

Current Issues in ALM and Independent Expert roles, and a look at ethical issues in AI

29 April 2021



Chairman's Welcome

Stuart Reynolds

29 April 2021

Agenda

13:00 – 13:05

Chairman's Welcome

Stuart Reynolds

13.05 – 13.35

AI

David Burston & Philip Simpson

Questions

13.40 – 14.05

Topical Issues around ALM

Russell Ward & Neil Dissanayake

Questions

14.10 – 14.40

IE & Schemes of Arrangement

Oliver Gillespie & Jen van der Ree

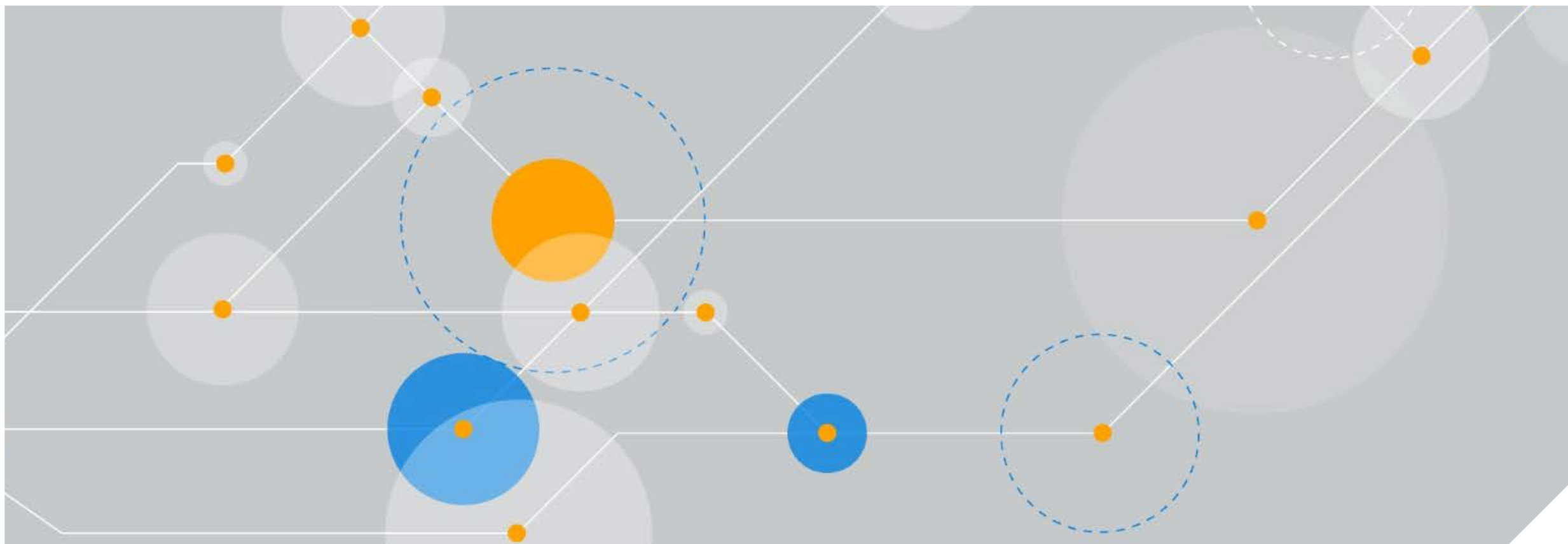
Questions and wrap up

Artificial Intelligence (“AI”)

The ethical use of AI In the life insurance sector

David Burston and Philip Simpson

APRIL 2021



MO COMPARE Motorists fork out £1,000 more to insure their cars if their name is Mohammed

Technology

Fatal Tesla crash sparks federal investigation

2 January 2020

Facebook blocks insurer exploiting user data to find 'conscientious' drivers

The long read
The student and the algorithm: how the exam results fiasco threatened one pupil's future

Artificial intelligence (AI)

