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Syndicate Capital Briefing

28/02/2019

Agenda

- CFO Capital Reflections
- 2019 SCR reviews:
    - Process
    - Numbers
- 2020 SCR reviews

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CFO Capital Reflections

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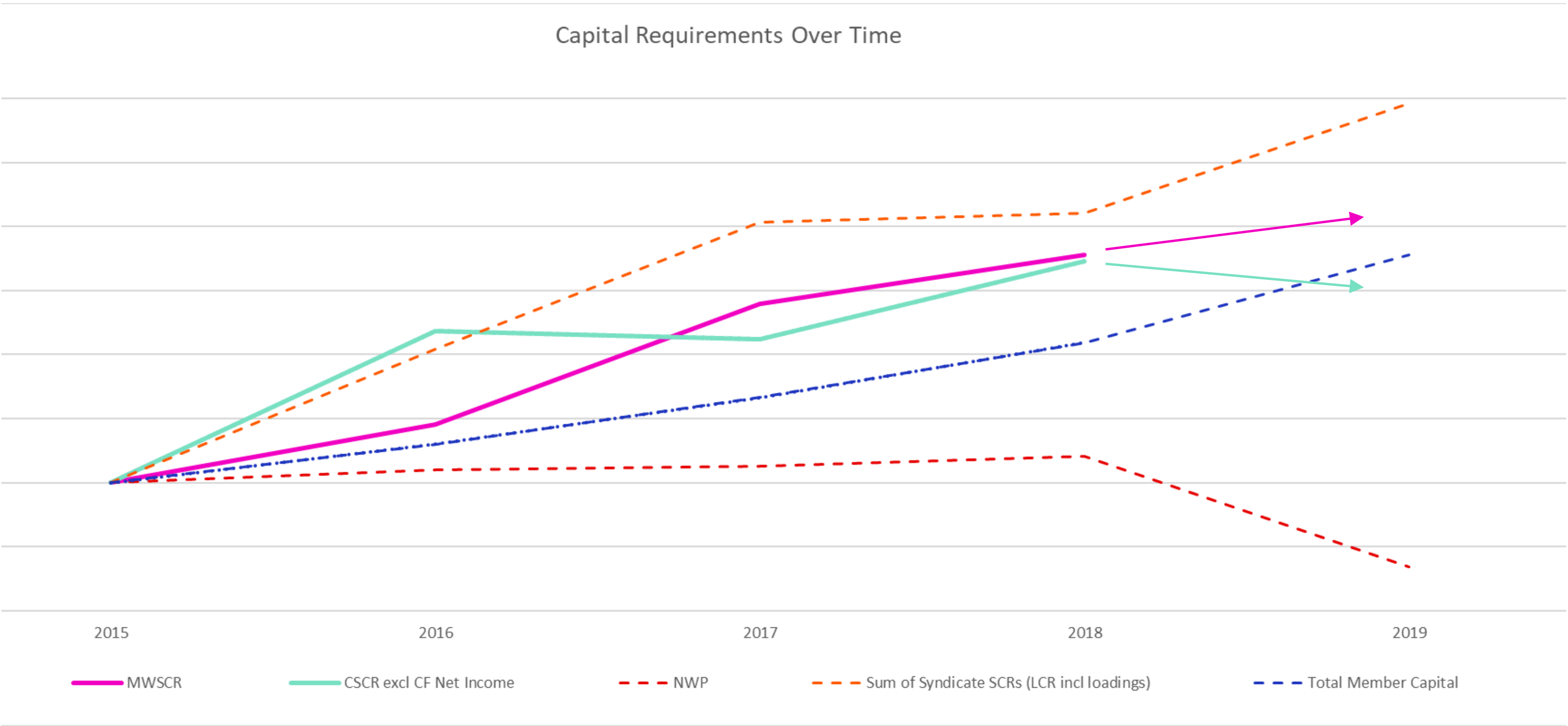
Capital Over Time

Movements generally in line with exposure measures and market conditions



While there may appear to be a lot of change on capital there are many consistent themes. It is in the mutual interest of Lloyd's and the market to have robust challenge, clarity and collaboration in this process

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Central vs Market view

Lloyd's monitors syndicate model drift against Standard Formula and the Lloyd's Internal Model

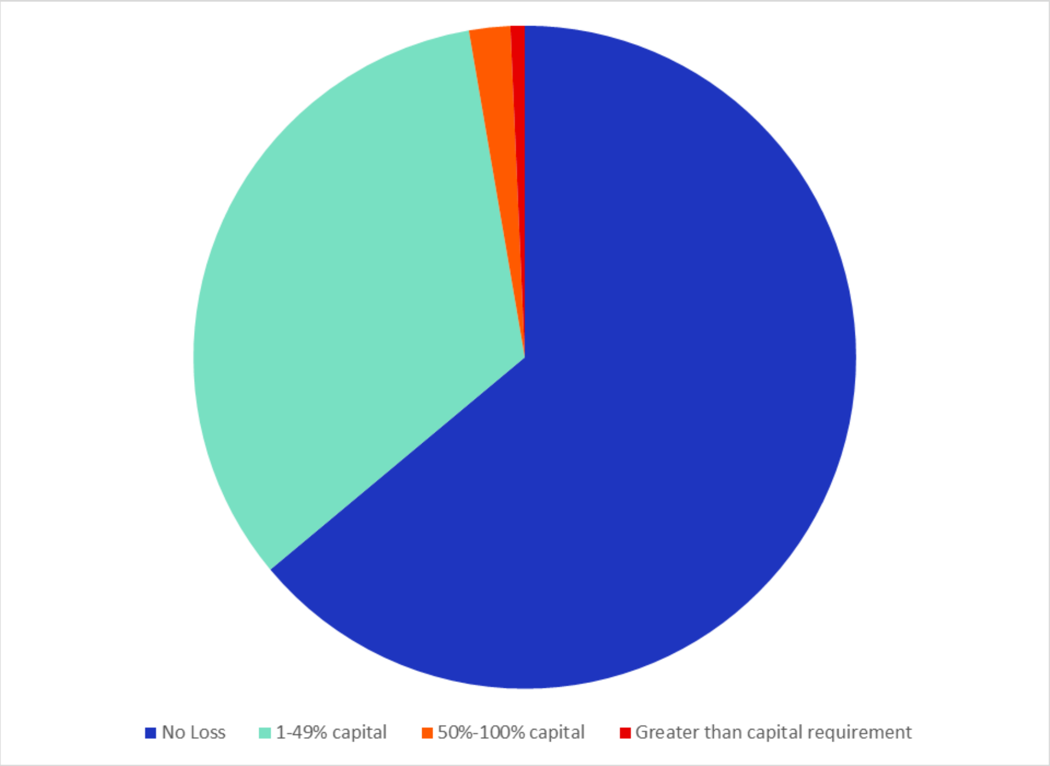
- Syndicate Internal Model view is lowest
- We recognise that the numbers could be materially different
- The focus is on understanding and quantifying the driver of these differences and monitoring over time
- Unlike the standard formula the LIM is calibrated based on market experience and designed to reflect the market risk profile
  - Does have limitations
  - More insight into the potential range of experience

We will be more transparent about this comparison; we ask that the market is more open to what this may be telling them

Hits to capital are real

Over time we have seen losses in excess of ICA/SCR

- Syndicate loss exceeds capital requirement ~1% 2006 – 2018
- A loss making outcome ~35%, immaterial number of loss making plans in the same period



- The recapitalisation process relies on market pro-activity
- 10% guidance is only sustainable if the market manages this position

A More Appealing Case

A larger number of appeals heard by CFO and Performance Management Director for 2019 SCRs

- What strengthened a case on appeal?
  - You'd thought about it already
    - And could evidence this by action and discussion on it
    - Meeting minutes, "self loads"
  - Effective validation
    - Which means findings, and associated actions
  - Two-sided model changes
    - Be aware of what could be perceived as cherry picking
- What weakened a case on appeal?
  - "You were happy with it last year"
  - Production of (endless) consultancy benchmarks
  - Shouting at the CEO (or anyone else)

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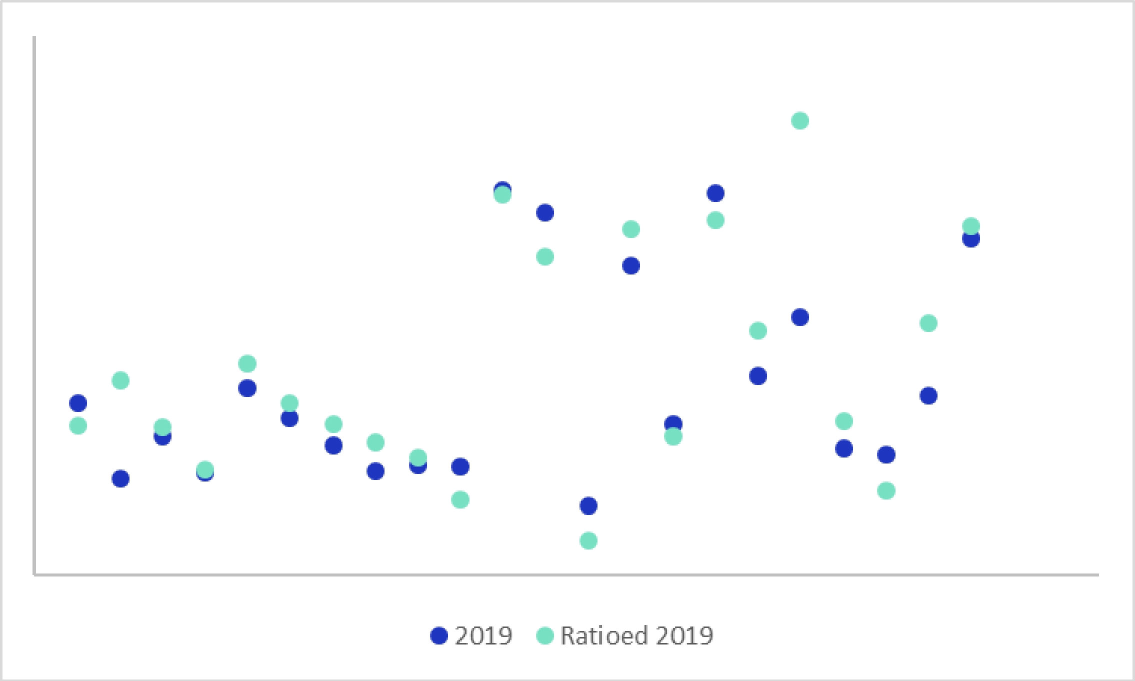
The Future - Rethinking SCRs?

