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The prevalence of procyclicality in the financial industry

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Introduction

ICAT group set up in April 2020 to investigate prior research papers on procyclicality and to investigate the behaviour of institutional investors over COVID

Representation

- Constructed a group covering
  - banking, insurance, asset management and pensions
  - Asia, Europe and Australia
- Members:
  - Varun Bajaj, Pablo Vasquez Lopez, Gareth Mee, Dick Rae, Raj Saundh, Adeline Tan, Denis Walsh

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Risk Based Capital Regimes

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Hypotheses

"Risk Based Capital Models are inherently procyclical particularly in their investment module"

"Temporary measures by regulators can contribute further to this inherent procyclicality"

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Polling question

- Risk Based Capital Models are inherently procyclical particularly in their investment module

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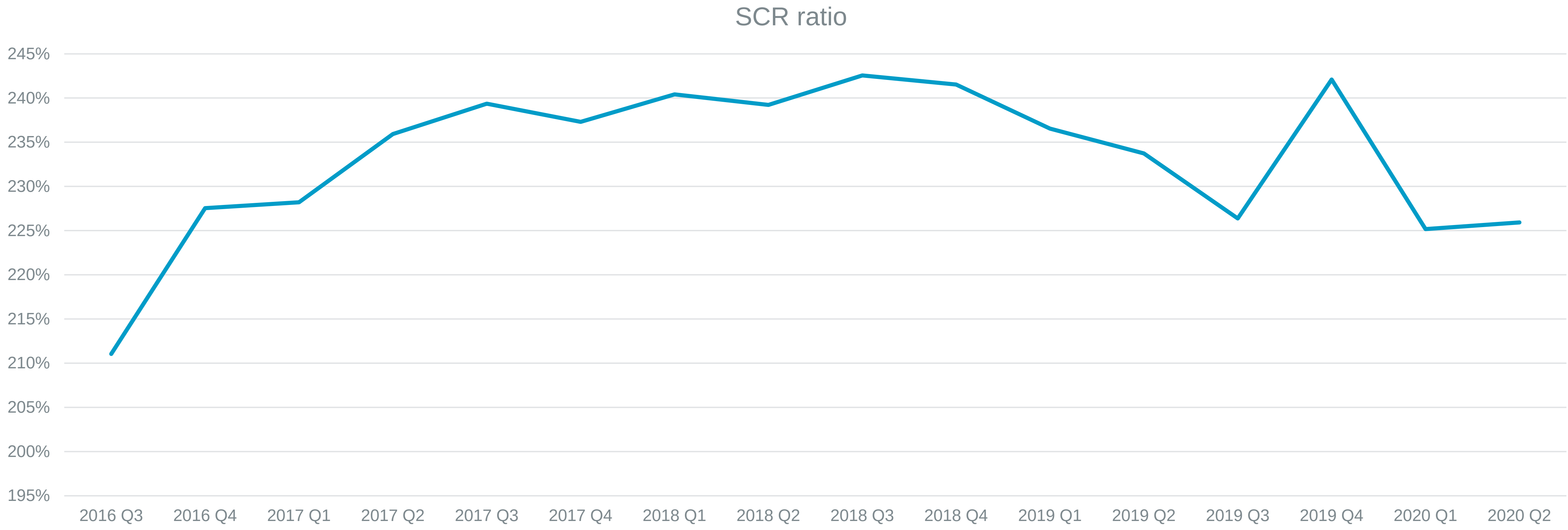
Limited Volatility in European Solvency Ratios…



"counter cyclical measures (e.g. volatility adjustment, symmetric adjustment, Transitional Measures on Technical Provisions (TMTP), matching adjustment) have "done their job"" – EIOPA 2020