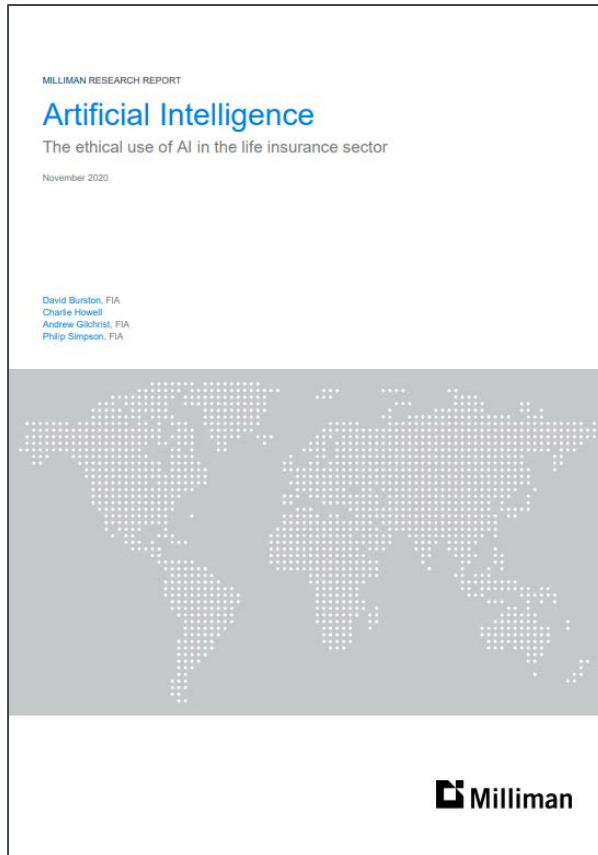
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Cambridge Analytica scandal 'highlights need for AI regulation'

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Introduction & Agenda



<https://uk.milliman.com/en-GB/insight/artificial-intelligence-the-ethical-use-of-ai-in-the-life-insurance-sector>

Background on AI

- What is AI and what distinguishes Machine Learning (“ML”) from AI?
- How do ML AI systems work?
- How can AI be used in the life insurance sector?



Ethical considerations

- What are the main ethical concerns associated with AI systems?