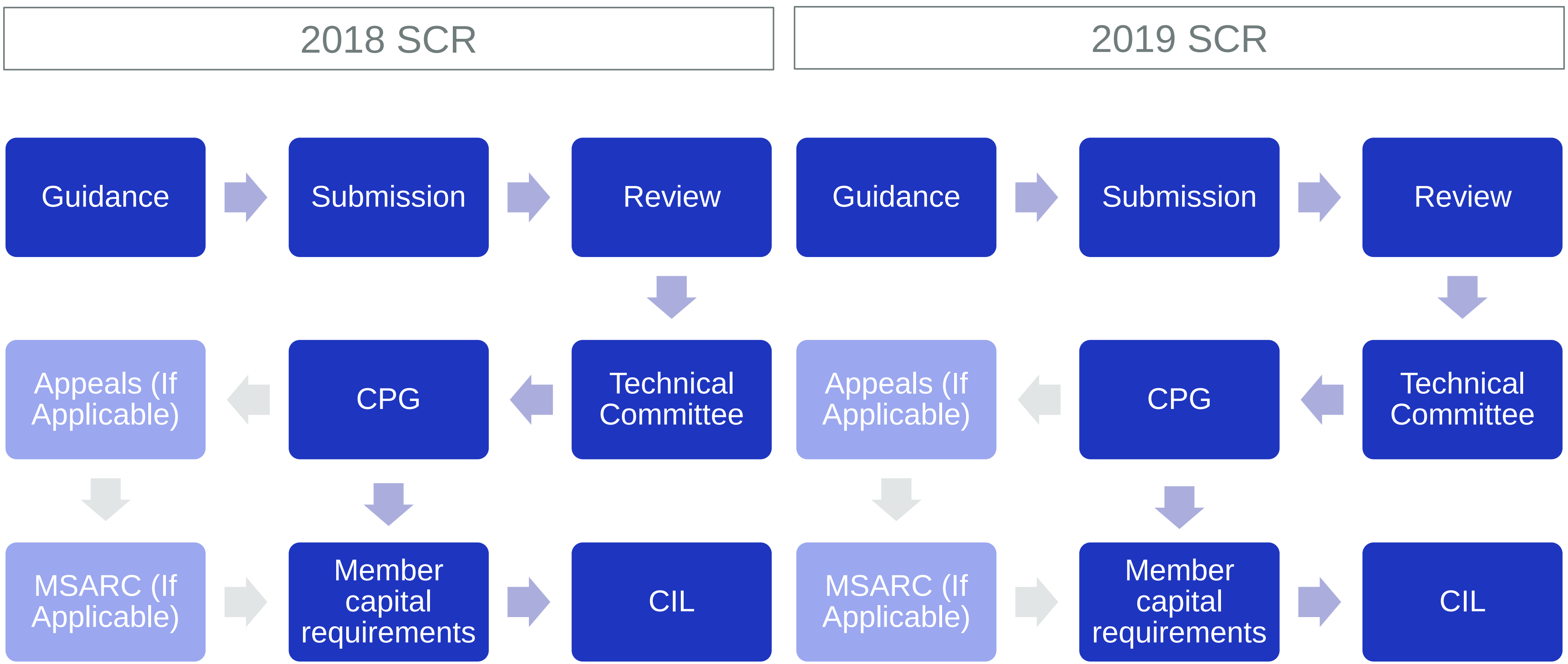
Mutual interest to have a basis that responds appropriately and equitably AND does not duplicate work



- One year number is the regulatory requirement. Could we adjust based on this?
- “Ratioed” 2019 is use of 2018 OY to Ult ratio applied to 2019 OY
- Wide variation in predictiveness by syndicate (sample is ~60% of market by SCR)

2019 SCR reviews: process

Spot the Difference



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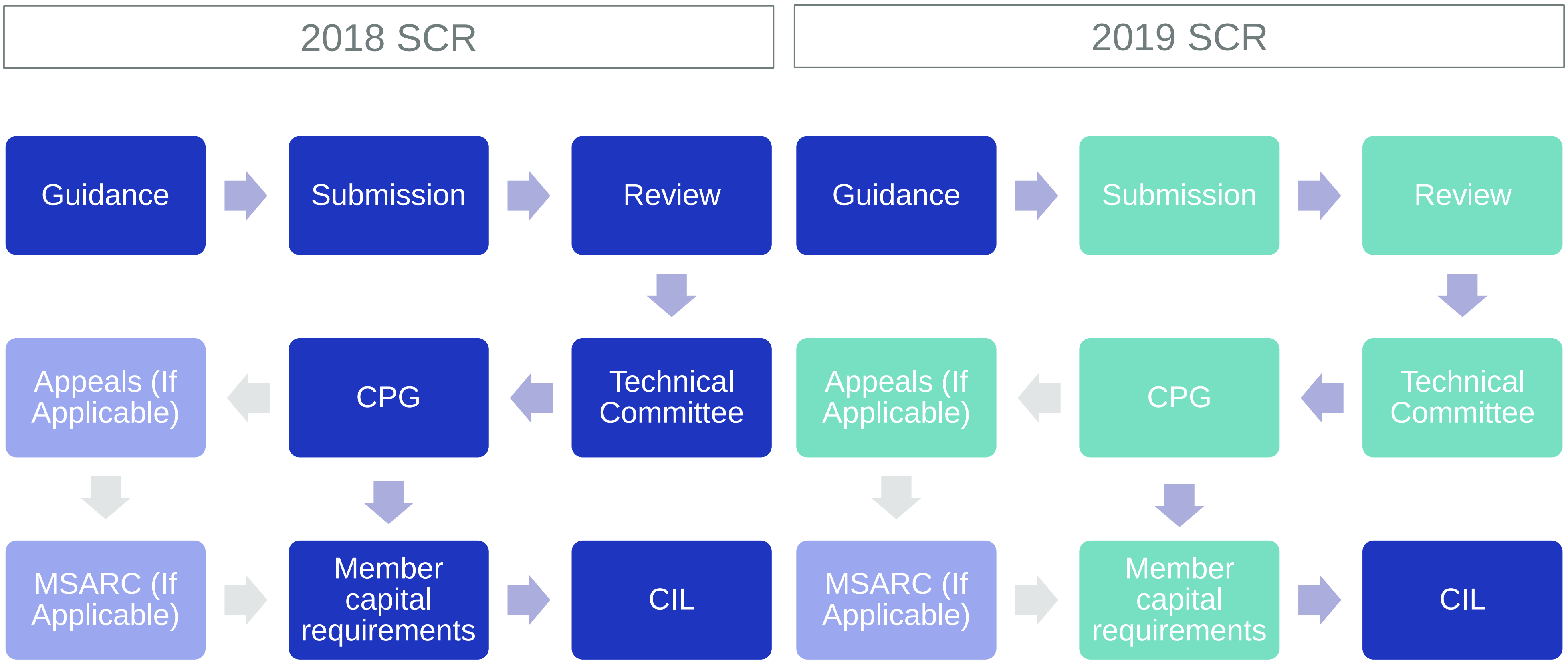
Spot the Difference

The process for 2019 SCR review was unchanged from the previous years but the experience of the process was different



Hindsight is 2020

How could the process difficulties have been reduced?

- By Lloyd's
  - Review process timescales for both capital and planning
  - Transparency on nature of review
  - Move away from benchmarks for discussion, require more accessible validation information to facilitate this
  - Communication of expectations and requirements – market messages presentation
- By the Market
  - Input into the reviews of modelling and processes
  - Take market messages on board – be clear they have been considered
  - Keep in touch with us on model changes – be clear on the drivers for these
  - Articulate the need for, prioritisation of and nature of change

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Lloyd's review

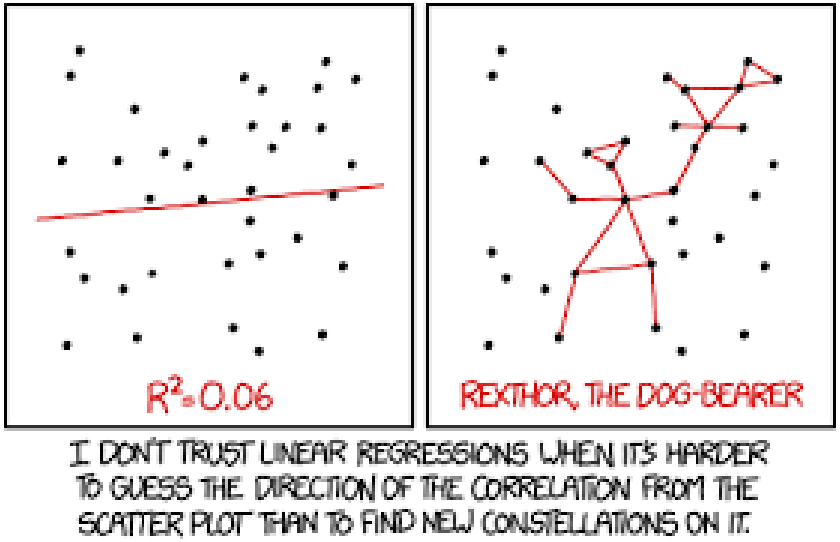
High level tests supplemented with detailed investigation

Test Area	Metrics considered	Questions asked
Overall	• Stress/Exposure • Movement from previous submission and identified drivers • Market decile and movement in this • Comparison to Central view	• Does the position match the risk profile – are the key risks driving capital? • Does the movement match the risk profile change? Has it been explained? • Is it consistent across risk types – e.g. premium risk down due to greater RI means greater RI credit risk • How has experience been responded to? • What model developments have been responded to and why?
Reserve risk		
Premium risk		
Catastrophe risk		
Credit risk		
Market risk		
Diversification	• Sum of Squares test of Diversification	• Are risks contributing greater than under independence
Operational risk		
One Year		

Change should be considered in context of risk profile

Justification for making change and resulting movement should be considered holistically

- Top-down view key for sniff test, stability and SII compliance
- Updates for data should not ignore risk profile
  - A year of good experience doesn't tell you that the risk is reduced
- Changes should not be accepted by virtue of being the consequence of input updates
- You should be comfortable that you are submitting a valid representation of your risk profile and articulating what has changed
- Focus on demonstrating appropriateness, a few examples of what not to say:
  - "This moves the capital by 50% but it is not a useful test."
  - "This test produces a fail but the parameterisation is accepted."
  - "This change did not have the expected level/direction of impact but it's been accepted."
  - "Capital has gone up so the load should be removed."