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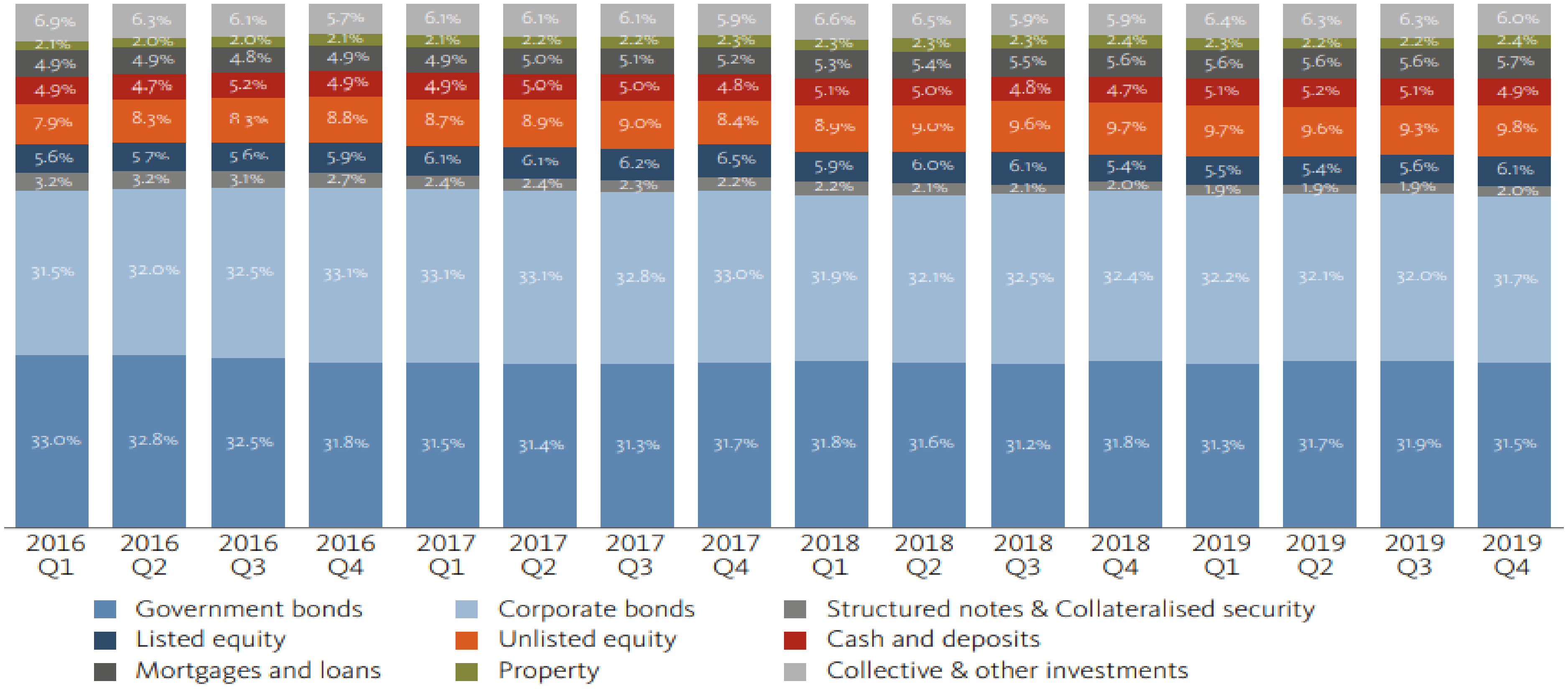
… and limited change in asset mix

Figure 2.1: Investment split of EEA insurance market



Source: SII QRTs data from EIOPA Central Repository. Quarterly prudential, Solo.
Reference period: Q1 2016 to Q4 2019.
Note: Look-through approach applied. Assets held for unit-linked business are excluded. Equities include holdings in related undertakings.

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Not all regulators are equal

Representation

- Anecdotal evidence that the European insurance regulators are requiring insurers to recapitalize where their Solvency ratios are falling below their targets
- The UK pension regulator last year increased pressure on companies to inject more money into their pension schemes
- Global banks encouraged by regulators to continue lending to stressed sectors through provision of government guarantees
  - Driven by the fact that banks are the ultimate lenders to the retail economy; insurers remain secondary lenders to the market

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Credit Ratings

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Hypotheses

“Credit Rating Agency methodologies show evidence of contributing to procyclicality”

“Reliance on credit ratings (specifically ratings of financial instruments), and actions taken by financial institutions in the event of rating downgrades contribute to procyclicality”