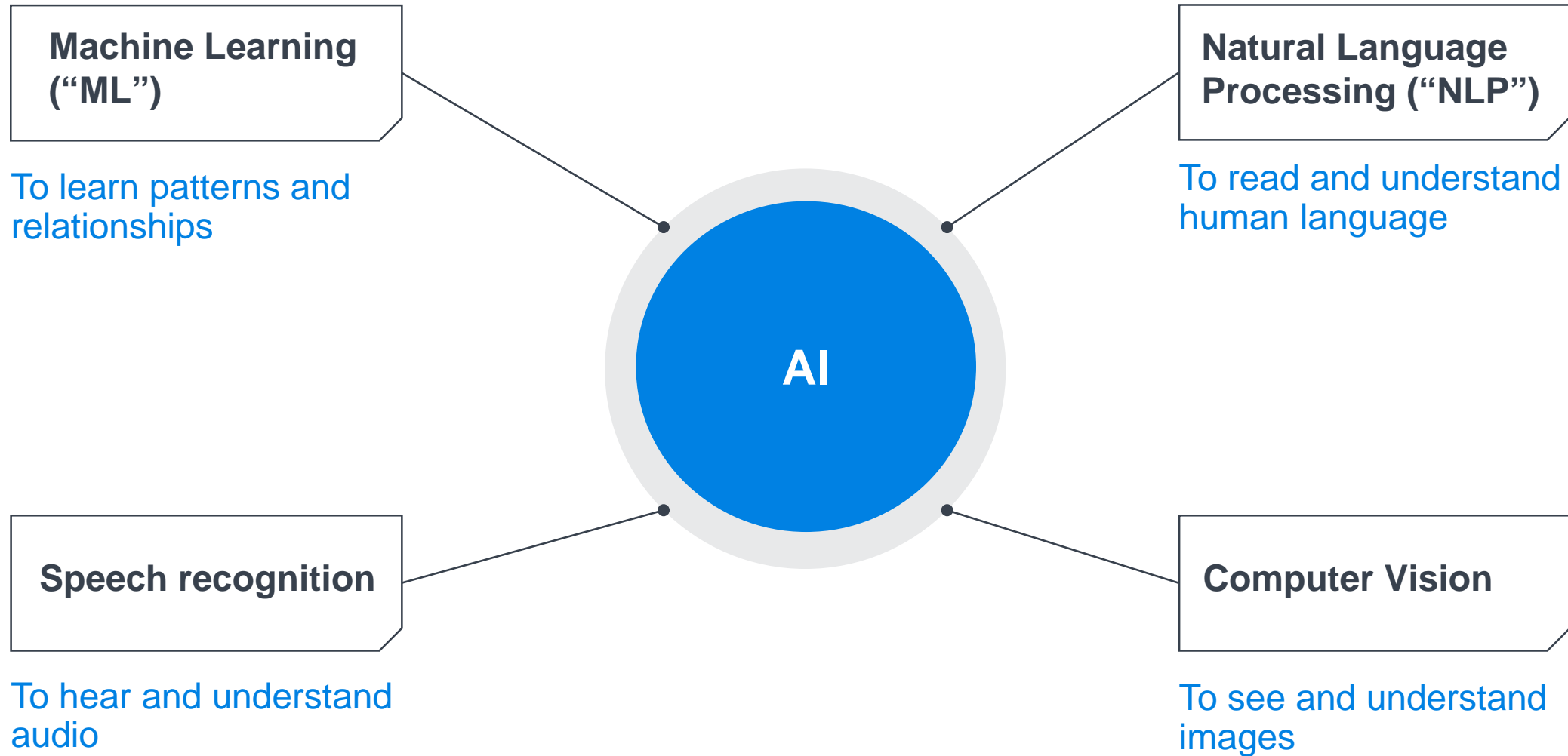


Background on AI

David Burston

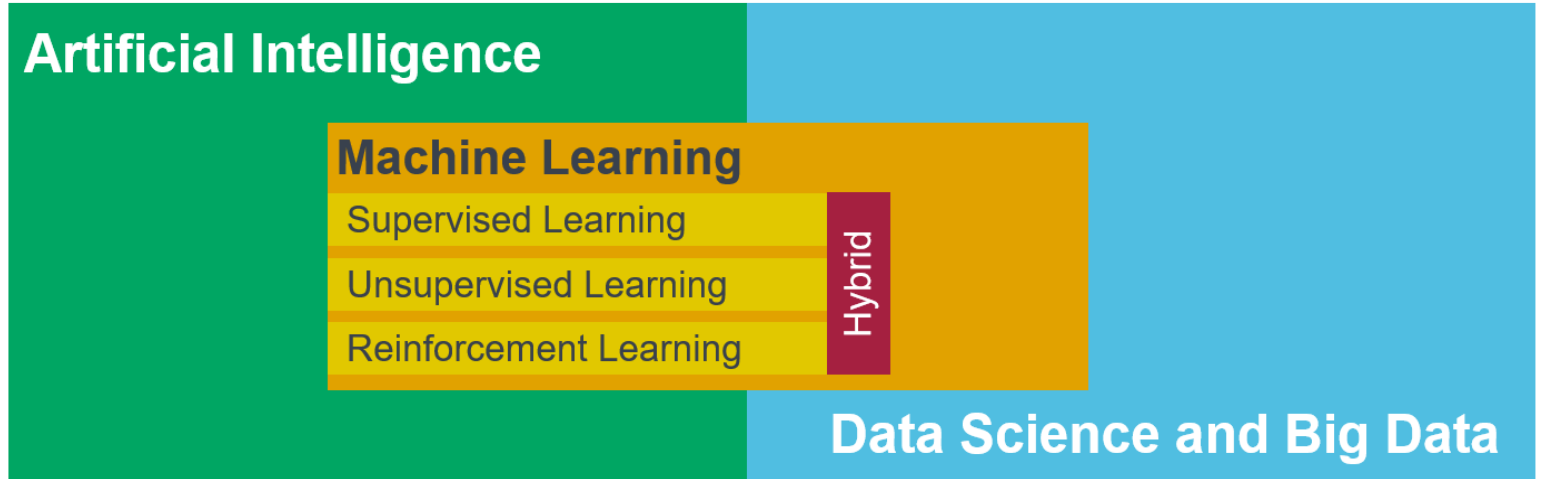
What is AI?

Some key examples



What distinguishes ML from AI?

- **AI** = a broad area of computer science that incorporates *any* computer system aiming to replicate tasks that would traditionally require human intelligence
- **ML** = development of models that are trained (i.e., calibrated, or fit to) on vast sets of data in order to discern or recognise patterns (i.e., to “learn”) in that data that would not be initially obvious



ML models can be incorporated in AI systems in algorithms that have the purpose of solving a particular problem without (or with limited) human input.

The system will be fed on sample data, and based on the model’s understanding of the key relationships and patterns in that past data, it may be used to:

■ **Predict outcomes**

■ **Make decisions**

What types of ML are there?

