows have been large). Reallocation is calculated using data on quarterly flows into (or out of) equities in order to adjust for the impact of revaluation effects. The S&P 500 is smoothed by taking the growth of the 8 quarter average on the 8 quarter average a year earlier.