Change should be considered in context of risk profile

Including high level view of key risks given business knowledge

Try it out: Higher or Lower?

Warm-up

Q: The year of the first female London tube driver is higher/lower than the first mobile phone

A: Higher

The market has adverse recent attritional experience

Q: The return period of the excluding natural catastrophe 2017 experience is **higher/lower** than for 2016 experience

A: Higher

The market is making increasing use of reinsurance, particularly targeted at volatility

Q: The level of RI credit risk in the market for 2019 capital is **higher/lower** than 2018

A: Lower

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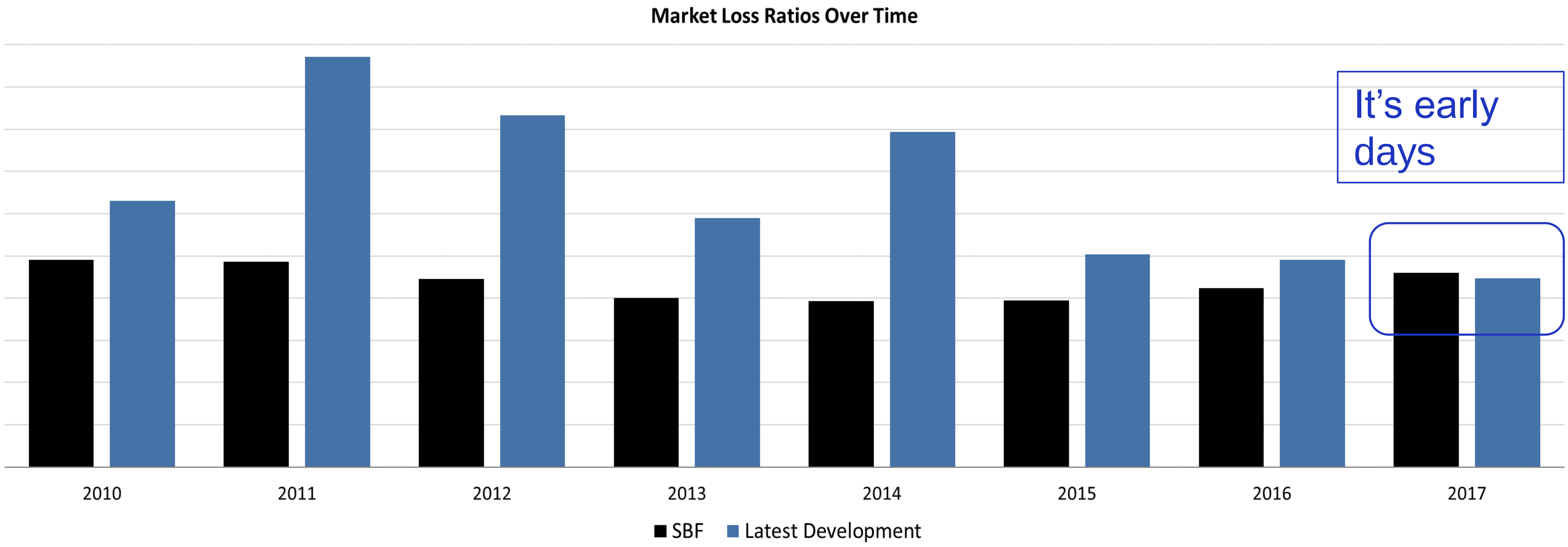
2018 CPG process focus

Market messages plus responses to submission features

- A number of market wide issues acknowledged, with limited recognition of their relevance within any particular syndicate
- Prospective loss ratios
  - We expect the actuarial teams and boards to be asking the same questions as we are
  - Show the historical trends, be clear about how much re-underwriting impact is required

A number of lines show clear, systematic deterioration to plan



We can not change the past. SBF assumptions have been shown to be inadequate over time. These movements should be affecting reserving and prospective loss ratio assumption setting.

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2018 CPG process focus

Market messages plus responses to submission features

- ## Actual vs expected reserves
  - Historically reconciliation of the projected and actual balance sheet is poor – also at 2018YE
  - Feedback loop missing in the majority of syndicates
  - Understated Exposure = Understated Capital
- ## Class sizes vs volatility
  - Reductions in volume but not line size may require upward adjustment to CVs
  - Much of the poorly performing business was not driving volatility
- ## Diversification, negative contribution of risk, nature of model change
  - Aim to address in collaboration with the market, 2020 Plan

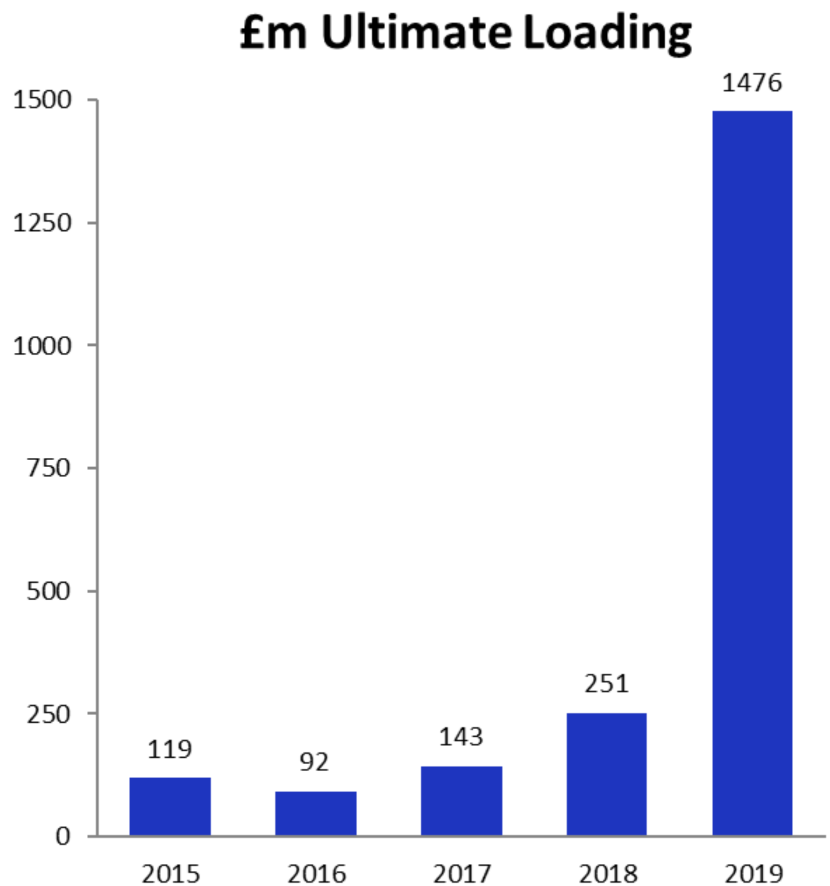
Validation: A Preview

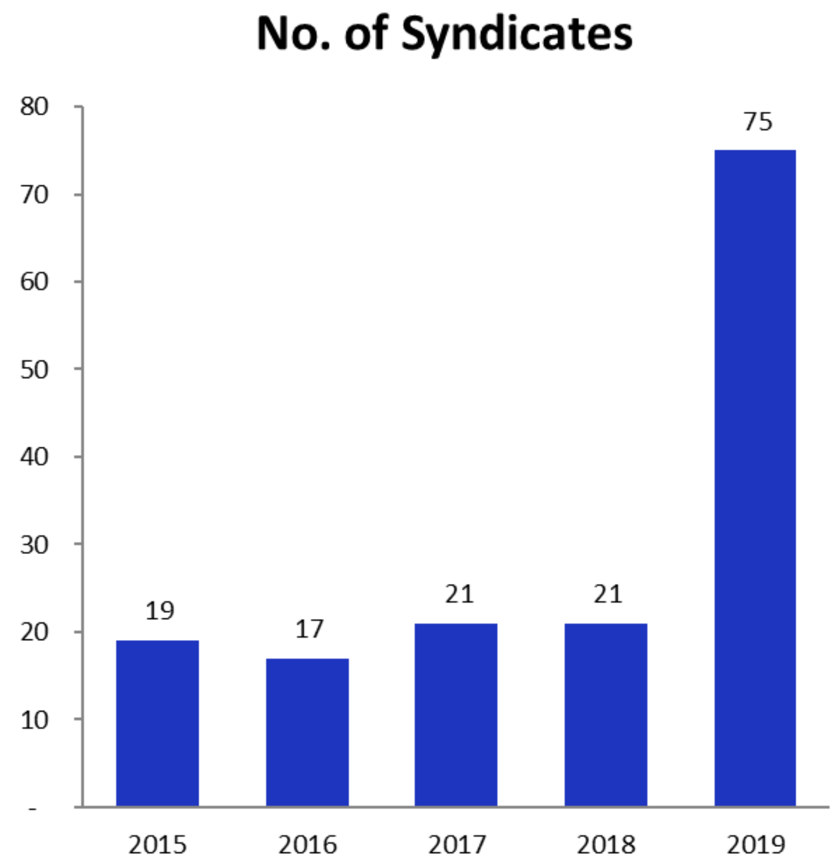
Quality is variable with too little consideration of one-year figures

- The market undertakes large volumes of testing and provides extensive reporting
- Required to confirm appropriateness of numbers in light of model updates and evolution of risk profile
- Neglected areas remain neglected
    - Links to risk profile
    - Ownership of external model assumptions:
        - ESG
        - Cat models
    - Consideration of one year experience
- Challenging areas remain challenging
        - ENIDs
        - Climate change
- Will be covered in the validation workshop (2nd May)