The three main types

Supervised Learning

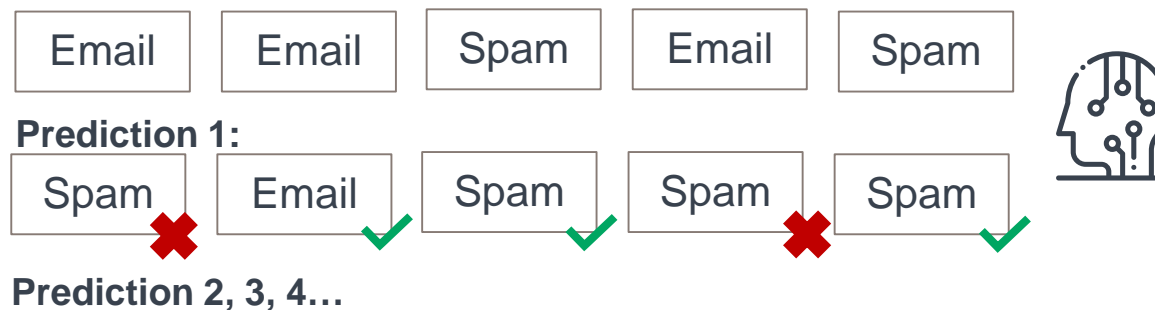
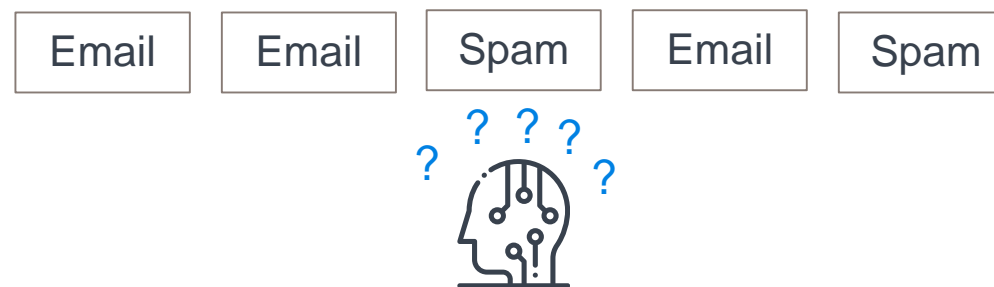
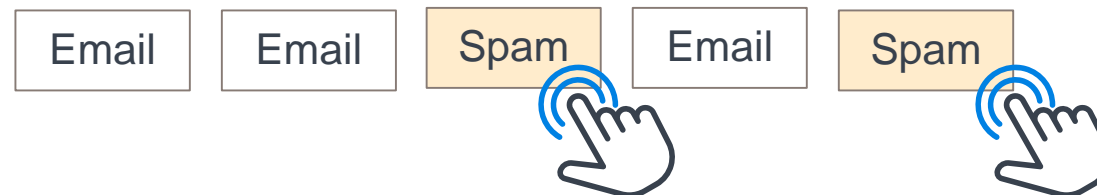
- Model trained on **labelled data set**
- Model told to map data item X to target variable Y (i.e., the model trains a function $F(X)=Y$).
- Trained on this data model learns a set of rules that it can apply to data outside the training data set.

Unsupervised Learning

- Model trained on **unlabelled data set**
- Model tasked with discovering patterns, structures, and regularities in the data without being told where to look or how to go about the task. Model does not know what the data item X is in order to look for a function F – it must determine these for itself.

