



ACTUARIAL SOCIETY
of
H O N G K O N G
香 港 精 算 學 會

Summary of the 2009 risk management survey results

The Investment & Risk Management Committee

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Steve Tong, Alan Liu, Patrick Li**

2 December 2009



Background

- Increasing shift and demand in actuarial role
- IAA response to G20 in November 2008
- Non existence of formal risk management guidelines
- Current practices/snapshot in HK?
- Launched the first industry survey in the market, serving as an initial step in moving practitioners to a complete risk governance concept and “better” practice
- A survey was sent out to 48 companies, including local operations and HK-based regional offices which often drive risk management framework. 63% response rate covering 80% of market by NB premiums
- Results anonymously analysed

Overview

Intro – Company information

Part 1 – Enterprise risk management framework

- Approach to Risk Management
- Risk function & structure
- Risk management program
 - Drivers
 - Risk Types
 - Capabilities
 - Level of satisfaction
 - Challenges
 - Alignment with strategy

Part 2 – Use of risk measures

- Types and approach
- Risk aggregation
- Performance indicators

Part 3 – Financial crisis

- Product strategy
- Asset management strategy
- Change to economic models



Are you out of line
with everybody?



Setting the scene...

- Overview of company profiles

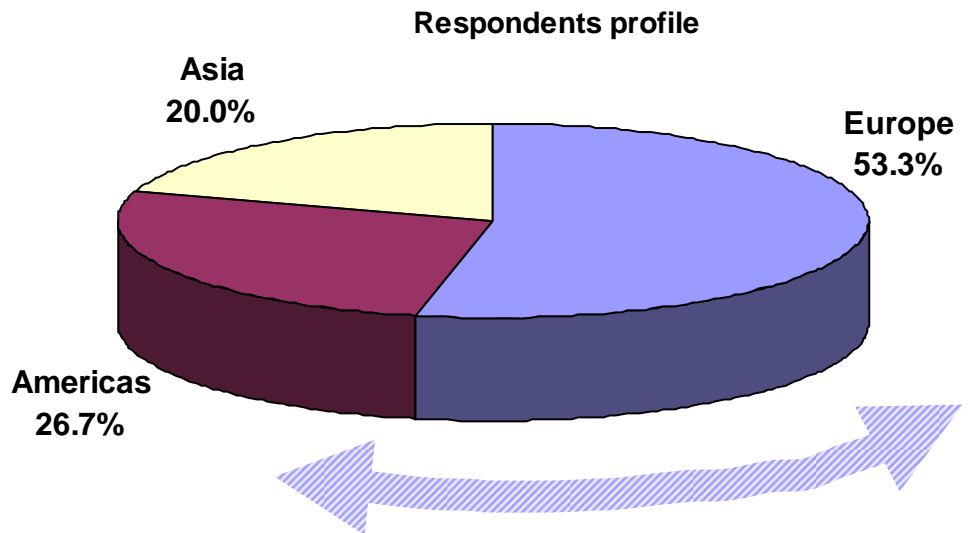
by Ms. Ka-Man Wong

Coverage of the survey

***There are a total of 30 respondents participated in the survey.
3 major reinsurers. 6/7 top life insurance players.***

Market share: Weighted IF = 75%; Weighted NB = 80%

Location of head office and regional/local office mix of participants:



Regional offices operating in HK comprises half of companies from Europe and a quarter from the Americas.

Location of Head Office

Total count = 30

Local offices	20	66.7%
Regional offices in HK	10	33.3%
With both offices contributed	5	16.7%

Role of respondents

- Represent company stance and viewpoint on
 - Risk management framework current and forward
 - Risk and financial reporting regime preference
 - Intended existing/future investment strategy
 - Liability and asset management
- Breakdown of the respondents' positions:

Position	Appointed Actuary / Chief Actuary	Chief Financial Officer / Chief Risk Officer	Others*
%	63.6%	22.7%	13.6%

* "Others" include General Manager, Actuarial Director, Head of Actuarial and Risk Office, and Valuation Actuary.

Asset position: portfolio size and mix

Size and asset mix of your general account asset portfolio as at 31 Dec 2008?

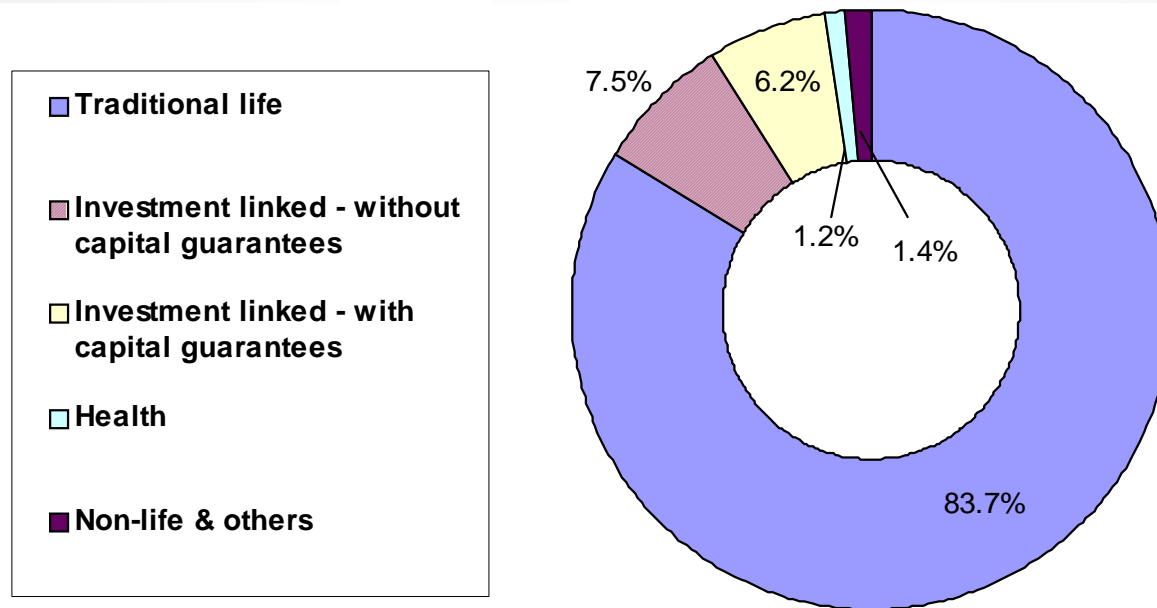
- Background to risk management framework and investment strategies response. Only applicable to local offices.
- Most companies (60%) sized between HK\$1 billion and HK\$49 billions.

Asset class holdings as at 31 December 2008:

Asset class	%
Corporate bonds	62%
Government bonds	11%
Equities & equity fund	11%
Cash / money market	9%
Mortgage / Asset backed securities	2%
Policy loans	2%
Real estate	1%
Hedge funds	0%
Others, please specify	2%

- Unit trust
- Synthetic bonds
- Other loans and account receivables

Liability position: product composition



- Product mix in in-force portfolio as at 31 December 2008
- Measured by % of total actuarial liability
- Local offices only and product type underlying treaty for reinsurers