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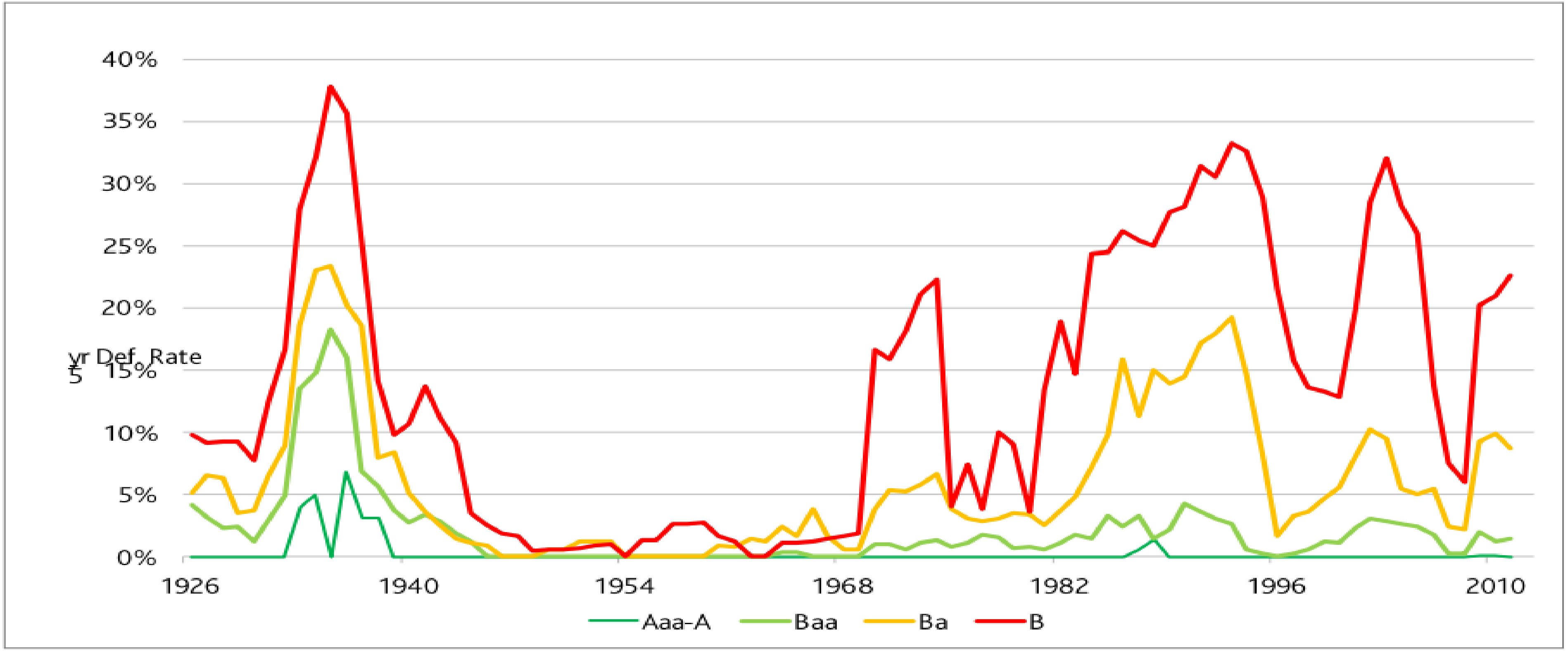
Polling question

- Reliance on credit ratings (specifically ratings of financial instruments), and actions taken by financial institutions in the event of rating downgrades contribute to procyclicality

Ratings are a relative measure of risk, not an absolute measure

5-year default rates by rating category: 1926-2011



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Literature divided on whether ratings are procyclical

- *"Rating changes are strongly correlated with cyclical indicators such as economic activity, default rates, and credit spreads. Few rating changes are subsequently reversed, even over long horizons, which implies that rating changes reflect enduring, rather than cyclical, changes in credit quality"* (Moody's Investor Services, 2009)
- *"the balance of rating downgrades and upgrades may correlate with the economic cycle".* It is also argued, these represent small rating moves, and based on their analysis, these moves are not typically reversed, thereby reflecting a fundamental deterioration in creditworthiness. (Moody's Investors Services - Rating Transitions - Global, 2020)
- On the East Asian crisis, credit rating actions… *"unduly exacerbated, for these countries, the cost of borrowing abroad and caused the supply of international capital to them to evaporate. In turn, lower than deserved ratings contributed at least for some time to amplify the East Asian crisis"*. (Ferri, et al., 1999)

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But credit ratings remain convenient for regulators

- Credit rating regulation changed materially post GFC
- Solvency II credit capital is proportional to rating despite calls at initiation stage to reduce reliance on credit ratings
- US regime remains heavily based on credit ratings
- All newer risk based capital regimes (Australia, Singapore, Hong Kong, South Africa) have used credit ratings to define level of capital
- Globally, in the institutional investment world, only pension schemes do not rely on credit ratings given the lack of risk based capital.