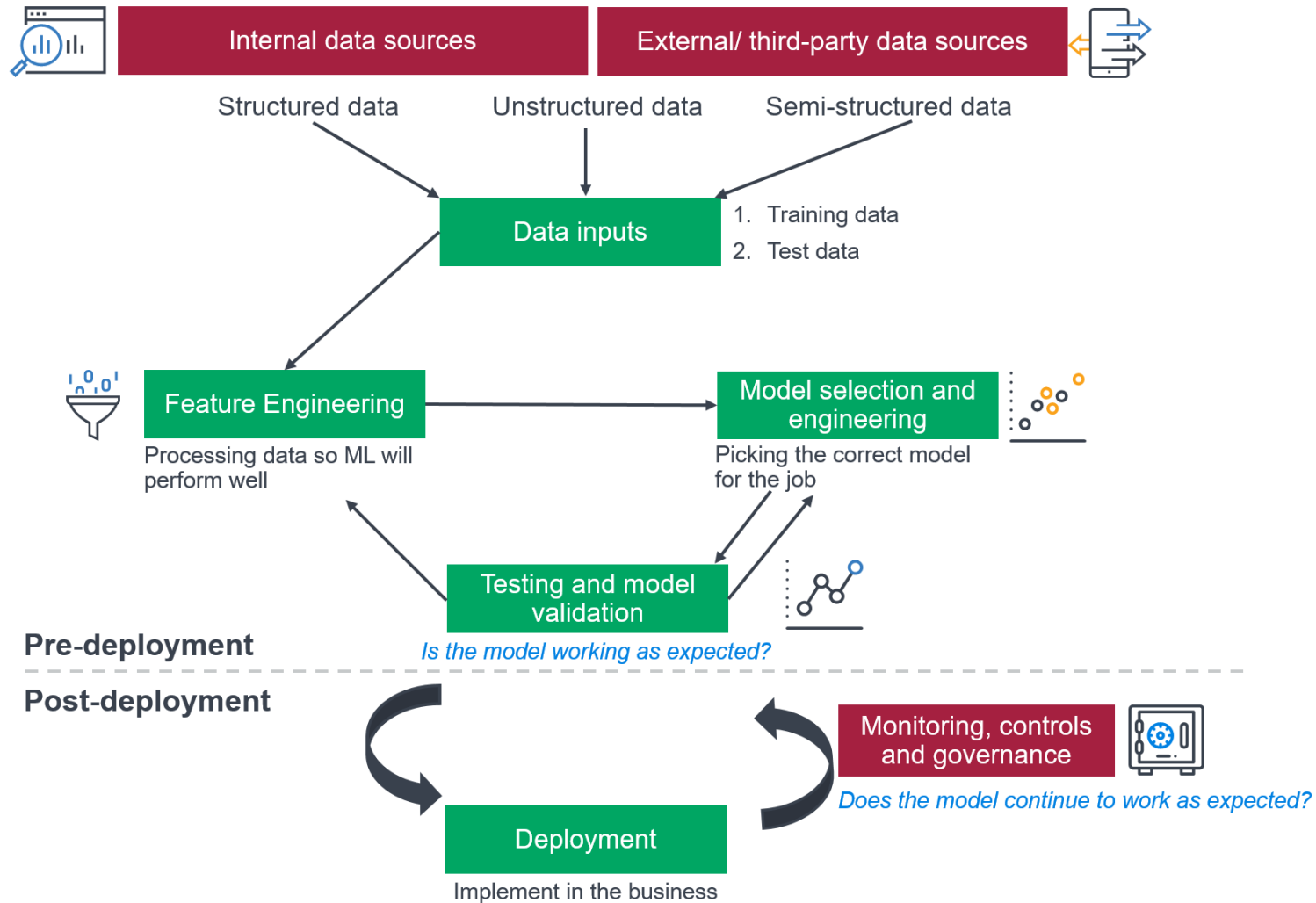
Reinforcement learning systems

- Model trained on **unlabelled data set**
- Model determines an outcome for each data point. The system then receives feedback by way of a *reward* that allows the system to learn from experience in a trial-and-error fashion.



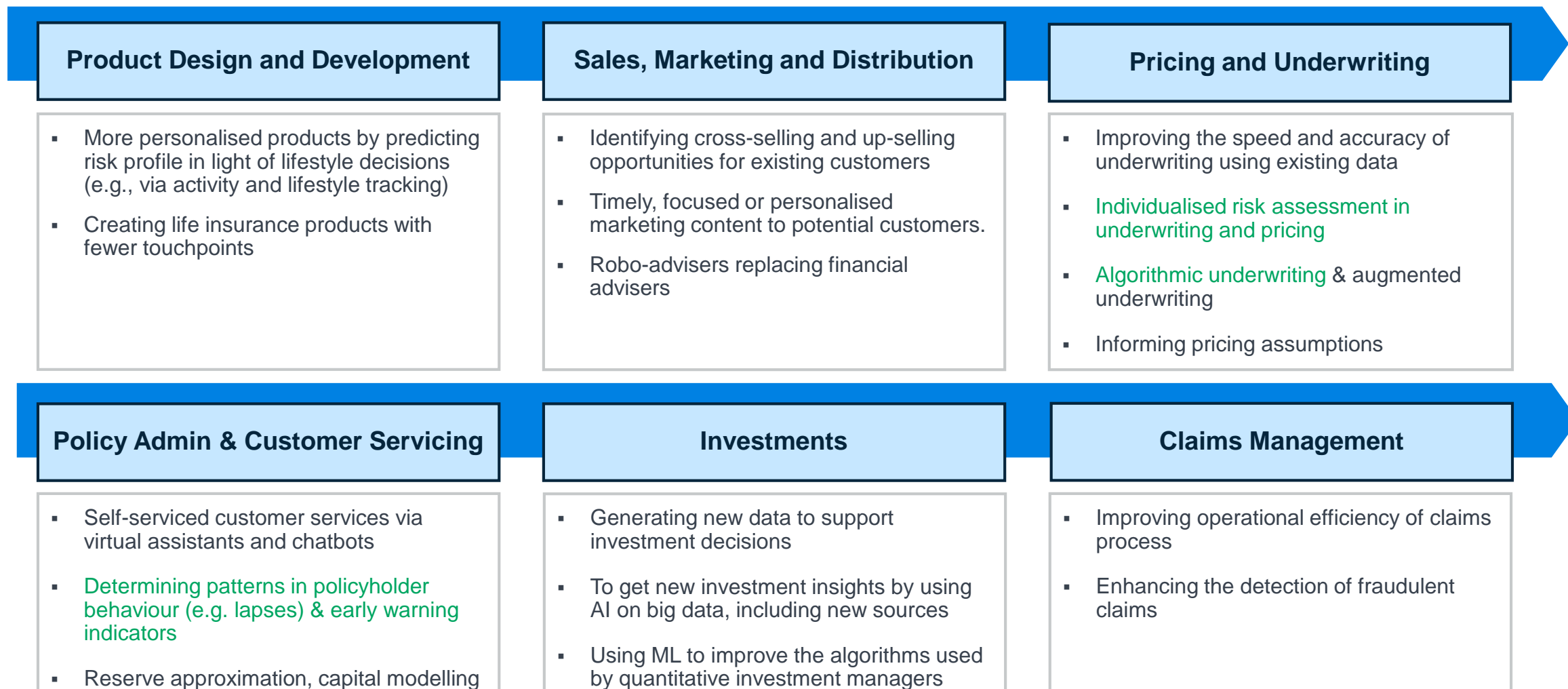
How do ML AI systems work?