Part 1

- Enterprise risk management

by Ms. Iris Lun

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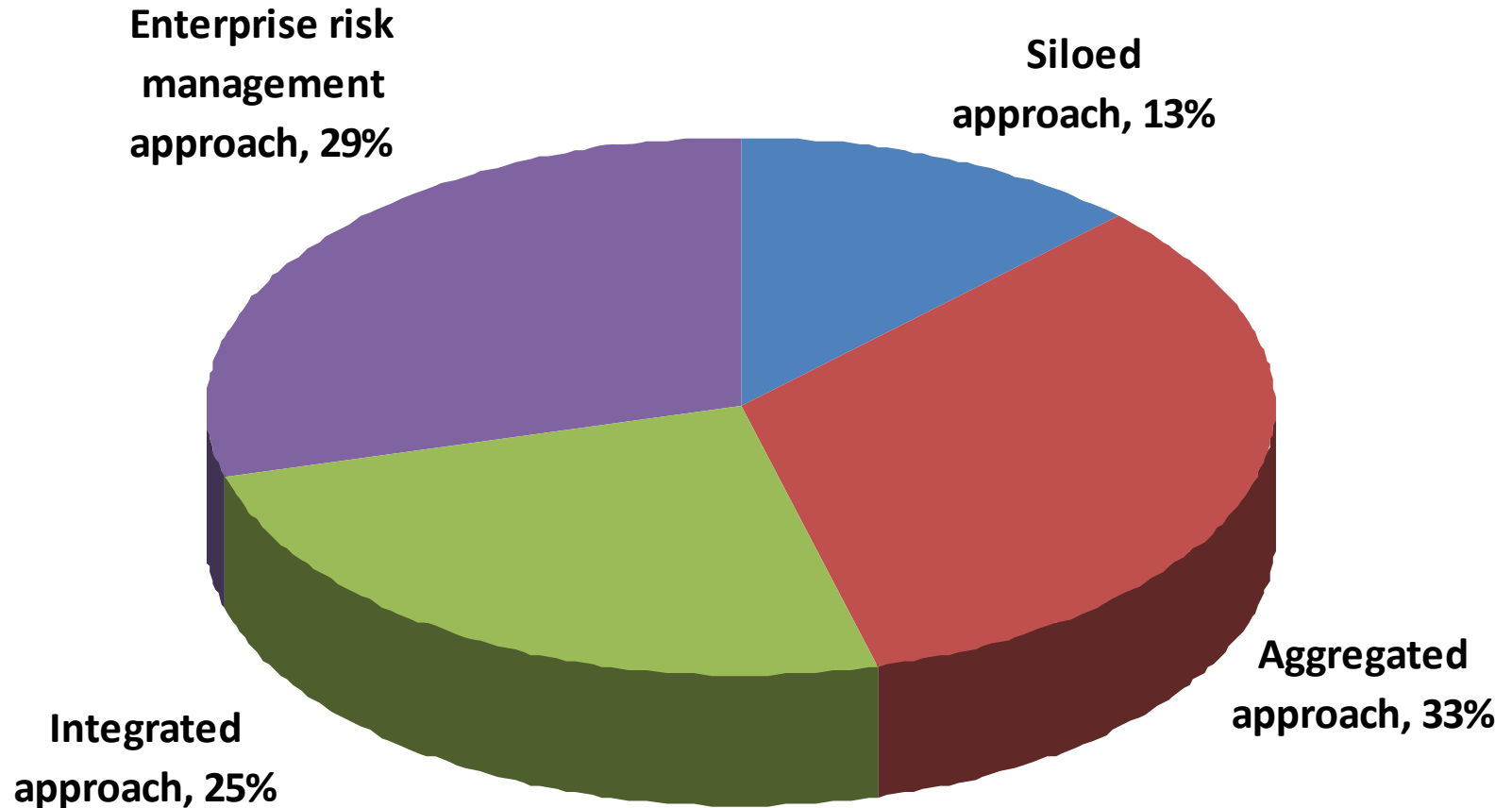
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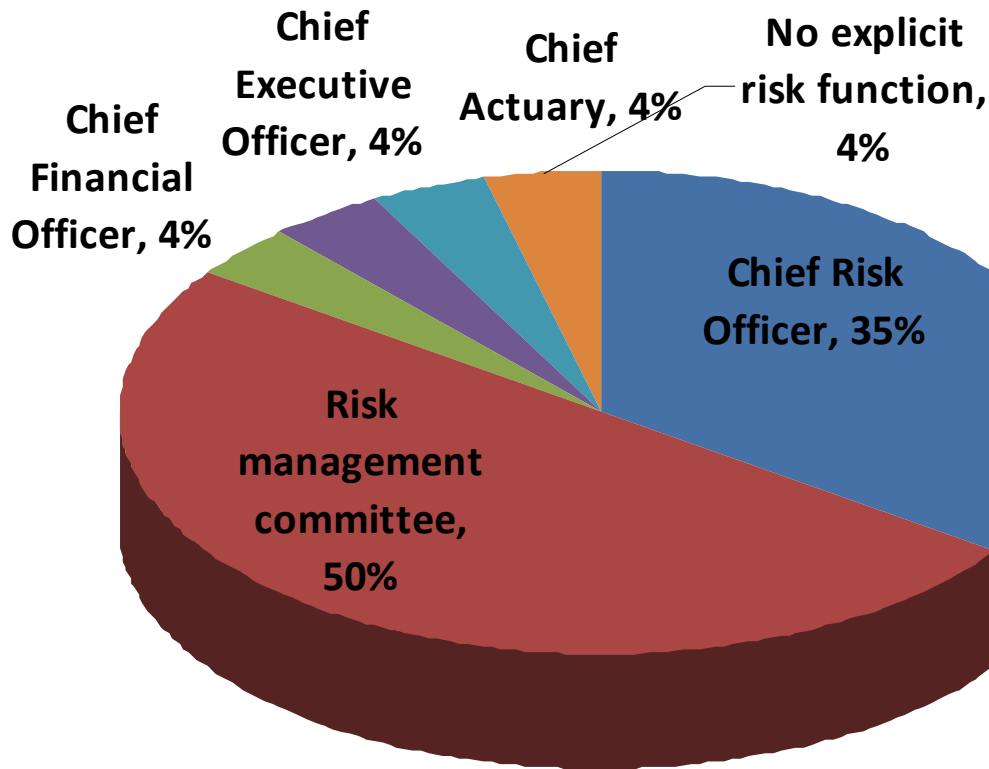


Approach to Risk Management



Risk Function and Structure

Who is ultimately responsible for risk management?

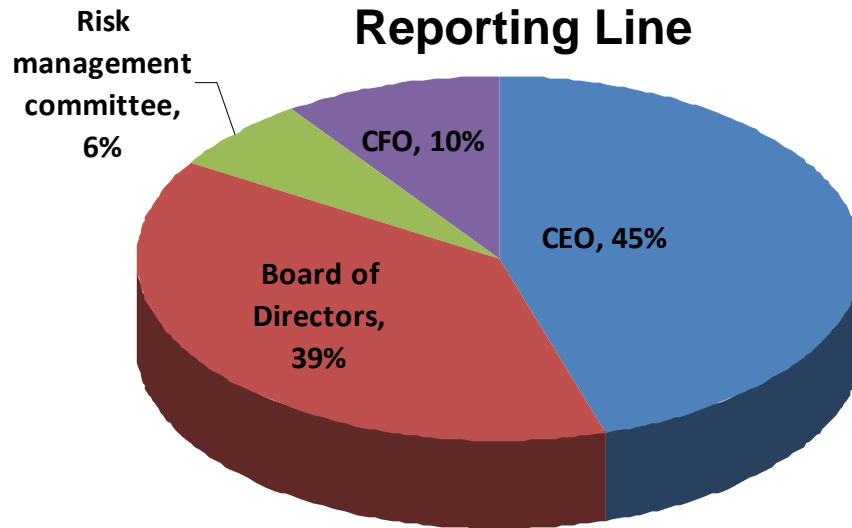


- Actuaries:
 - 1 company Chief Actuary responsible
 - Of those in positions responsible, 36% actuaries

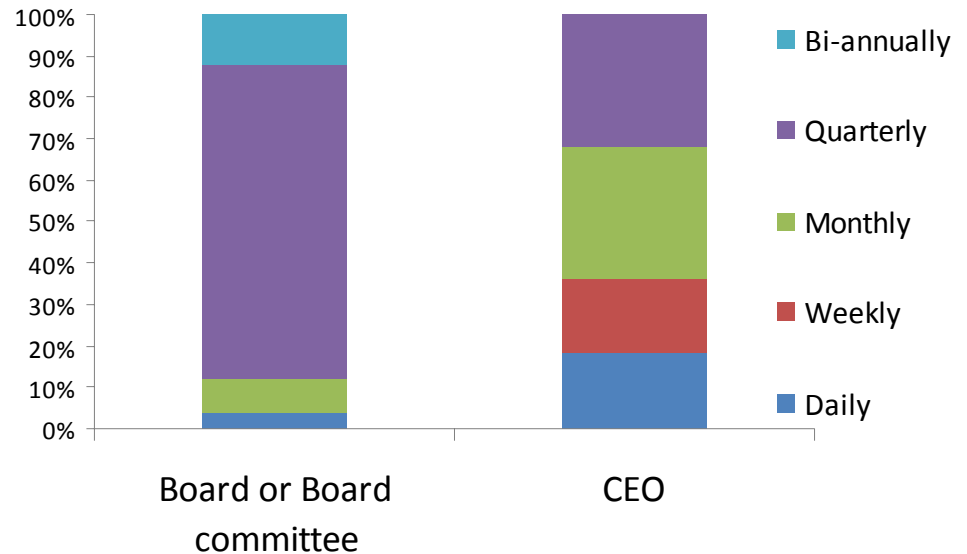
- Of all companies surveyed:
 - 52% have a designated CRO
 - 83% have risk management committees/boards established