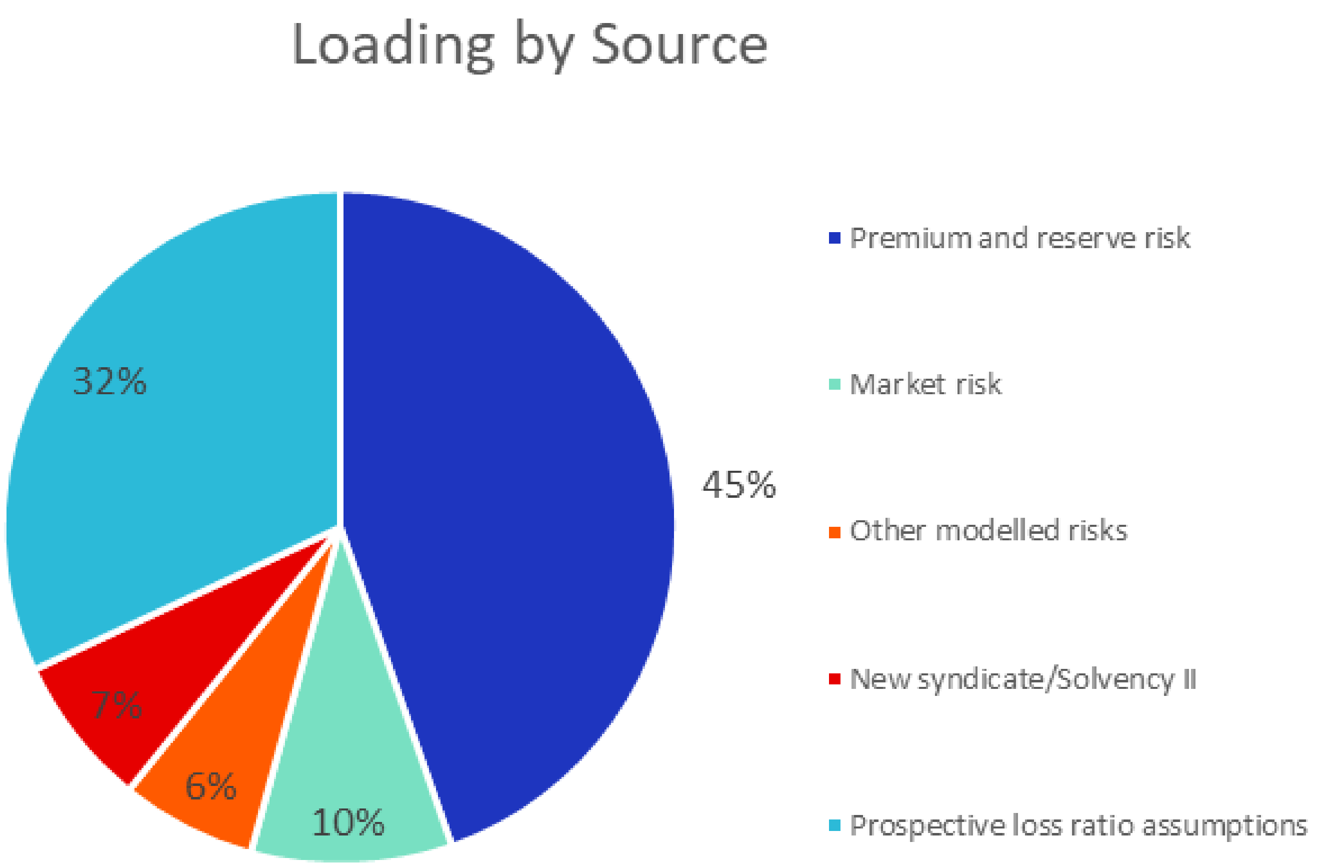
2019 SCR reviews: numbers

The quantum and frequency of loadings within the market has increased significantly…

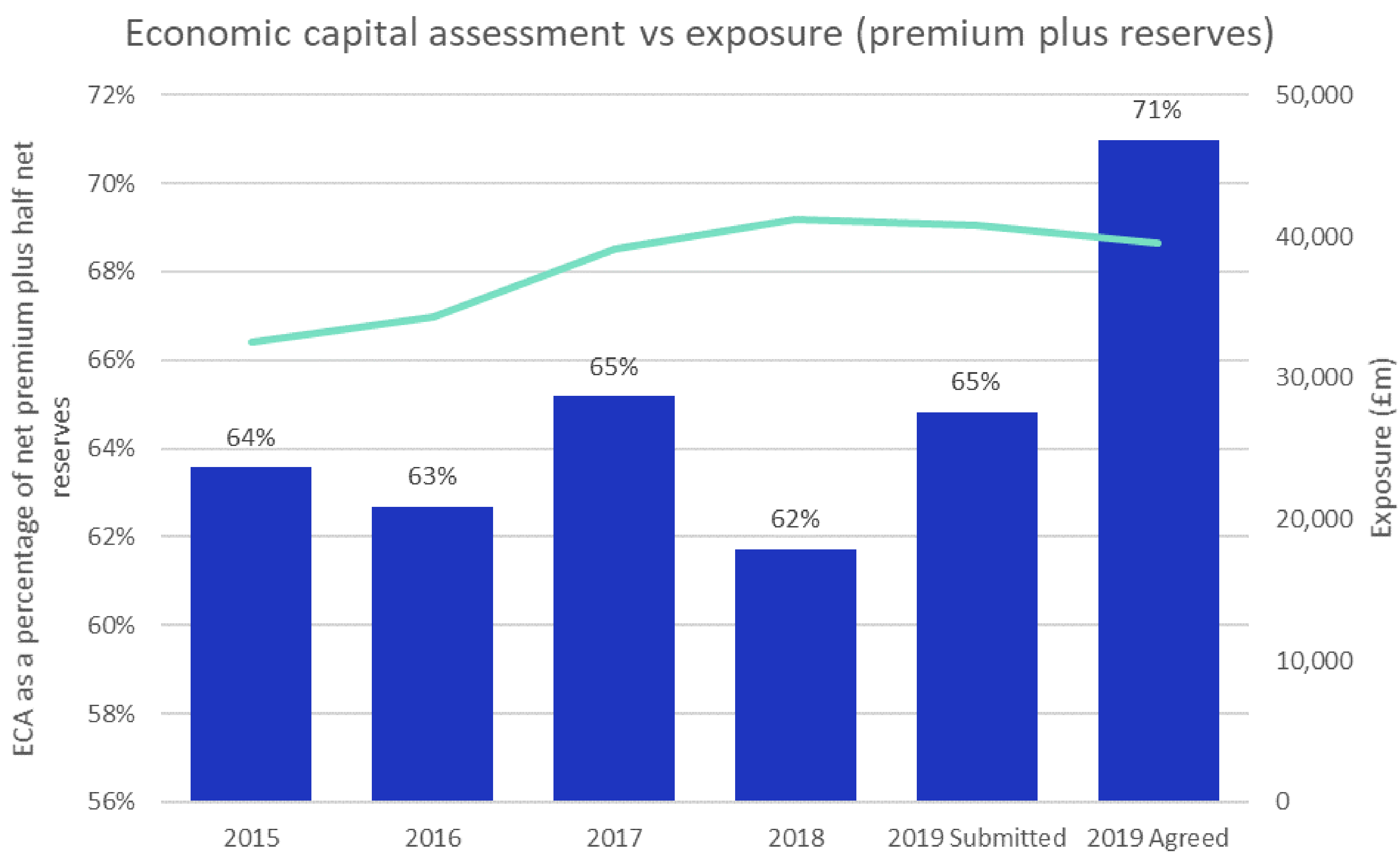




…With loadings applied across a range of risk areas…



…and an increase as a proportion of overall exposure, which includes the most material risk driver, claims reserves



An increase on submission was strengthened by loadings during the review process

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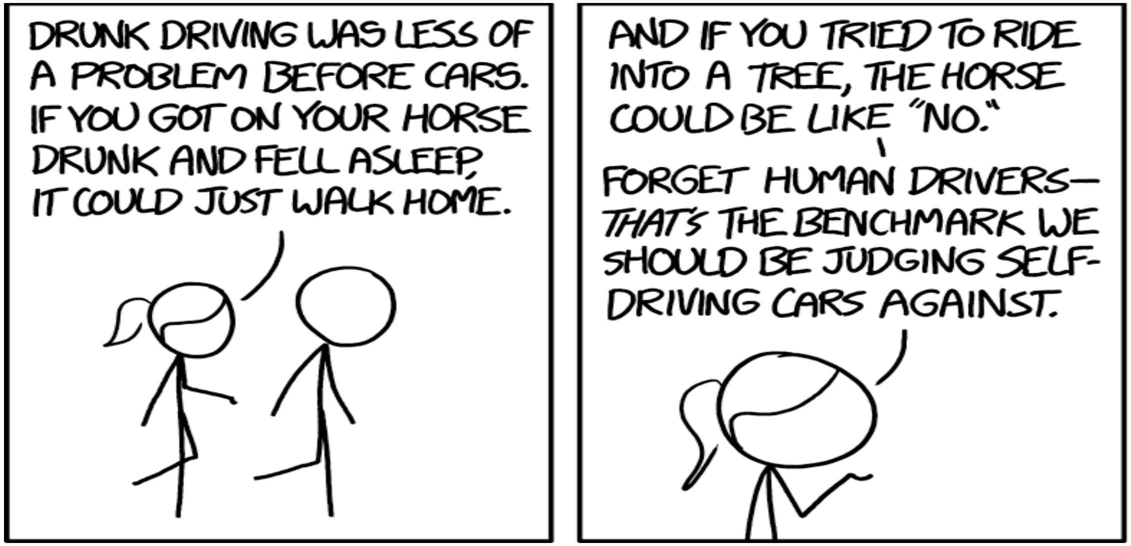
Benchmarks

Baseline needs to be appropriate and comprehensive



- We assume your current position is appropriate, not your position relative to others
- Movements need to be explained and understood, not accepted based on benchmarks
- We will:
  - Move to increased availability of other validation testing to avoid a "one-sided" discussion
  - Aim to provide benchmark information that would be helpful
- We ask that the market does not:
  - Provide Lloyd's benchmarks to Lloyd's to justify positions/movements
- Various stats provided in the appendix