An overview



How can AI be used in the life insurance sector?

The traditional insurance value chain



Ethical considerations

Philip Simpson

What are the main ethical concerns associated with AI systems?

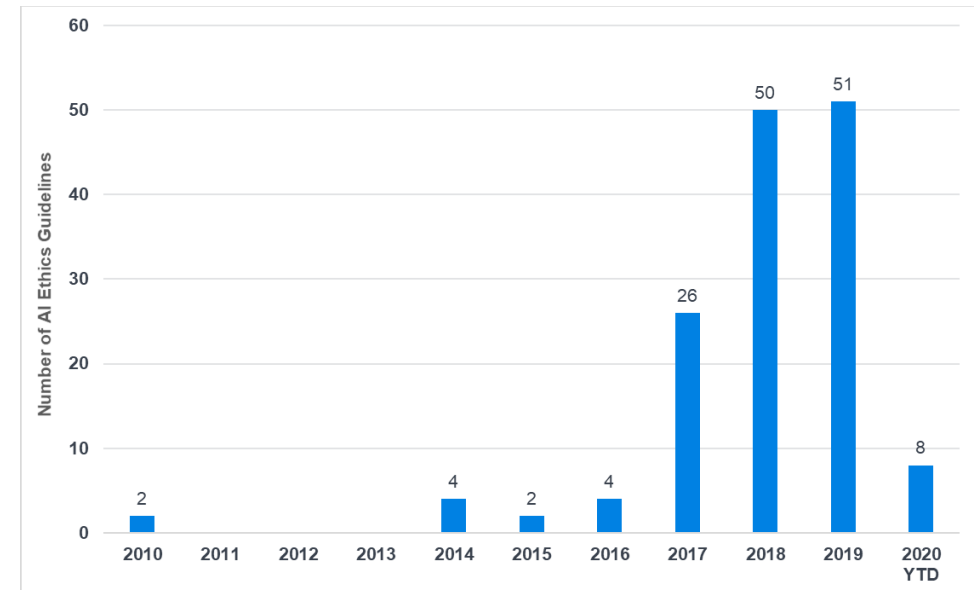
- Over recent years a proliferation of guidelines from academia, the private sector, government bodies, industry bodies and think tanks that aim to provide guidance on how to develop AI in an ethical, moral, and responsible way.

Saturation of information →

“what guidelines should we follow exactly?”

- Despite saturation, there has been a convergence to a number of **core principles**.

NUMBER OF AI ETHICS GUIDELINES PUBLISHED OVER TIME



Source: Data collected from AI Ethics Guidelines Global Inventory <https://inventory.algorithmwatch.org/> (September 2020).

What are the main ethical concerns associated with AI systems?