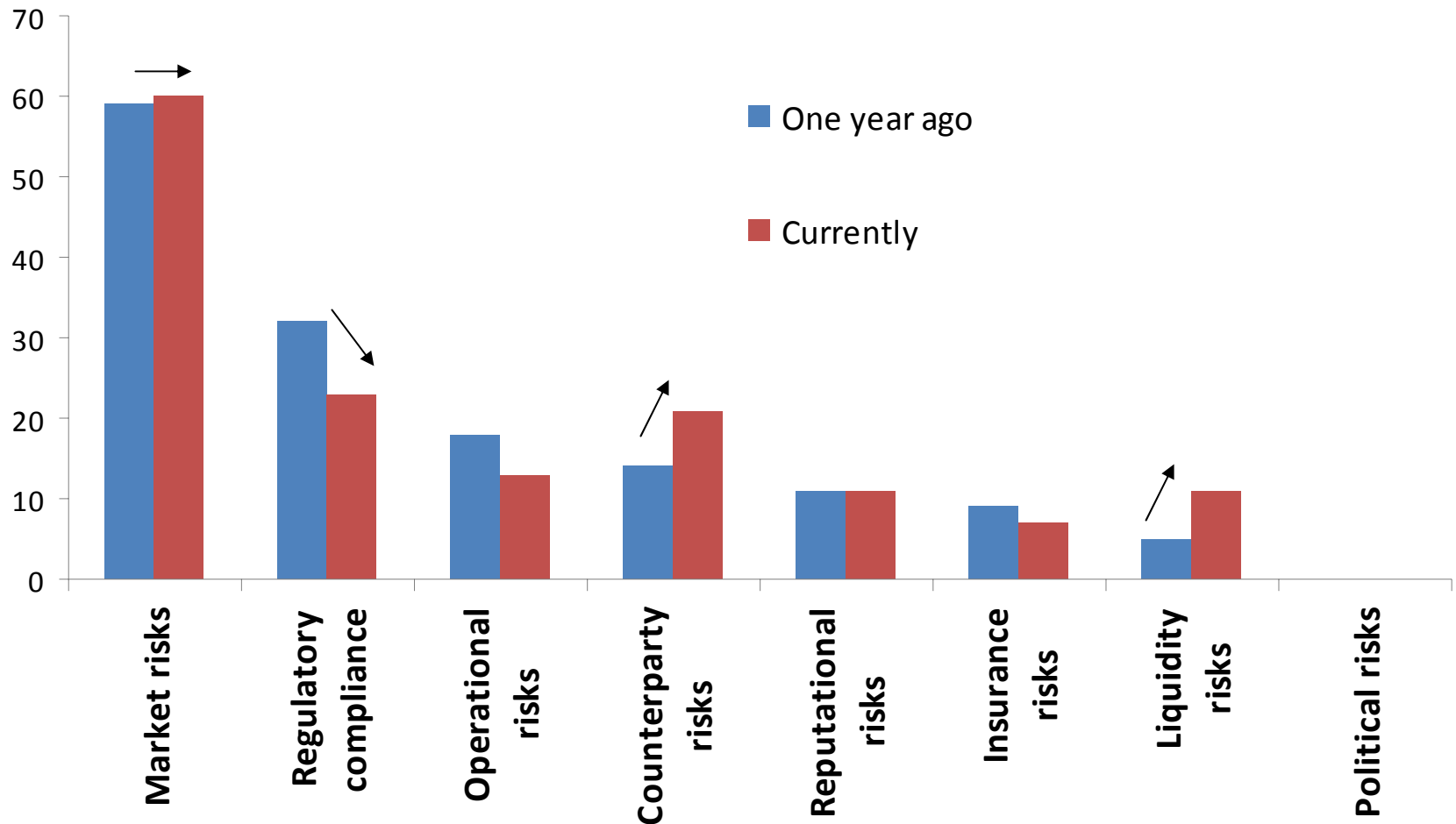
Risk Function and Structure



Reporting Frequency

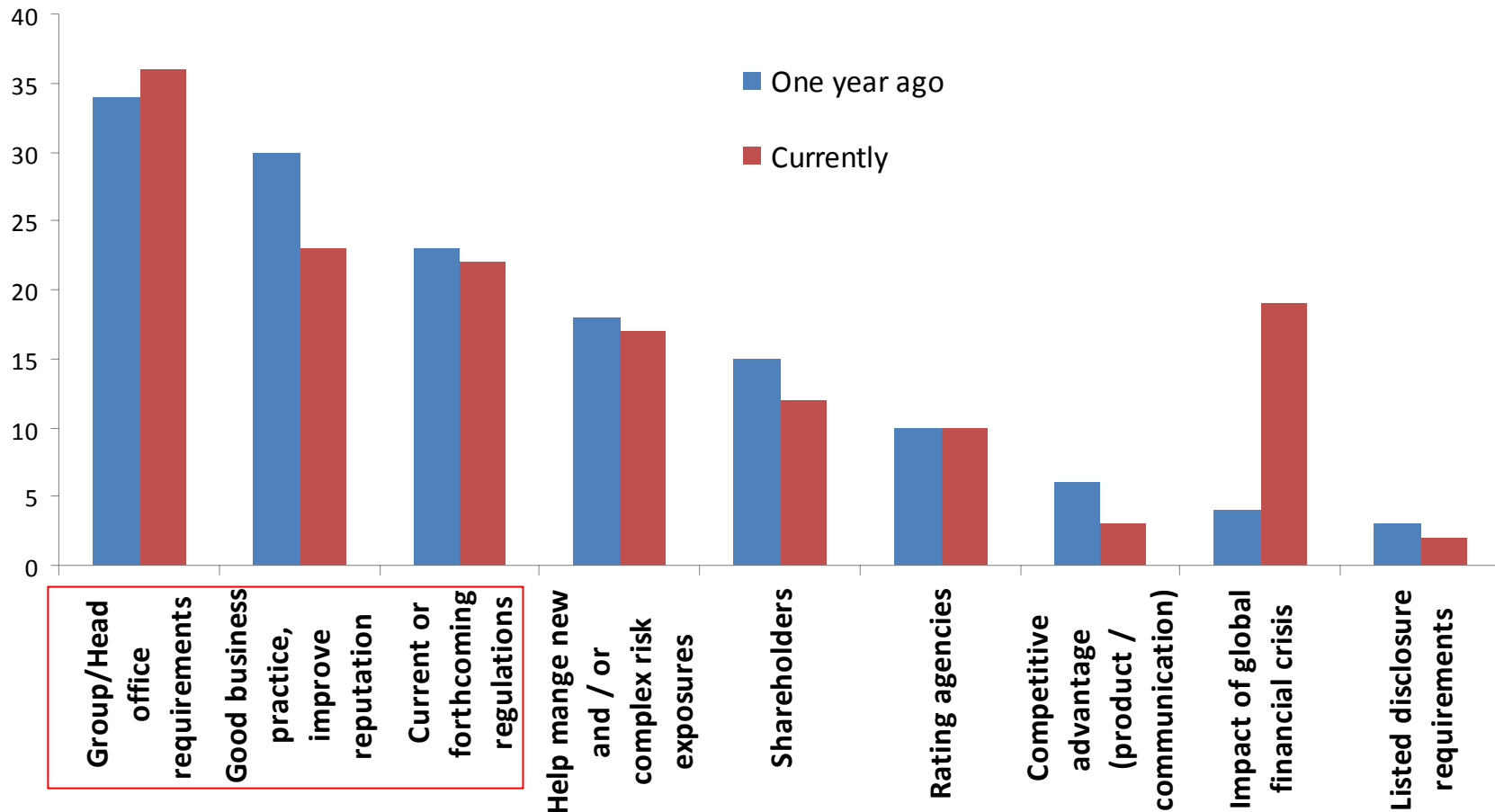


Risk Management Program – Risk Types



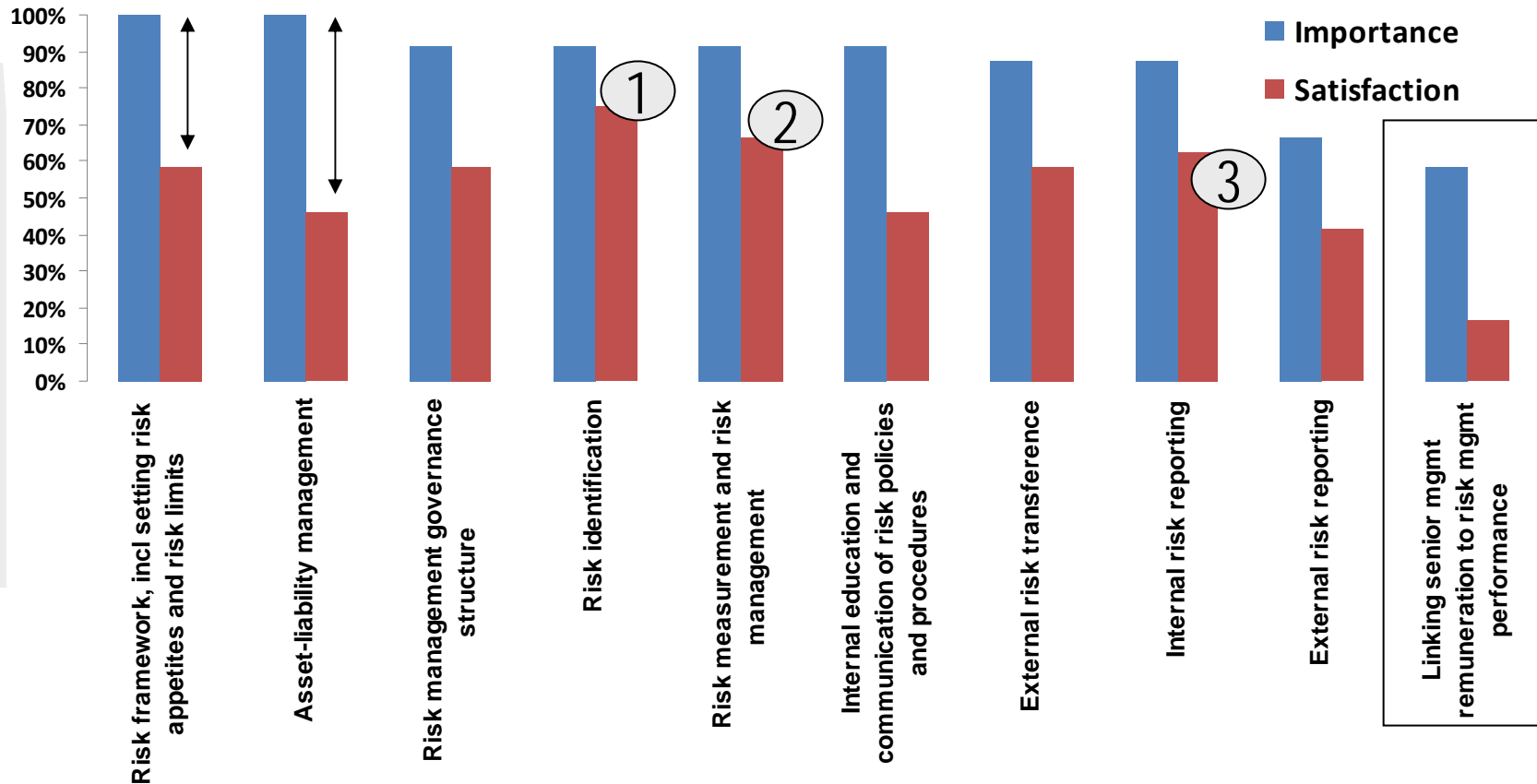
- Rank top 3 risk types included in risk management program

Risk Management Program – Drivers