2020 SCR: Plan

Getting Set for 2020

Three main (linked) themes: Market working groups, market communications, market guidance

Q1

- Market working groups kick off
- CPG process review kick off
- Limited validation information request due 1st March
- Capital briefing (28th February)
- Exposure management Catastrophe model completeness LMA working group kick off
- IMO returns (18th March)

Q2

- Feedback on March market information provided
- Market testing data collection (due 1st of May)
- Syndicates selected for phase two of market versus central view deep dives
- Validation briefing (2nd May)
- Capital Market messages (10th June): Setting out expectation of market movements
- Exposure management model completeness return
- Draft SCR and model change guidance and requirements circulated for comment (including working group outcomes)

Q3

- Finalisation of guidance (July)
- Feedback on May market testing data collection
- Outcome of phase two deep dives
- NED Forum (4th Sept)
- LCR submissions – including additional validation information “template”

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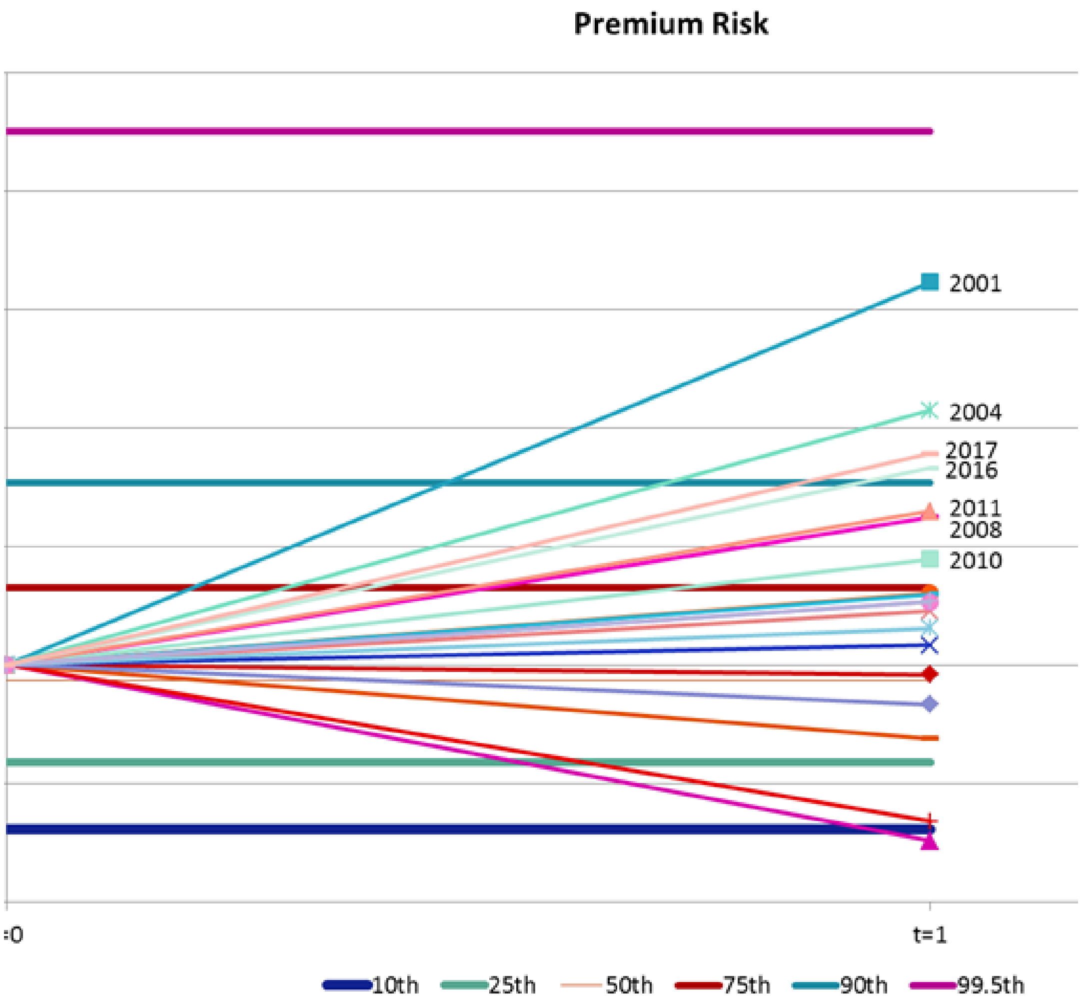
2017 and 2016 have both shown material deviation to plan (ex catastrophe)

- This presents the risk that capital is not sufficient
- Are the drivers for this investigated, understood and responded to?
- This should affect the reliance you place on assumptions, and the assessment of effectiveness of underwriting action
- Information collection in March targeted at syndicate view of this experience and how that has been responded to



Improve Standardisation of Review Processes

1. Improve use of validation information in reviews
   - Review test measures applied
   - Collect additional information – 1st information due 1st March, we will refine based on this
   - Prescribe certain testing
   - Require certain explanations from all syndicates (limit email exchange and additional requests)
2. Transparency of the tests we apply
   - Recognise risk of manipulation, for Lloyd's to manage

➔ Aim is greater efficiency and targeting of review; fewer surprises on both sides

Address areas of review focus in collaboration with the market

Market working groups established with monthly meetings with conclusions in June

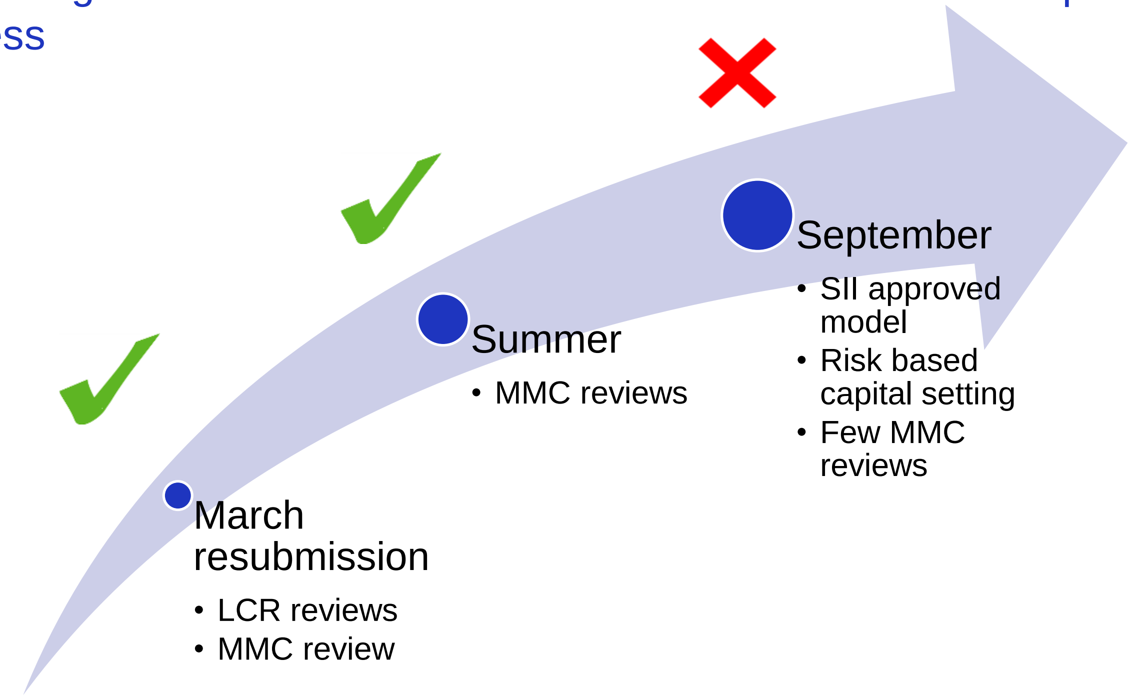
1. Diversification
   - Establish most appropriate testing to assess contribution of risk to capital
   - Outcome is to define the test(s) that Lloyd’s will apply as part of 2020 SCR reviews
2. Market risk
   - Investigate the drivers of negative contribution to capital, decide on approach
3. Model Change
   - Process now a couple of years into operation
   - Review areas of guidance that cause disproportionate input/focus
   - Assist in timescales/review turnaround

Improve Major Model Change Application Process

1. NUMBER of REVIEWS and their TIMING

— Lloyd's to establish "reasonable" turnaround times which are communicated quickly after the application is received

— Capital setting in November with deferred MMC reviews cause duplication and delays in the process



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Improve Major Model Change Application Process

1. NUMBER of REVIEWS and their TIMING

- Last year 87 MMC applications received
- Of these 53 as part of September submissions
- 11 of the 53 were methodology/design changes
- Overall number high due to
  1. Data being in scope of model change policies
  2. Various small risk profile changes accumulating/Submission of SBF trigger for MMC
  3. Quarterly updates accumulating (e.g. four versions of ESG updates accumulating in absolute change terms)

➔ Significant reduction only if we change TIMING of methodology/design changes and REDUCE the number of small risk profile/data changes accumulating

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Improve Major Model Change Application Process

2. EFFICIENCY of the PROCESS

   — Clarification on what MMC should include

      1. ONE major change

      2. ACCUMULATION of minor changes

   — Consistent application of the standard

   — Clarification around batching of changes – too many changes are grouped currently which means we have to ask for more information

3. Requirement to maintain capability to calculate “approved” model numbers with clear bridging of changes

How to be Pro-active

- Adapt your model development plans to send us any methodology/design major model changes in July (or earlier), so that they can be approved before September

- Make COMPLETE model change applications: fully validated, board/internal committees need a certain level of detail to be comfortable with the change – same applies to Lloyd's

- Review how changes are batched – sufficient detail to understand the movement

- Understand (and validate) your model – look into the areas you have been loaded for

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Last Minute Reminder and Key Takeaways

March Submission Notes – A last minute reminder

- Re-assessment of SCR based on YE actuals and any risk profile updates
- Template submissions from all syndicates
- LCR submissions (including SuppQ and AoC) for uSCR movements greater than 10%
- MDC first time use – some notes are on the system
  - Analysis of change process: we will send the template (by close 4th March) for completion by close 6th March
  - SuppQ must be saved and uploaded as a .xlsx file (macro –enabled workbooks can't be uploaded)