PERCENTAGE OF GUIDELINES REVIEWED THAT COVERED ETHICAL TOPICS

Transparency, openness, communication	94%	Robustness (reproducibility, accuracy, reliability)	50%
Fairness, non-discrimination, diversity	83%	Human rights, human autonomy, etc.	39%
Accountability (auditability, reporting negative impacts, redress)	83%	Human oversight and control	33%
Explainability, interpretability	72%	Public awareness, education on AI and its risks	33%
Data privacy	72%	Impact on employment	28%
Data security and cybersecurity	67%	Potential use in weapons	22%
Societal and environmental well-being	61%	Cultural considerations (e.g., different groups and cultures may have different ethical views)	22%
Prevention of harm/misuse of AI	56%	Competence and skills of those using AI	17%

Key areas of concern reflected in names of groups researching AI ethics, e.g.:

- **FAT** = fairness, accountability, transparency
- **FATE** = fairness, accountability, transparency, ethics in AI

Source: Milliman Paper 'Artificial Intelligence: The ethical use of AI in the life insurance sector'. <https://uk.milliman.com/en-GB/insight/artificial-intelligence-the-ethical-use-of-ai-in-the-life-insurance-sector> (November 2020).

FATE

Fairness, bias and non-discrimination

- Important that there is, and perceived to be, fairness in AI applications and that such applications do not unfairly discriminate against certain groups of customers.

- AI is reliant on data → Exposed to data bias
- AI relies on humans → Exposed to any bias that the human modellers may have (conscious or unconscious)

- This bias can result in unfair decisions, outcomes or predictions, and may result in differentiation (some of which may be fair, some of which may not be fair (i.e., they may be discriminatory)).

ILLUSTRATIVE EXAMPLES

- At an insurer, males purchasing life insurance historically had higher wages than females reflecting historic wage inequality.
- An AI system using this data to recommend life insurance products may learn that women earn less than men, and offer a lower sum assured than for an equivalent male.
- Historically, fewer life insurance policies had been issued to minority groups at an insurer.
- Consequently they are underrepresented in a policyholder data set used to train an automated underwriting tool.
- For future applications using the tool, the system cannot determine an automated underwriting decision for policies from that minority group.
- It therefore refers the decision to a human underwriters to review, making the process longer for individuals from the minority group, and opening up their application to greater scrutiny than other policyholders.

KEY CONSIDERATIONS:

- Types of bias that an AI system could be susceptible to
- Types of unfairness that the AI system could give rise to
- The types of discrimination an AI system could create.

FATE

Accountability

- If a human makes an error in decision making that adversely impacts a policyholder or that puts the financial security of a firm at risk, clearly defined roles and responsibilities make it easier to ascertain culpability.
- For decisions, recommendations or predictions made by an AI system, often without explicit human sign-off (i.e., automated) there is concern it is not possible to determine who is accountable when the AI system results in adverse conclusions and harm.
 - Was it due to poor design?
 - Was it due to a lack of understanding from those overseeing the AI system?
 - Was it due to a lack of oversight and risk management from the board of a firm?

So who can be held accountable?

PEOPLE



Responsible for judgement on whether an AI system should be developed and how, what data and models to use, and how to decide if the model is working well

FIRM



Responsible for the introduction of an AI system and thus the ongoing governance and oversight of the system.

What can firms do?



ROBUST CONTROLS, DOCUMENTATION AND RECORD KEEPING



GOVERNANCE FRAMEWORKS AND OVERSIGHT

FATE

Transparency

- Ultimate goal is to present AI use as justified and credible, and to have that perceived in the eyes of others by providing them with insight on what has been performed, and why.
- Transparency means different things to different stakeholders that will need:
 - Different levels of insight.
 - Communicated in ways that are interpretable to them.

KEY CONSIDERATIONS:

- **Explainability** – explaining the technical process of the AI system
- **Interpretability** – communicating explanations to interested parties in a way they will understand
- **Traceability** – recording data and model use
- **Communication** – communicating openly to interested parties

	EXAMPLE MOTIVATION	EXAMPLE DISCLOSURE NEEDED	INTERPRETABILITY
Policyholder	Seek appropriate redress and contest decisions made by AI system	<ul style="list-style-type: none"> ▪ When and how AI is being used? ▪ How a decision made by an AI could be changed? 	<ul style="list-style-type: none"> ▪ Jargon free ▪ Needs to reflect a range of levels of understanding on AI
Prudential regulator (e.g. PRA)	Build trust that the AI system is robust, works as intended, with sufficient governance in place for ongoing review	<ul style="list-style-type: none"> ▪ Where AI systems are being used (or may be)? ▪ What risks are created by a firm's use of AI systems ▪ How the governance and controls contribute to sufficient risk management? 	<ul style="list-style-type: none"> ▪ May be reasonably high-level ▪ Some technical information may be required to facilitate guidance, best practice, and setting expectation
Conduct regulator (e.g. FCA)	To be able to investigate and contest the use of an AI system if it feels that it is unfair, discriminatory, or not meeting other conduct of business requirements	<ul style="list-style-type: none"> ▪ As above for prudential regulation, but will have a focus on ensuring fairness of outcomes for consumers 	<ul style="list-style-type: none"> ▪ As above for prudential regulation, but will have a focus on ensuring fairness of outcomes for consumers ▪ Some technical information may be required to facilitate investigations into issues around individual fairness