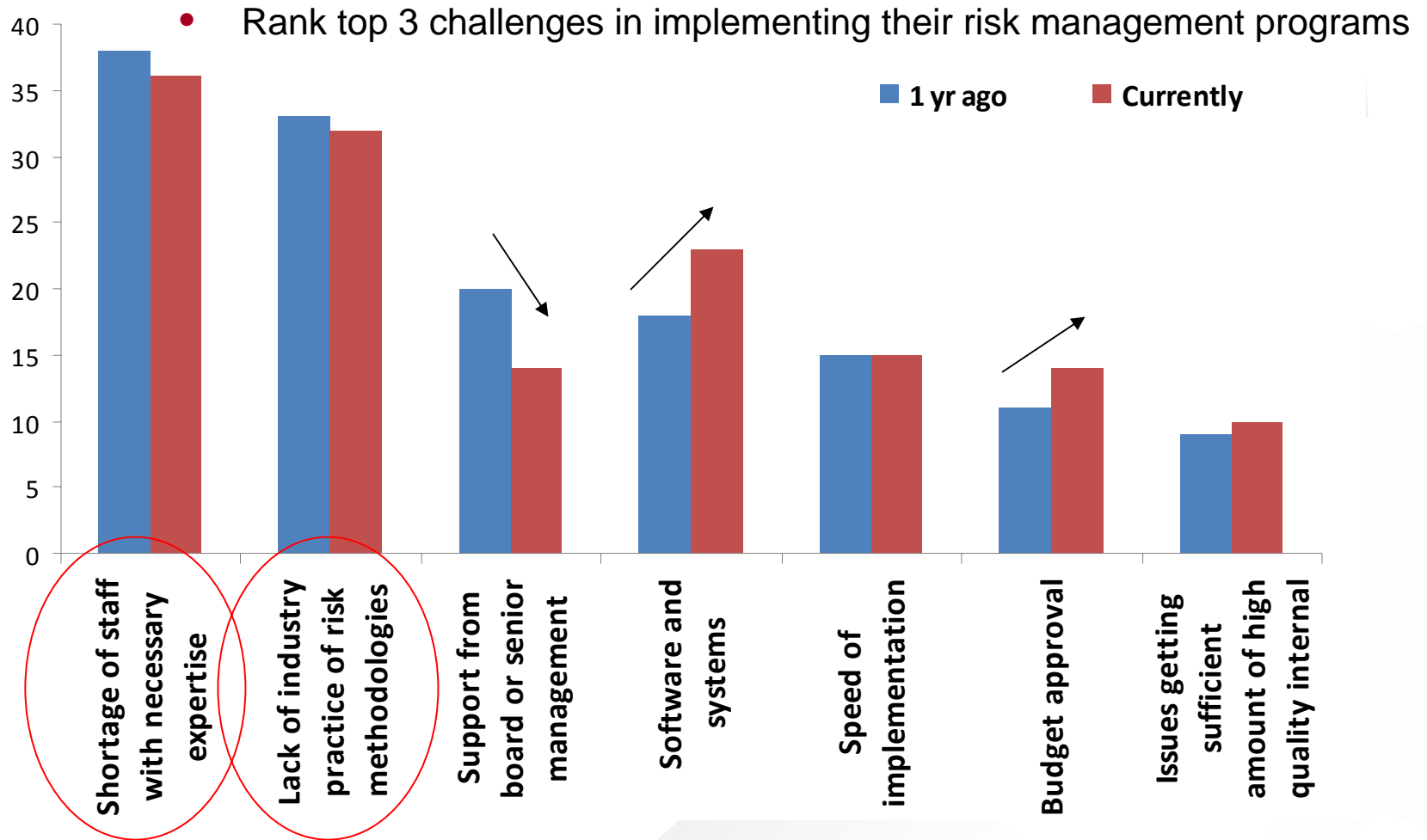
- Rank top 3 drivers for their risk management program
- Little change over the one year period

Risk Management Program – Capabilities



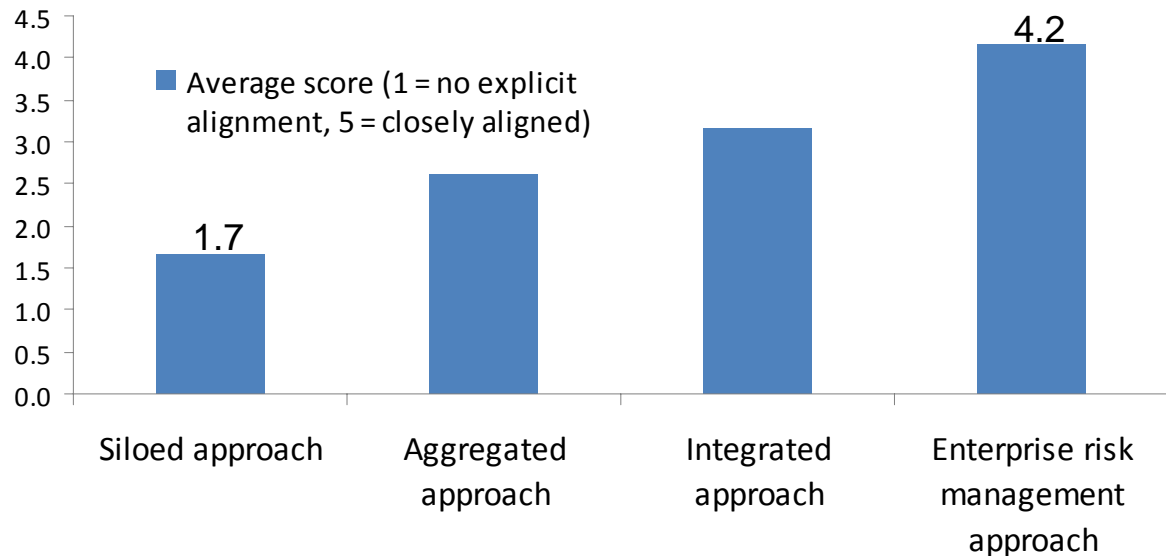
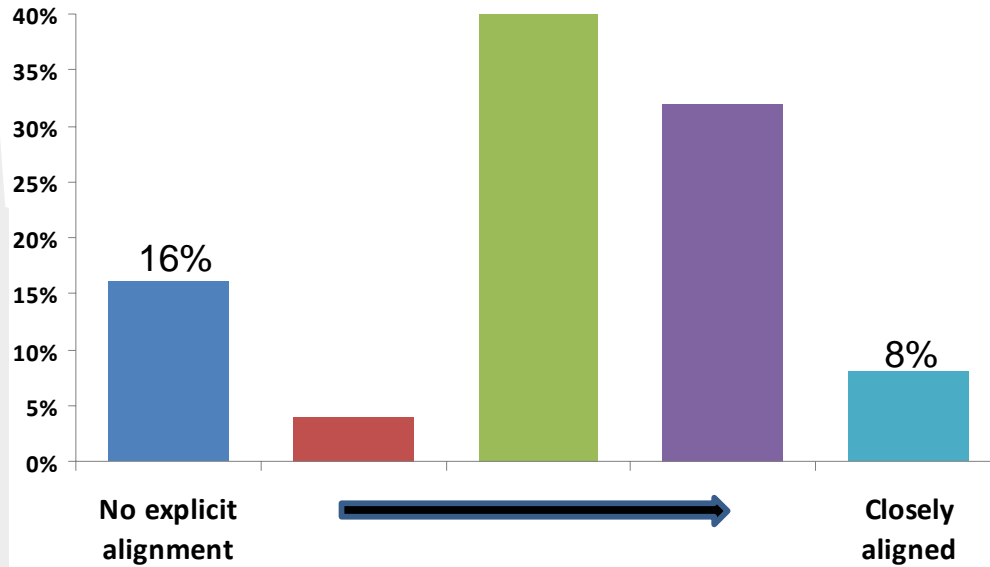
- Considered important?
- Satisfied with current capabilities?