Key Takeaways

Wrap up; questions welcome

1. We are working with the market and other Lloyd's teams to overcome areas of challenge in the review process. We will be open and listen to market interests/challenges

2. Capital is inextricably linked to risk profile and reporting needs to evolve to recognise this. Please submit:
   - High level summaries, with underlying detail available
   - Tests you think are appropriate
   - How you gain assurance on capital appropriateness

3. Feedback, requirements and market messages to be communicated more extensively this year
   - Validation briefing in May
   - CRO forum in June
   - SCR and validation guidance update Draft Q2, final Q3
   - NED forum in September

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Appendix: Model tests and ranges

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Lloyd's review

High level tests supplemented with detailed investigation

Test Area	Metrics considered	Questions asked
Overall	Capital/ Exposure Movement over previous years Key movement drivers Market decile and movement in this Comparison to central view	Does the movement match the risk profile change? Has it been explained? Is it consistent across risk types – e.g. premium risk down due to greater RI means greater RI credit risk How has experience been responded to?
Reserve risk	Diversification between classes versus number of classes Stress (excl risk margin)/reserves	Has business mix/RI cover/volumes changed?
Premium risk	Diversification between classes versus number of classes Stress (excl risk margin)/mean (premium/claims)	Has business mix/RI cover/volumes changed?
Catastrophe risk	Exposure management review	How are changes driven by exposure versus view of risk?
Credit risk	RI Credit risk/RI recoveries Other credit risk/premium	What is the rating of counterparties? Has collateral been model? Are there concentration risks?
Market risk	Market risk/available assets	What is the asset and FX mix?
Operational risk	Op risk/capital, premium	Is the direction of movement appropriate? Is there any overlap with other risks?
Diversification	Undiversified versus post diversified contribution Sum of squares test	Is credit greater than independence? Are the risks contributing to capital as expected?
One Year	One year/ultimate	Is the ratio and any movement justified?

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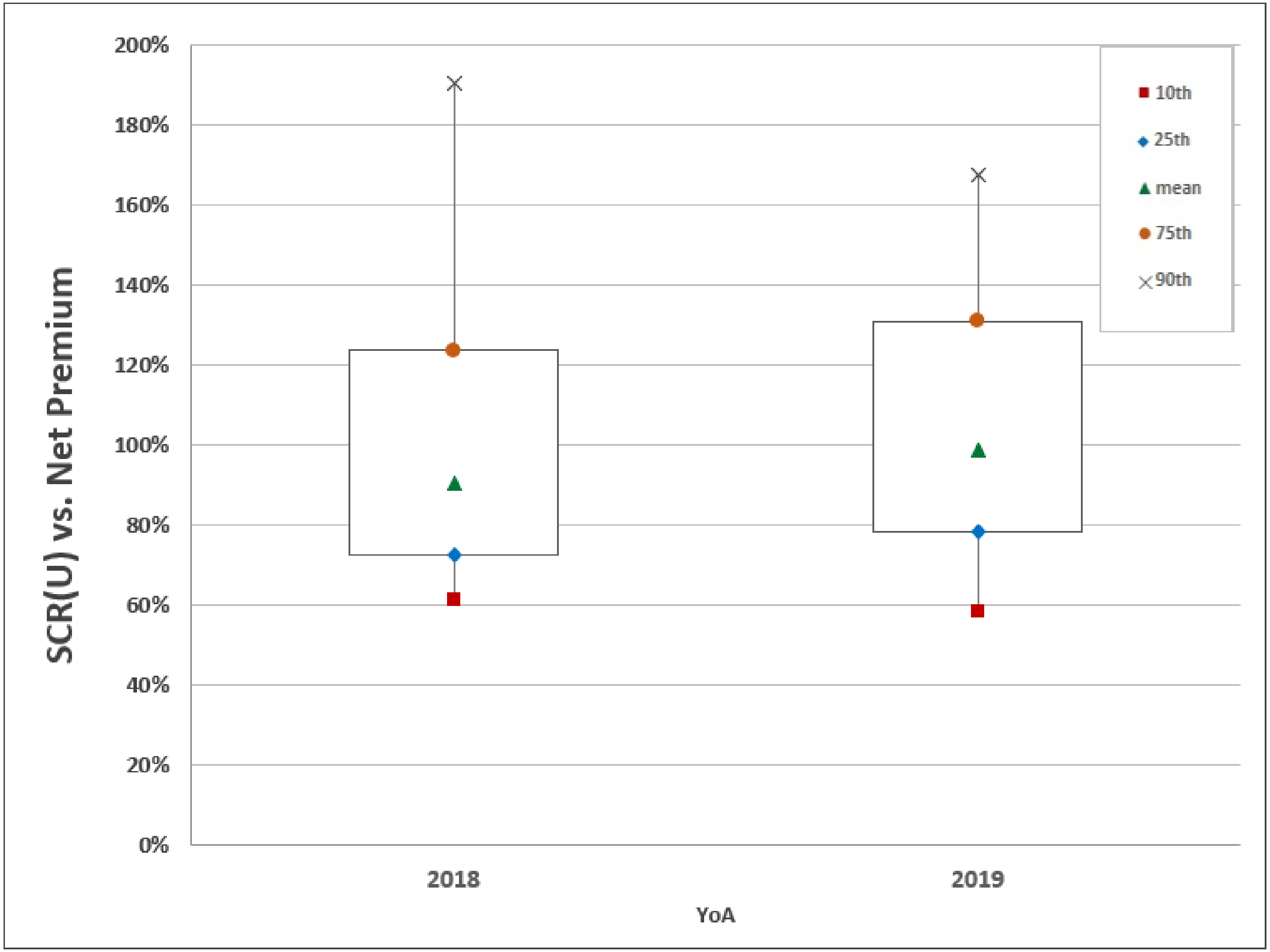
Results for 2019 YoA: user beware

- LCR risks vs. exposure: an update from last year
- Based on December 2017 CiL and November 2018 CiL data
- Notes:
  - the exposure measures are not optimal
  - gaps/jumps may occur near the percentiles shown
  - excludes new syndicates
  - means are volume weighted
- Remember:
  - distance from the market mean/min/max/any quartile is **not** a validation test