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Institutional investment practices

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Hypotheses

“Insurers, Pension Schemes and Endowments, are investors in long term assets to fund liability positions, however they are subject to very different determinants of cyclical behaviour; including their investment purpose, regulatory environment, incentives for leadership and others”

“Investment strategies are different across the key asset classes (equity, sovereign and corporate fixed income) which leads to different contributions to procyclicality”

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Polling question

- Although the role of insurers as lenders to the economy has increased, banks are still the key lenders to the sensitive sectors of the economy

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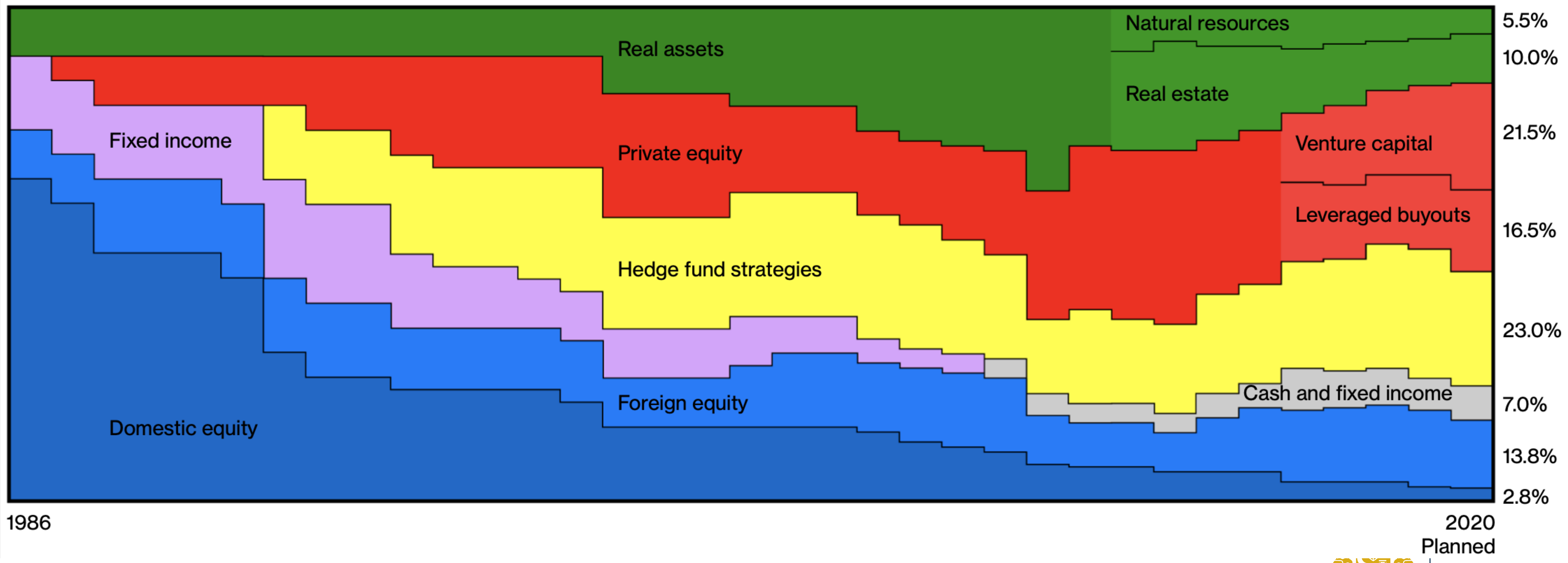
Same objectives, different application

- Insurers
  - Insurers for the long term, short term equity behaviours
  - Government bonds – “People feel safe at home and will continue to do so”
  - Corporate bonds - “Sometimes you make your bed and just lie in it”
- Pension schemes
  - Also long term and use equity to get there
  - Fixed income – home bias

Endowments more procyclical?



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Dynamic Provisioning

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Hypotheses

“The effectiveness of banking-like countercyclical buffers as mitigants of pro-cyclical behaviours might not work in insurance”

“Although the role of insurers as lenders to the economy has increased, banks are still the key lenders to the sensitive sectors of the economy”