Risk Management Program – Challenges





Risk Management Program – Alignment with company strategy



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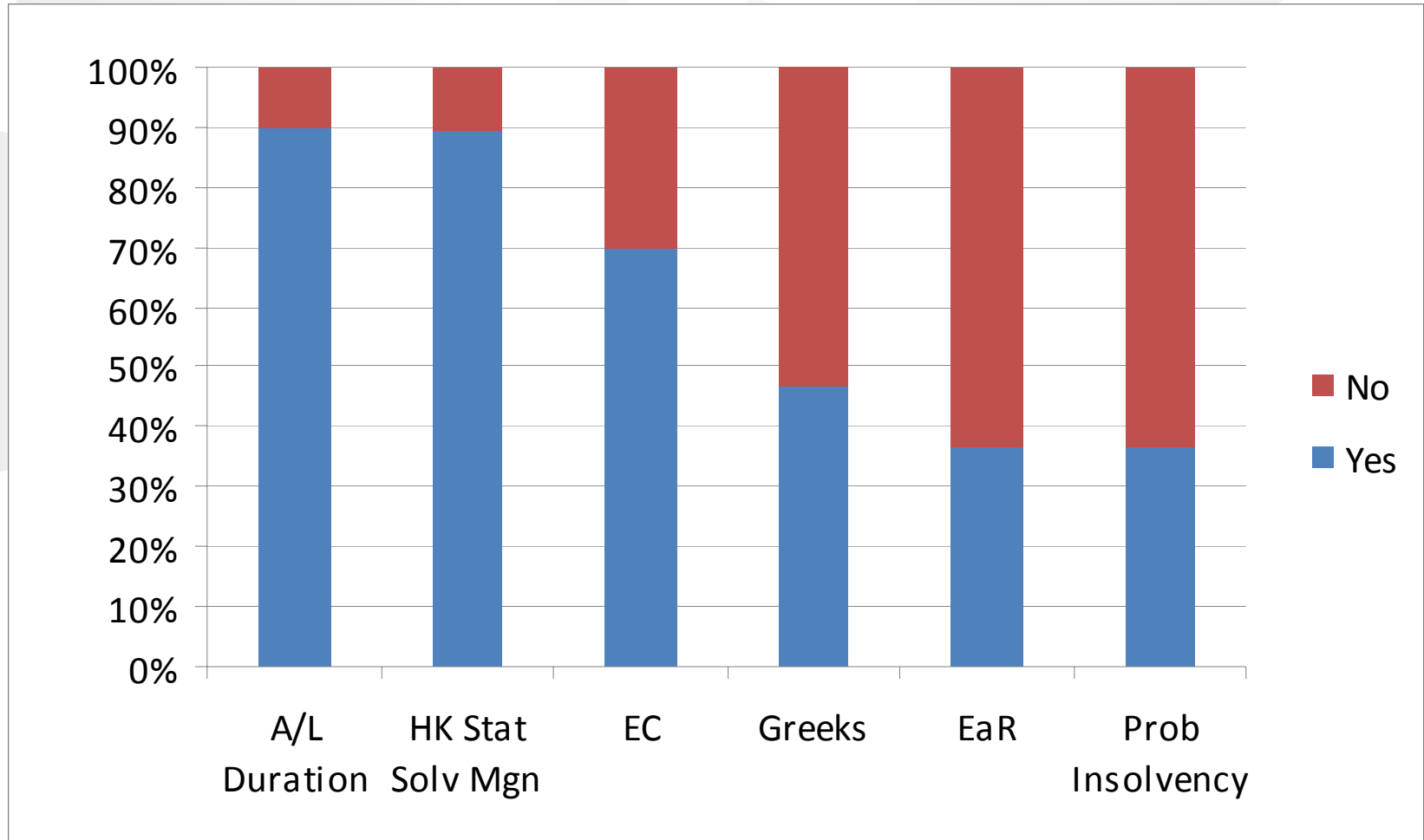
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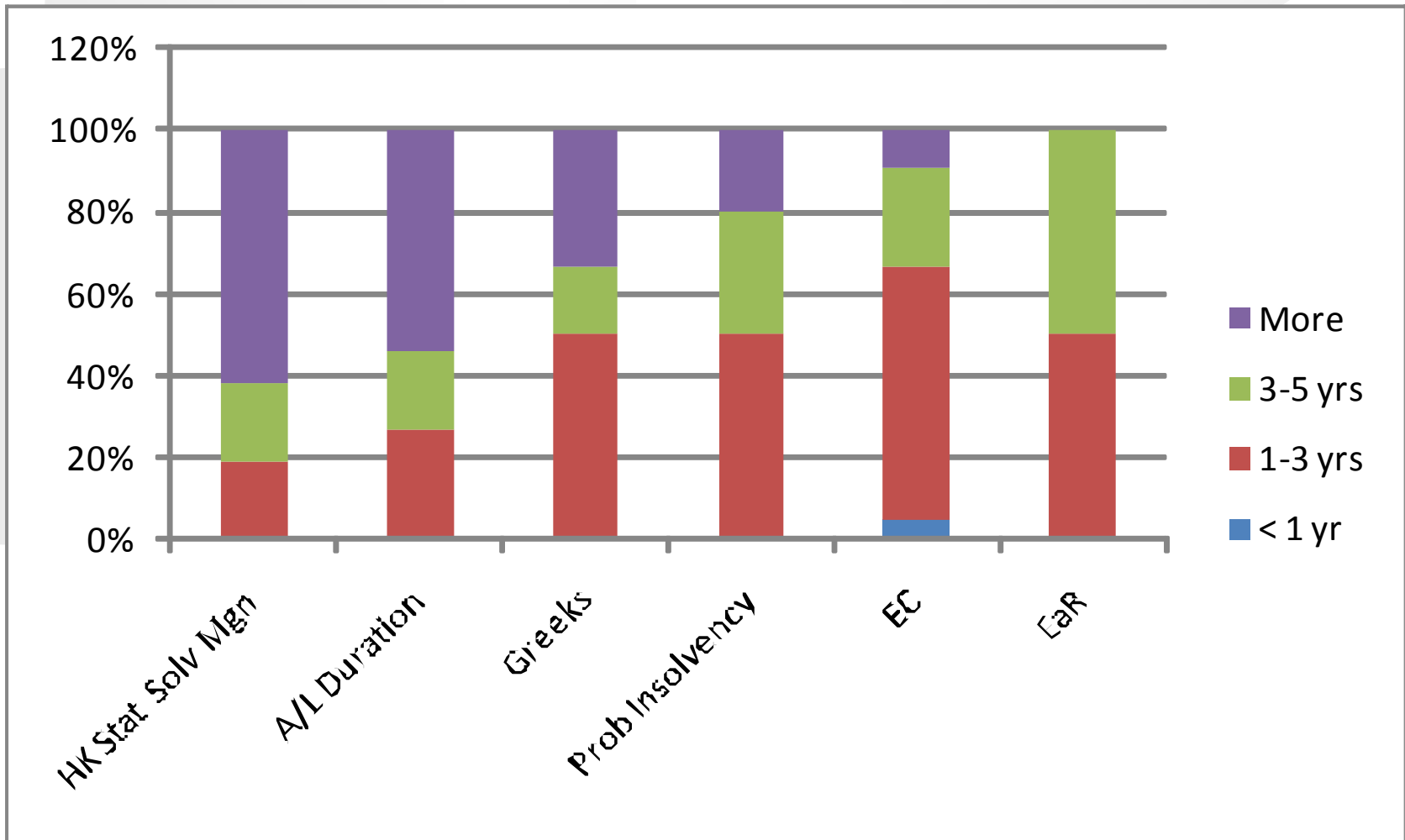


Which risk measures do we use?