Ultimate SCR vs. net premium



Ult SCR: F309

Net PI: F313 table 1 col D row 1

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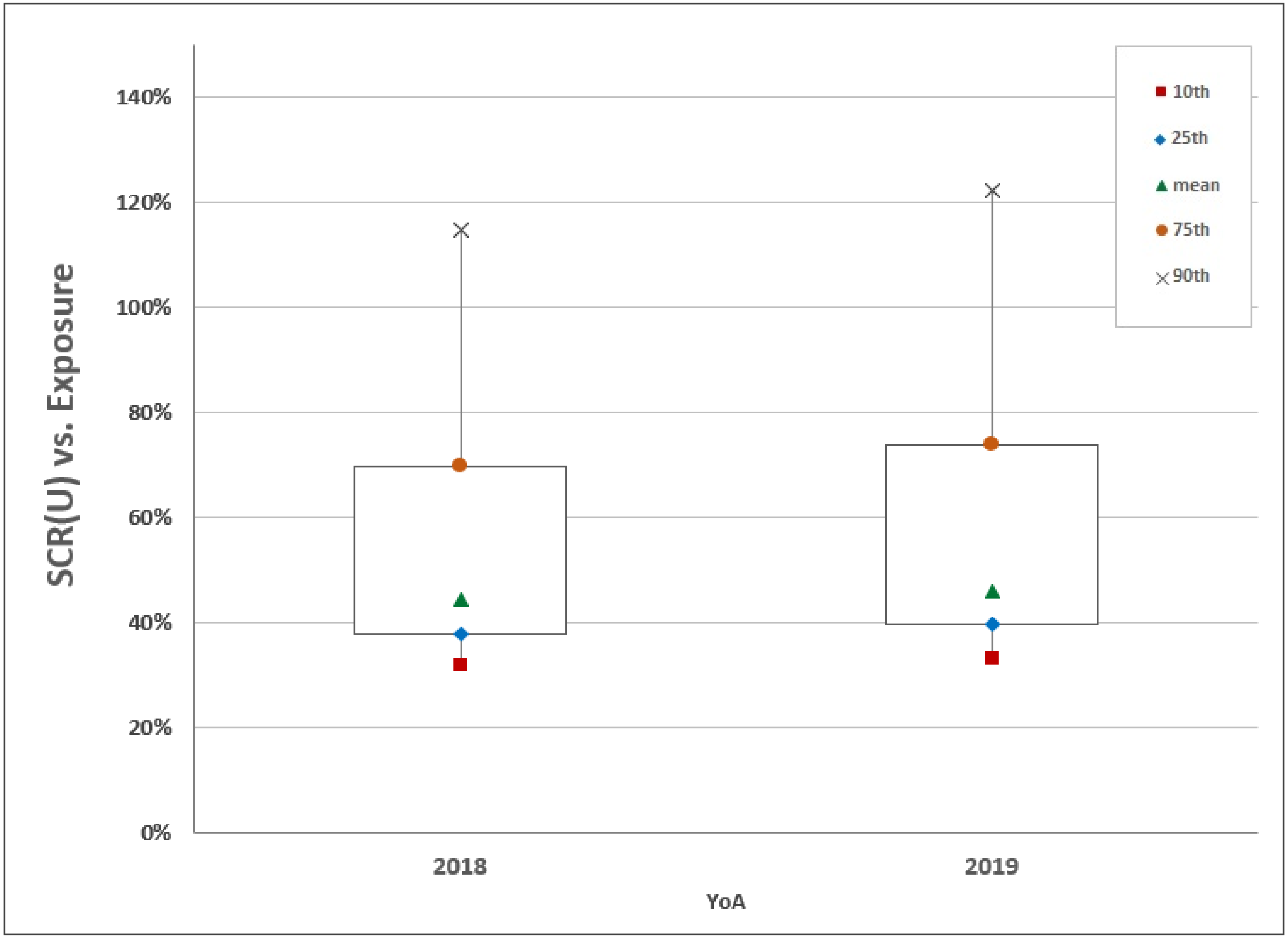
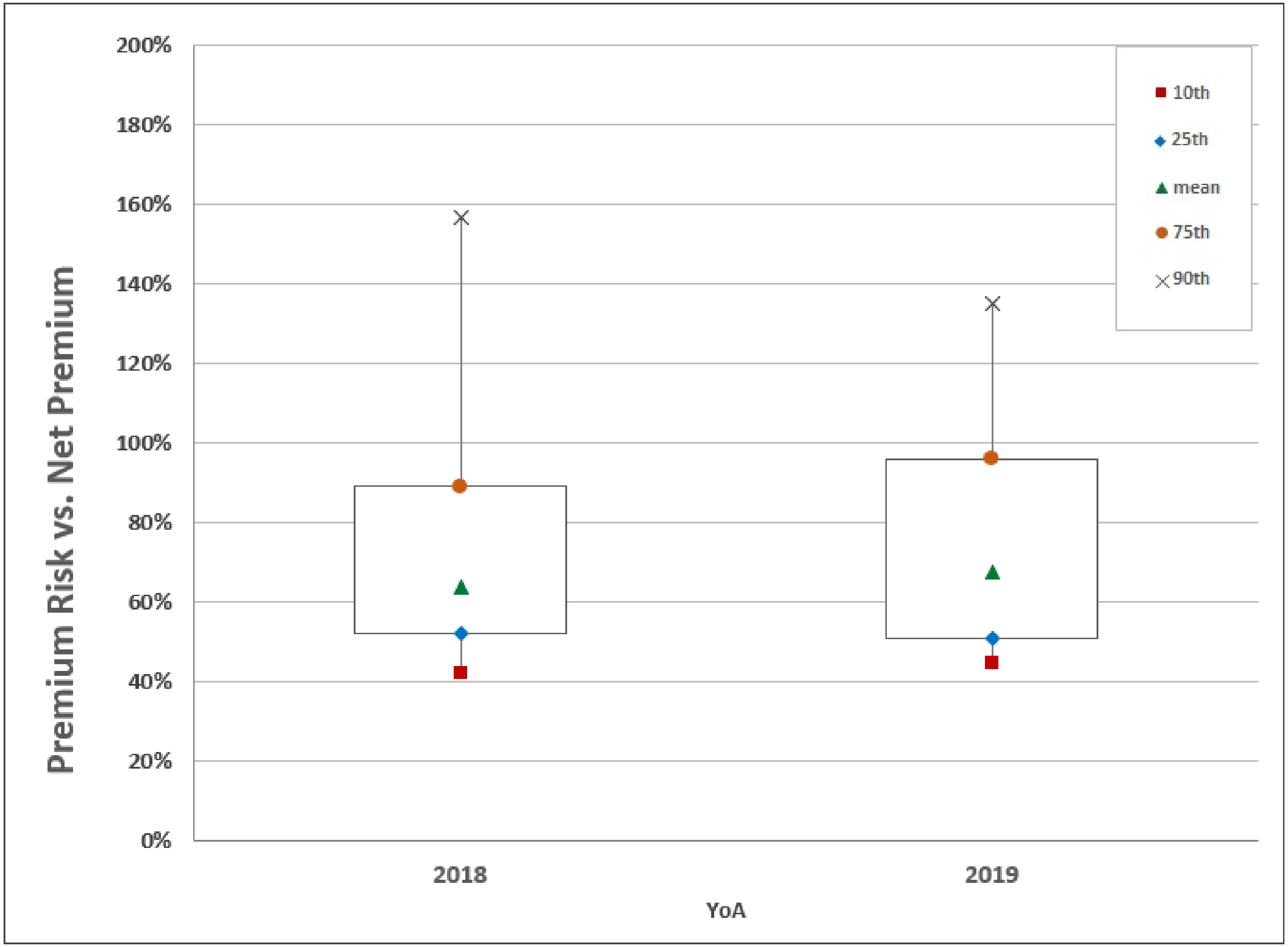
Ultimate SCR vs. exposure (net premium + ½ net reserves)