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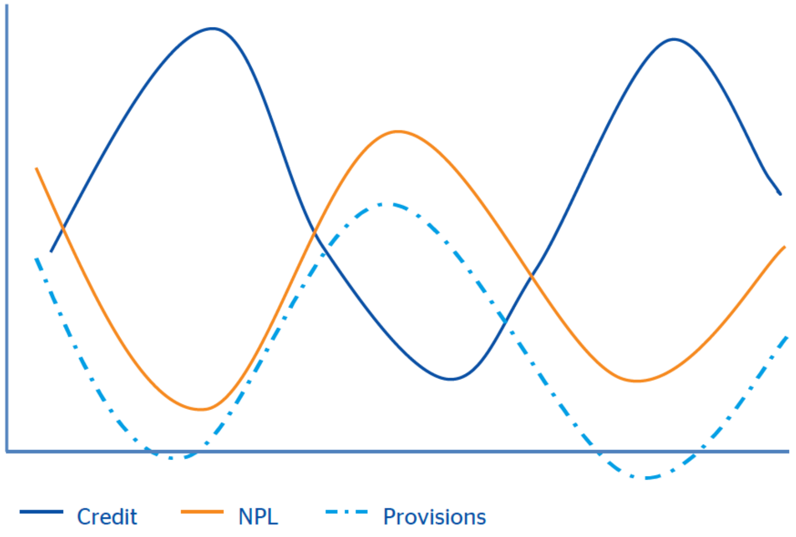
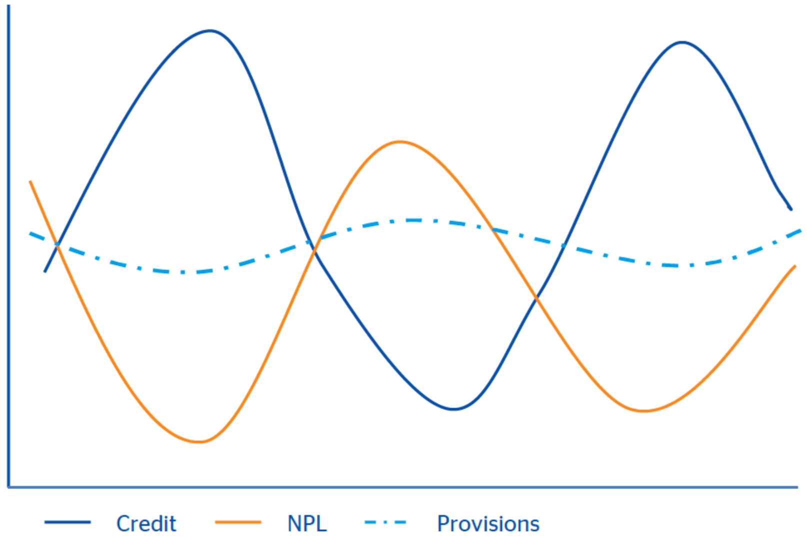
Dynamic provisioning - example

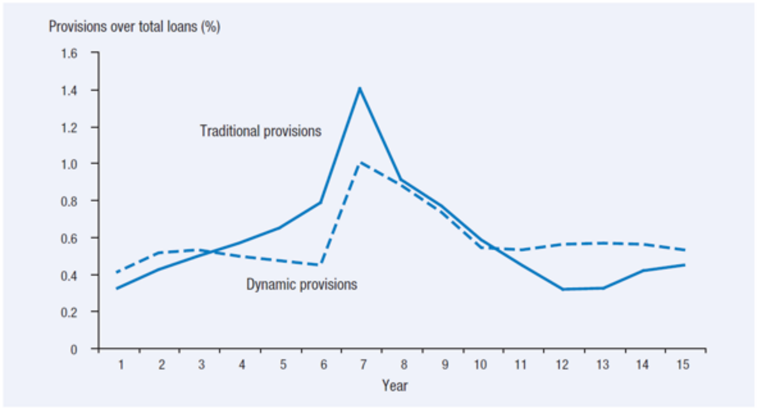
Normal Provisioning Cycle



Dynamic Provisioning Cycle



Traditional and dynamic provisions across a simulated lending cycle



Note: Traditional provisions are specific plus general provisions. Dynamic provisions are specific provisions plus general provisions with a countercyclical component.

- Dynamic provisions in banking can help to mitigate countercyclical factors
- Insurance is however a different animal. A countercyclical buffer might not be as effective

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Concluding thoughts

Definitely herding but perhaps less procyclicality…

- Risk based capital regimes have developed to be less procyclical
- Credit ratings remain a convenient tool for market participants. Whether they are used as an “absolute” or as a “relative” measure of credit risk could lead to a different contribution to procyclicality
- Different institutional investors with the same aims (long term) apply fundamentally different investment strategies to meet similar goals same aims, entirely describable by regulatory regime
- Although banks and insurers are lenders to the economy, both are very different; and consequently regulators behave differently towards them in times of stress

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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