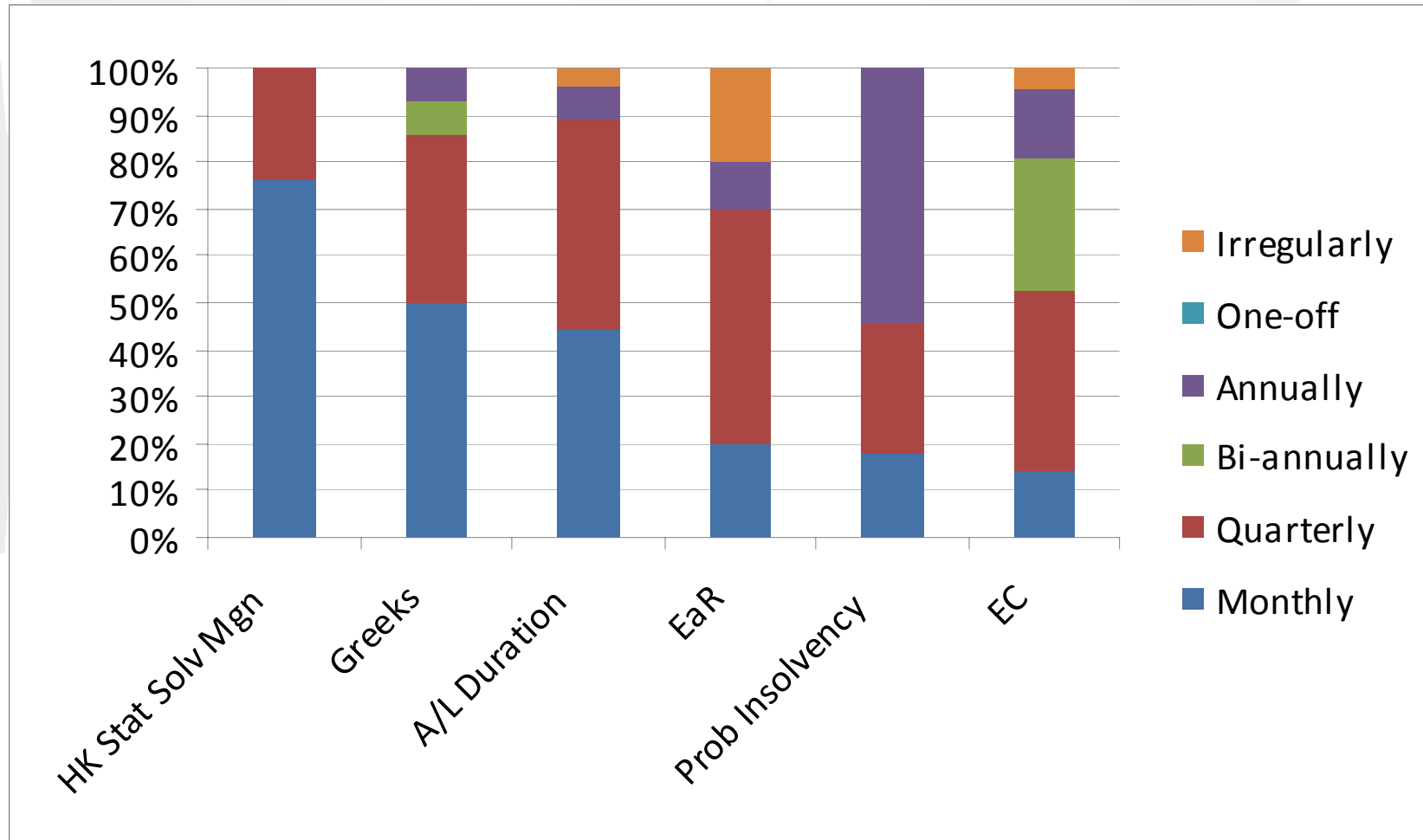




How long have we been using them?

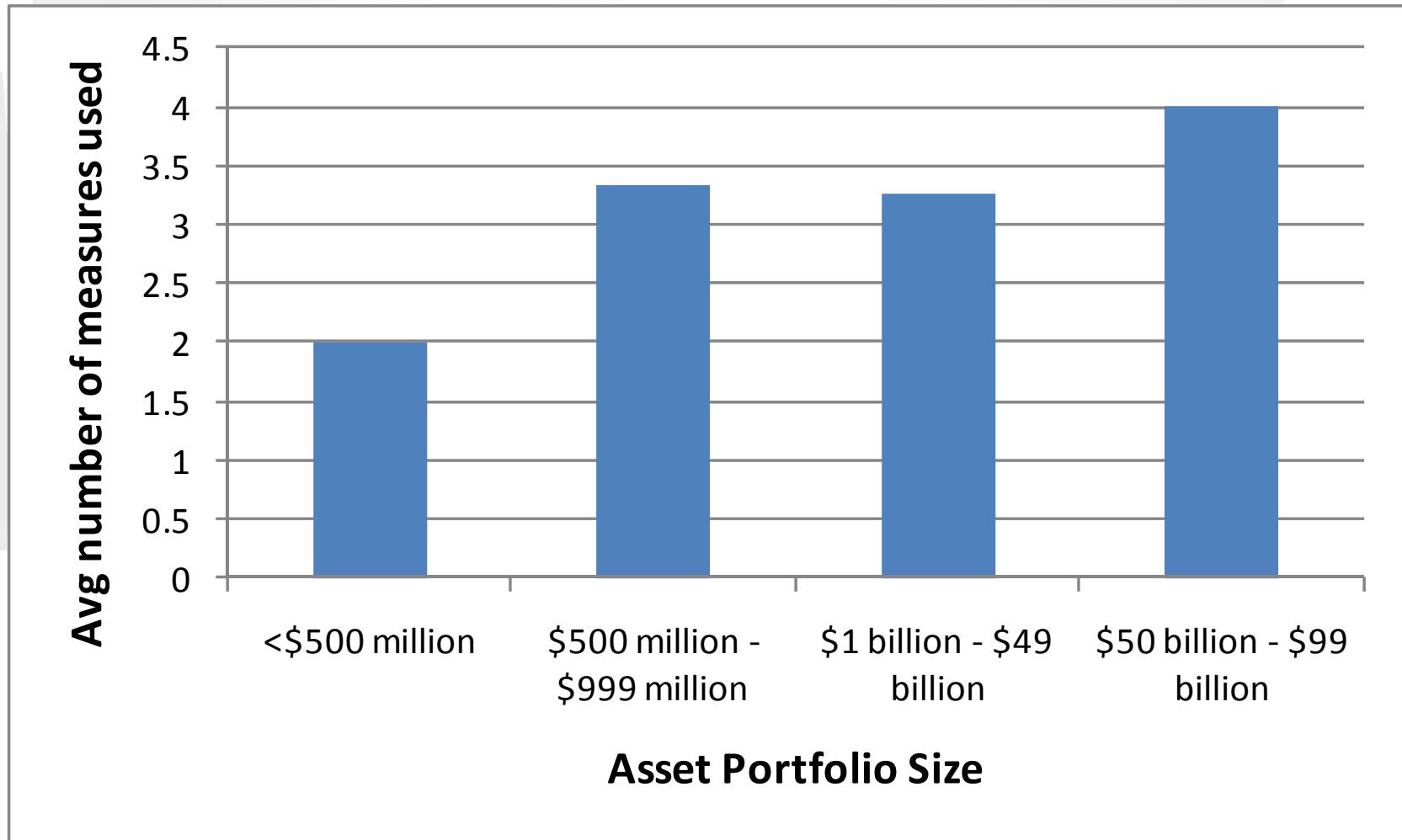


How frequently do we calculate them?





How many do we use?