Ult SCR: F309

Exposure: Net PI + 0.5*Net Reserves

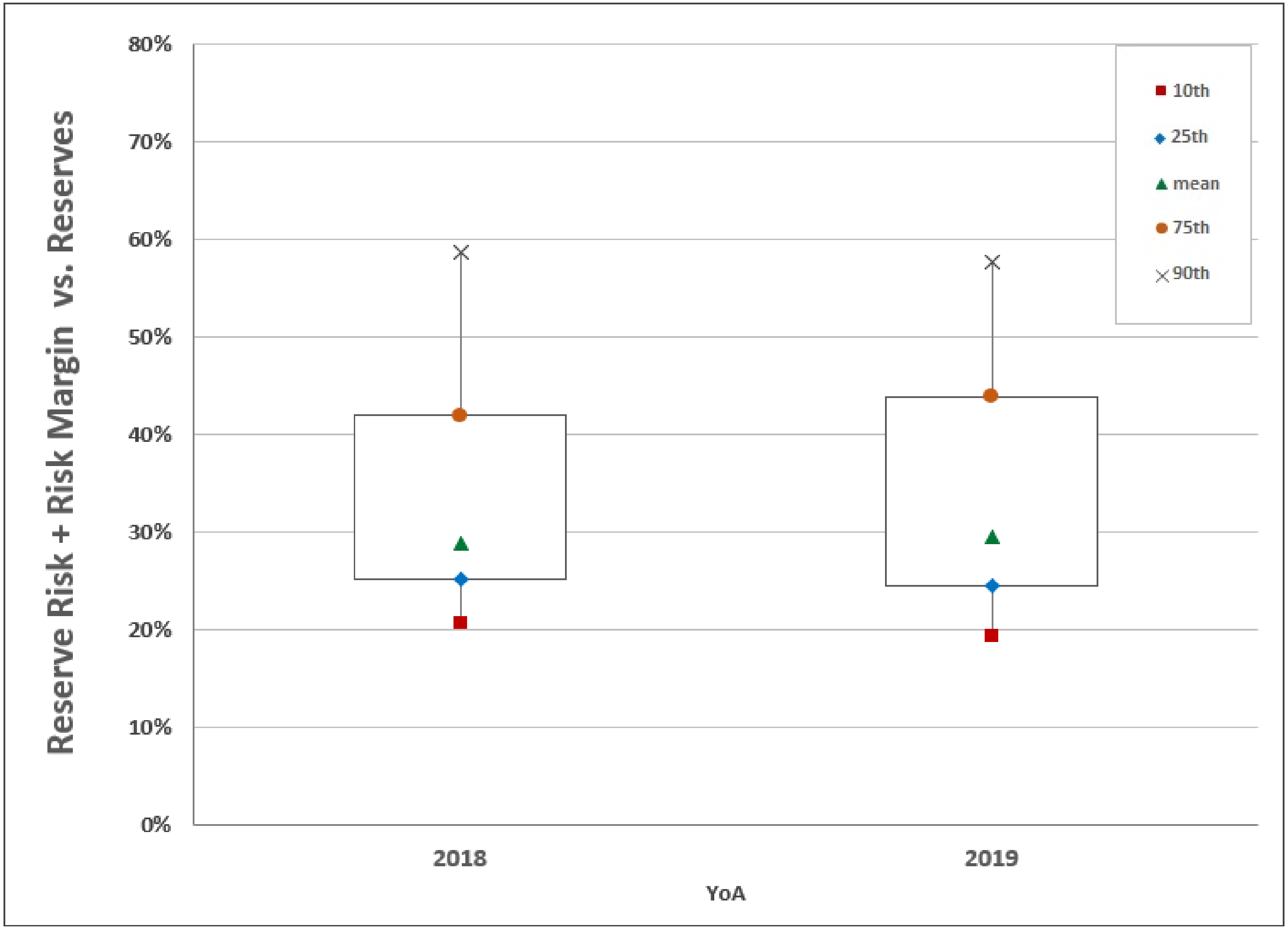
Premium risk vs. net premium



Ult premium risk (pre diversification): F309

Net PI: F313 table 1 col D row 1

Reserve risk + risk margin vs. reserves

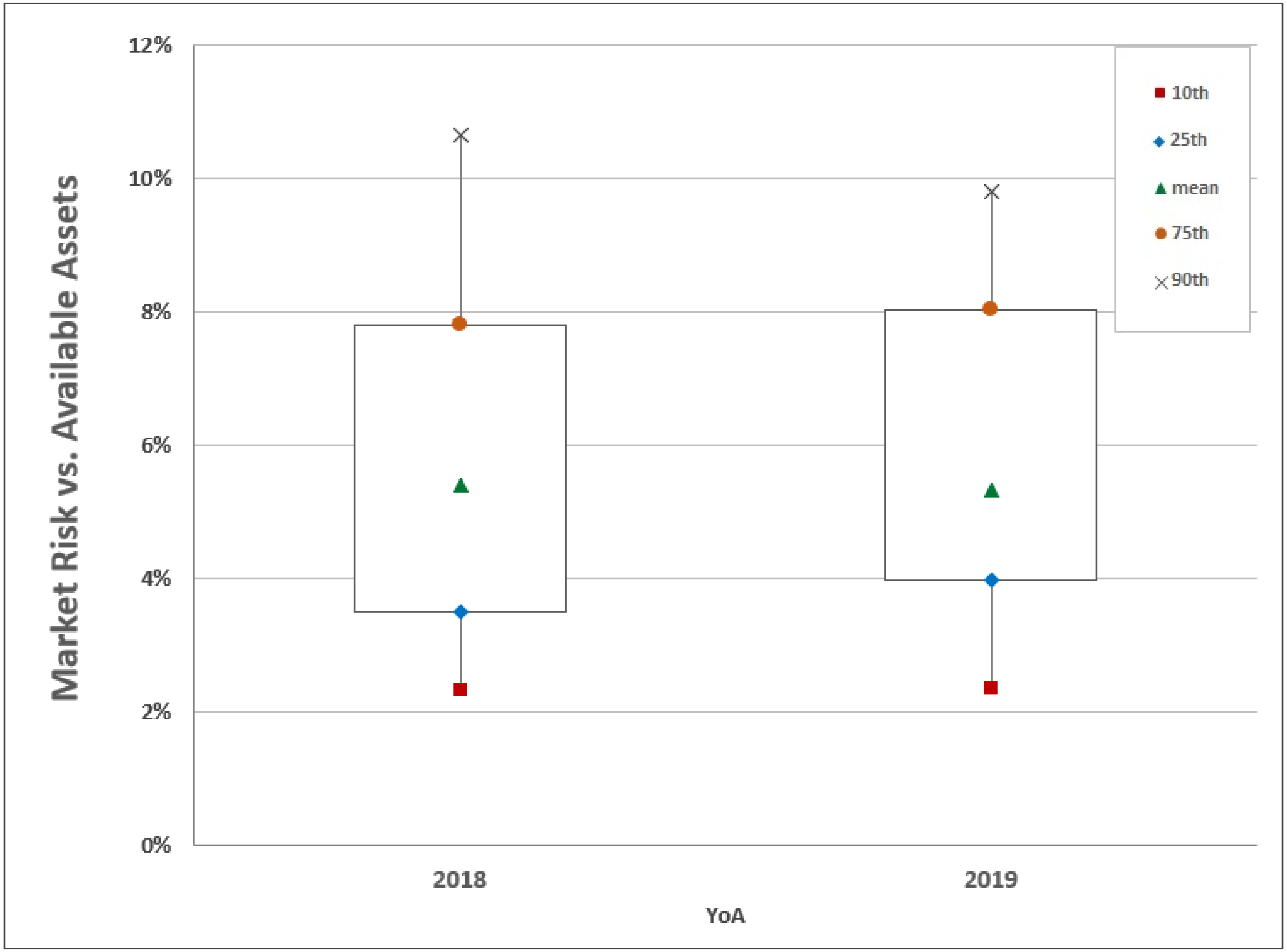


Reserve risk (pre Diversification) F309

Risk margin: F312 col P total

Net Reserves: F312 cols H+I-J Total less Proposed YOA

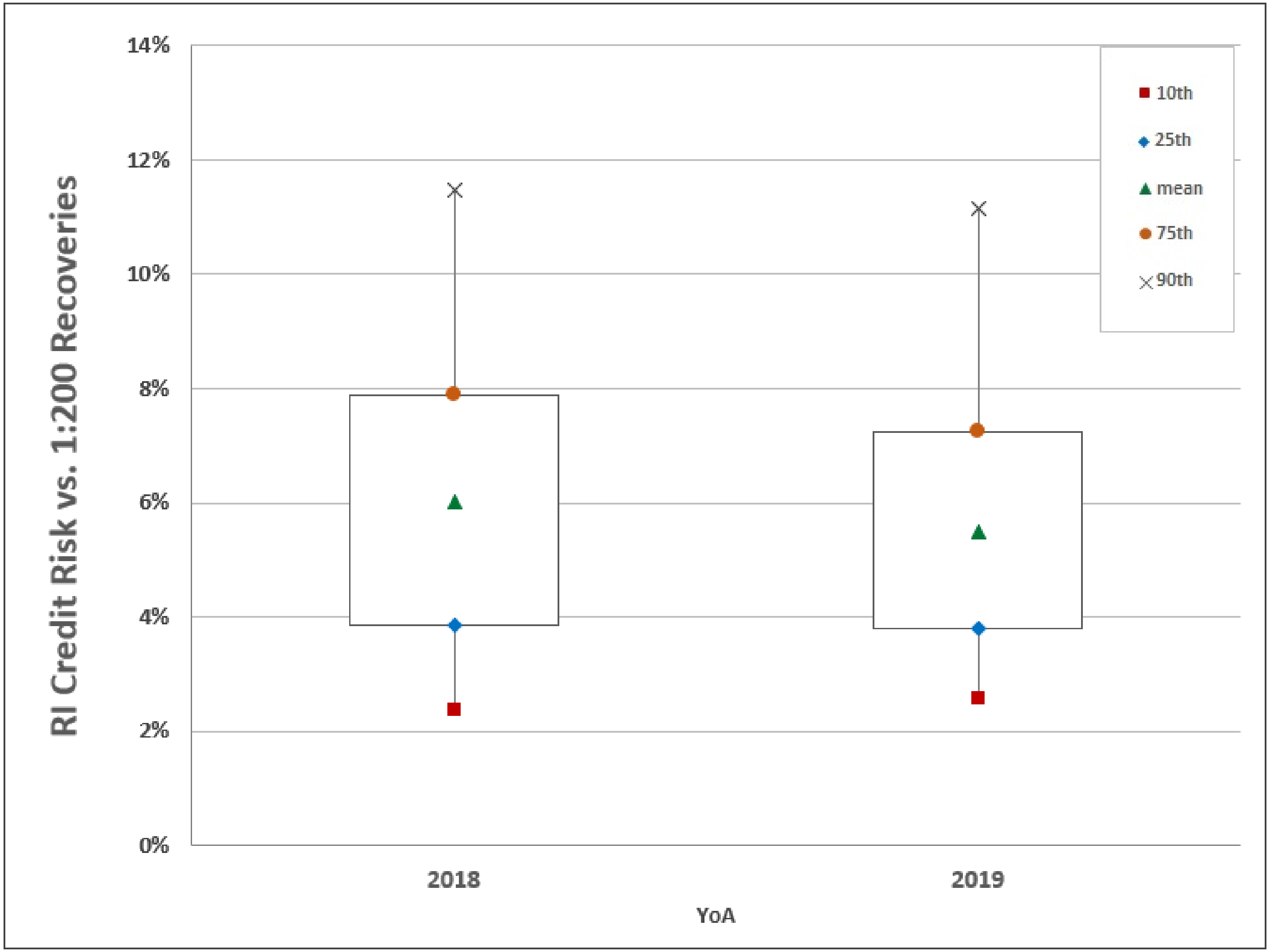
Market risk vs. available assets



Market risk (pre Diversification): F309

Available assets: F312 col Q Total less Proposed YOA + F313 table 1 col D row 1

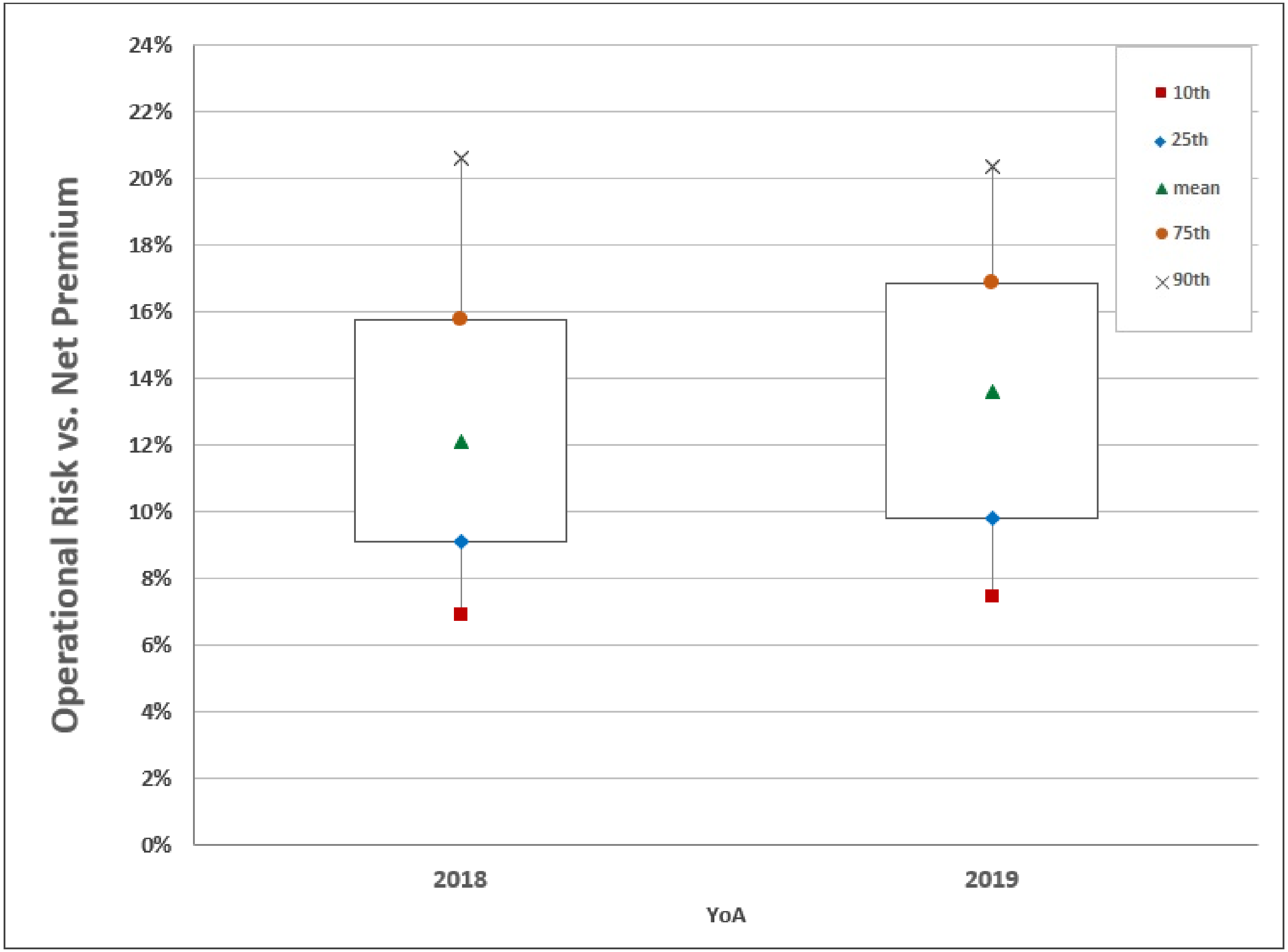
RI credit risk vs. 1:200 recoveries



RI credit risk (pre Diversification): F309

1:200 Recoveries (approximated): F311 table 1 col G row 4 less row 3

Operational risk vs. net premium



Operational risk (pre Diversification): F309

Net PI: F313 table 1 col D row 1

SCR(1) vs. SCR(U) + RM