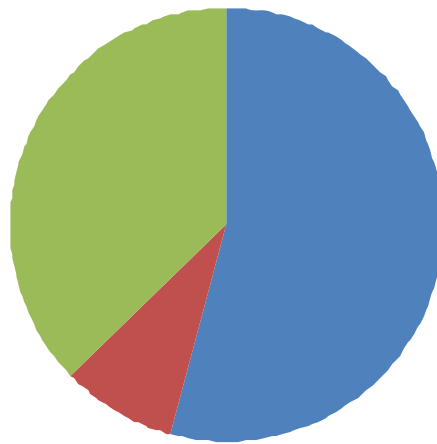


How many do we use?



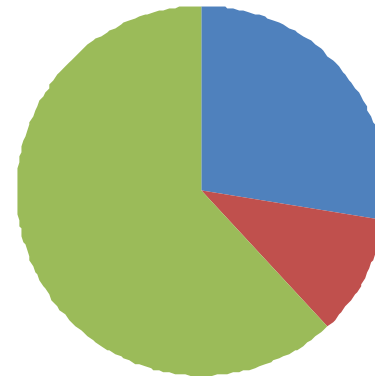
Aggregation / diversification

Aggregation of risk measurement



- Company
- Regional
- Global

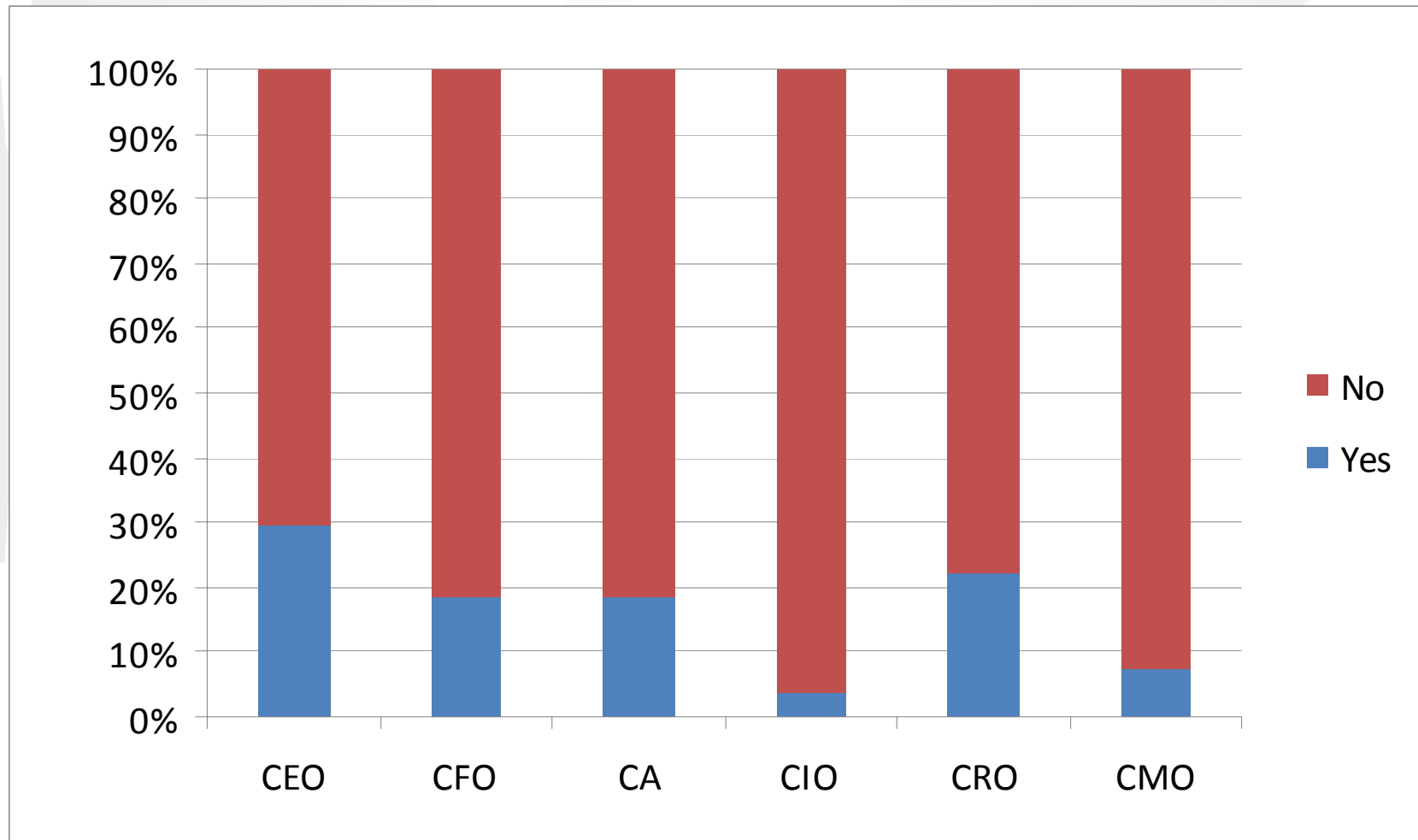
Analysis on risk diversification



- No
- Yes, 1-2 risk types
- Yes, 3 or more risk types



Impact on remuneration





Part 3

- Responses to the financial crisis

by Ms. Ka-Man Wong

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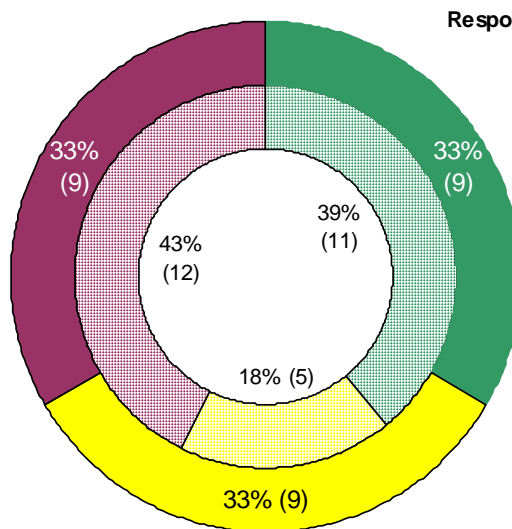
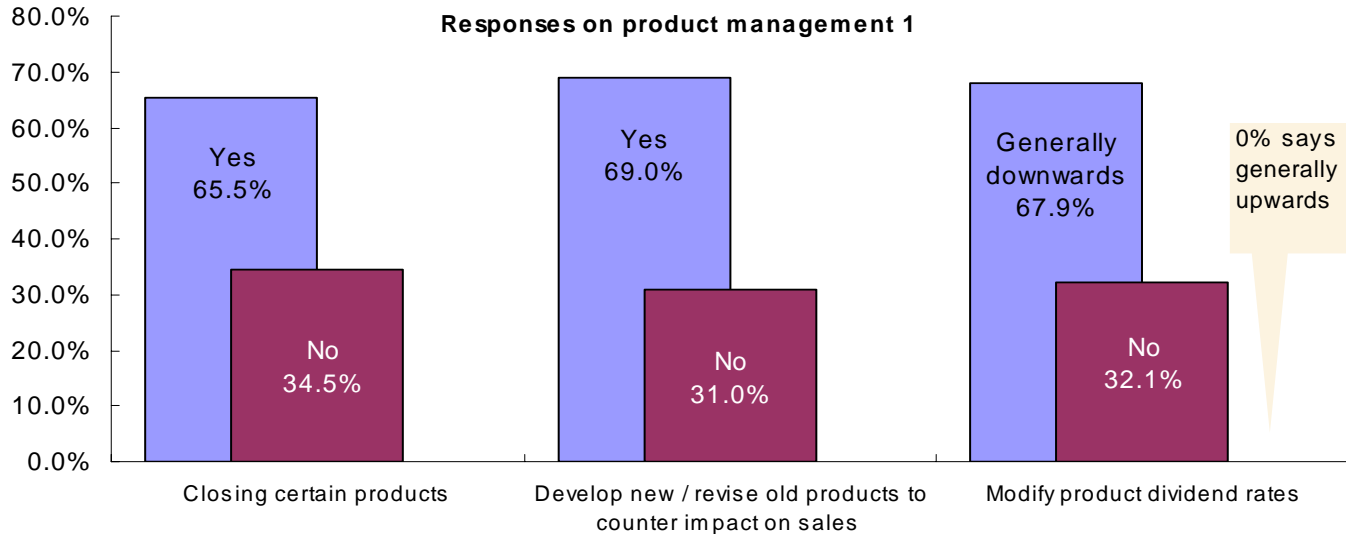
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Liability management (1): existing portfolio



Outer circle (plain):
Incorporate Market Value Adjustments to product features

Inner circle (dots):
Carry out additional review on strategy to determine discretionary benefit levels

Green: Already in place
Yellow: Not in place but LIKELY
Red: Not in place and NOT LIKELY

Liability management (2): new products

The relative change to / intention to change the product mix of new business sales

Product trend	Movement		
	Decrease	No change	Increase
Investment linked (with guarantees)	50%	38%	13%
Investment linked (without guarantees)	46%	15%	39%
Non-participating products	12%	52%	36%
Non-life / Others	0%	91%	9%
Participating products	4%	40%	56%
Pure risk / health	0%	23%	77%

- 4 firms out of 30 respondents (13%) indicated no change.
- To avoid distortion of results, table analyses product trends of “Yes” responses with adjustments for product types (e.g. non-life) currently not applicable to a few companies.
- Evidence of “back to basic”?

Asset strategy?

- Recall the following responses from firms as to the asset mix of the general account portfolio as at 31 December 2008:

Asset class	%
Corporate bonds	62%
Government bonds	11%
Equities & equity fund	11%
Cash / money market	9%
Mortgage / Asset backed securities	2%
Policy loans	2%
Real estate	1%
Hedge funds	0%
Others, please specify	2%

- 1) Any changes made in current asset mix as short term response? (increase/no change/decrease)
- 2) On a longer term perspective, any change to the asset allocation in the SAA? (increase/no change/decrease)
- 3) Have you actively managed the asset class? (more/no change/less)
- 4) Do you have inclination to outsource the management of the asset class? (more/no change/less)

“De-risking” asset allocation moves

Change in current short term mix as short term response vs. allocation in SAA

	Short Term	SAA
Top 3 increase		
Cash & Equiv.	78%	26%
Gov't bond	59%	30%
Corp bond	37% / 15%	26%
Top 3 decrease		
Equities & fund	56%	19% / 7%
Hedge fund	33%	21%
MBS/ABS	24%	17%

Management of assets

- More active management of the asset class?

	Cash	Gov't bond	Corp bond	Equities	Real estate	Policy loans	Hedge funds	MBS / ABS
Increase	41%	37%	57%	30%	13%		26%	21%
No change	59%	63%	39%	48%	83%	100%	70%	75%
Decrease			4%	22%	4%		4%	4%

13% ↑ intention to outsource

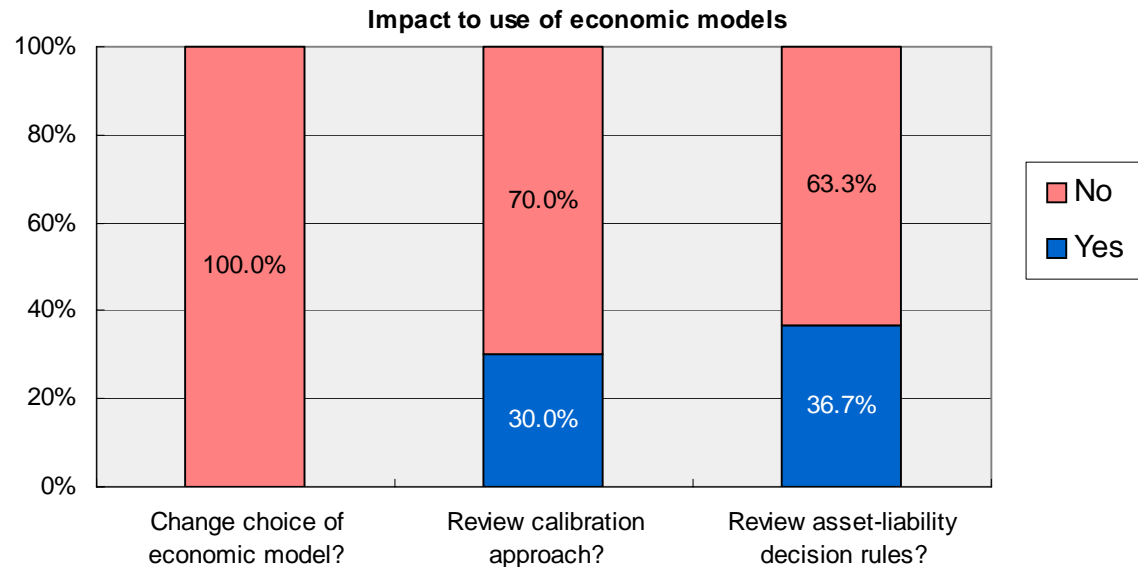
9% ↑ intention to outsource

8% ↑ intention to outsource

By number of respondents, not weighted by asset size.

Use of economic model

- Includes the review of:
- stress scenarios;
 - model calibration;
 - approach to liquidity premium

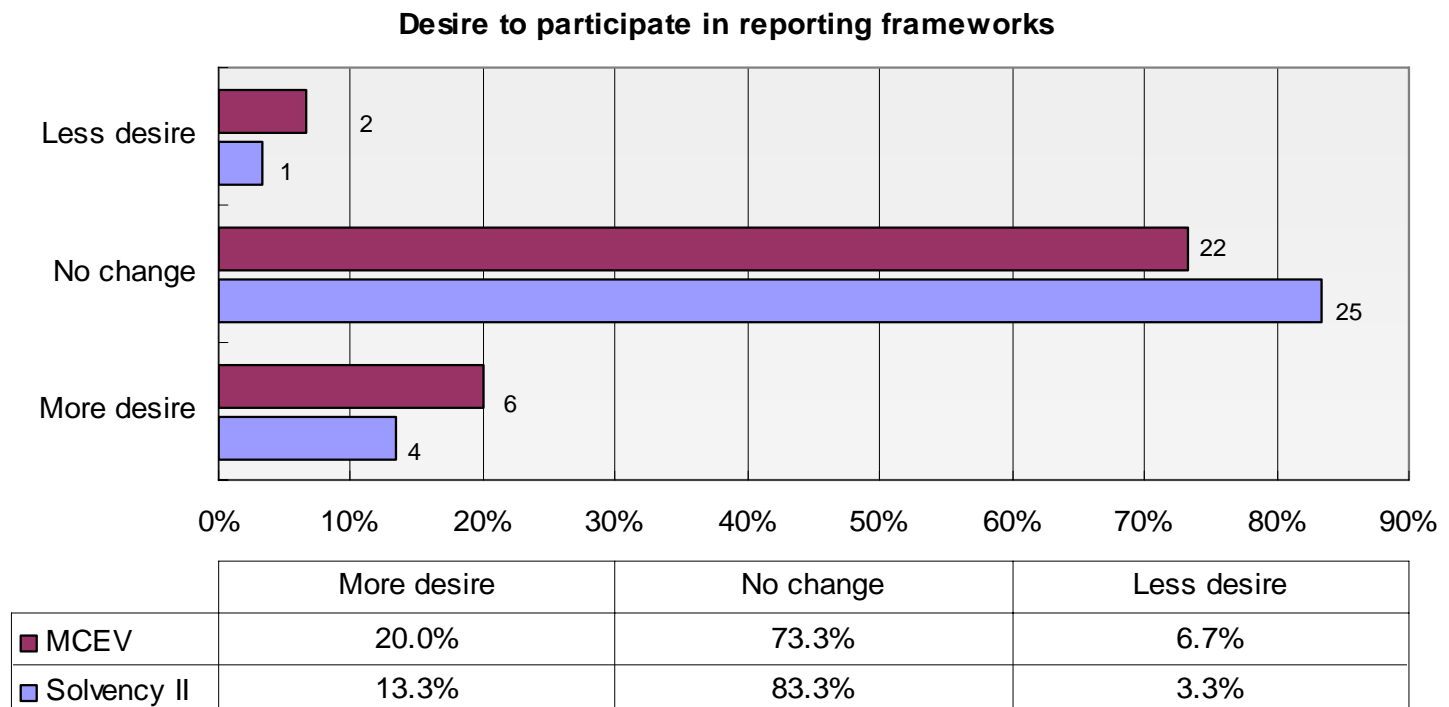


Includes the review of:

- parameter and risk appetite change due to crisis;
- dynamic policyholder behaviour assumptions;
- applying dynamic lapse to products with in-the-money policyholder options;
- allowing less equities in portfolio;
- review asset allocations in full;
- weekly review of performance; and
- tightening credit policy

Risk monitoring framework

- Has the financial crisis affected desire of companies to participate in the following reporting frameworks?





What implications from here?

- Variations!
- Lessons learnt from the crisis?
 - Is your risk management framework robust enough
- Are you align with “general market practice” / outlier?
 - Company perspective – position in the league?
 - Profession perspective – alignment = appropriate?
- Where should the industry heading toward?
- Role of ASHK?
- Company driven guidelines ➔ industry guidance?

Thank you



Wish list

- Industry practice on risk methodology and governance
- 2nd risk management survey (May/June 2010)
 - Industry asset mix
 - Approach to market risk management
 - Level of resourcing for risk management
- Sharing of global and local practices (seminars and talks)
- Explore ways to support the CERA qualification
- Forum for CROs or risk-function holders
- Increase collaboration with other ASHK committees