FATE

Explainability

- Complexity of some ML models → challenging to understand and explain how the model is working or making its decisions, predictions, or recommendations – “**AI’s black box problem**”.
- Explainability is important in situations where it is important to know why a prediction, decision or recommendation was made by an AI system, not just what was predicted, e.g.:
 - Why was my claim declined?
 - Why was my premium higher than expected?
- Need for explainability is highly contextual and may depend on the potential level for financial or social impact, or where potential form harm to an individual.
- Various stakeholders will have different explainability requirements.

		EXPLAINABILITY CONSIDERATION				
Stakeholder group	Some high-risk use cases relevant to stakeholder group	Key features that contributed to an individual outcome, decision or prediction	Key features that generally drive model output	High-level information on how the model is set up and works to come to its outcomes, decisions or predictions	How the model output would differ if an alternative non-ML approach was used	How the model would deal with data it has not seen before
Public (policyholders, potential policyholders)	<ul style="list-style-type: none"> Pricing decisions Underwriting decisions Claims decisions Guidance 					
Prudential regulators (e.g., PRA)	<ul style="list-style-type: none"> Reserve calculations Daily solvency monitoring Capital requirement (e.g., SCR) calculations Investments Material assumptions used in reserving 					
Conduct regulators (e.g., FCA)	<ul style="list-style-type: none"> Pricing decisions Underwriting decisions Claims decisions Guidance 					

KEY CONSIDERATIONS:

- Techniques available for understanding complex ML models
- What needs to be understood and by whom?
- How to communicate to relevant stakeholders in a way that they would understand.

Summary

Key takeaways

- Features unique to ML models and AI systems create new risks to life insurers.
- ML models aim to differentiate —that is how they have predictive power. The features that such models use to determine predictions will raise ethical questions around bias, fairness and discrimination against groups and individuals.
- AI systems are increasingly allowing value to be extracted from unstructured data sources that were previously inaccessible, including some data sources that individuals might not choose to share with insurers (e.g., social media data). This raises ethical questions around data privacy and data security.
- ML models can be extremely complex and so it is hard to understand how they are making decisions (i.e., they are black boxes). When decisions by such models can have adverse impacts on policyholders, it raises the question of whether the lack of explainability and transparency in decision making is ethical.
- In many cases AI systems are now making the decisions that humans would have taken, with limited or no oversight. This raises the question: When things go wrong, who is accountable?
- Unlike other modelling approaches, or other systems, AI is often a living system that needs regular validation and calibration to ensure the model is continuing to work in line with expectations. This increases the burden on model risk management and necessitates the creation of dynamic controls, checks and governance structures that review and re-review the AI system throughout its life cycle.

Any Questions?

Topical ALM Issues

Neil Dissanayake
Russell Ward

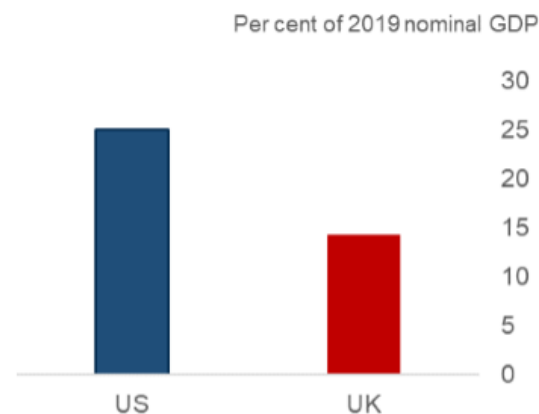
Economic Context

The COVID-19 pandemic has prompted huge levels of fiscal support

- In the US, a potential further USD4trn has been proposed by President Biden to target infrastructure development and to support American families.
- UK spending plans perhaps less eye catching but imply significant budget deficits.
- This spending will need to be financed -> lots of Gov't bond issuance over the coming months and years.
- Corporate investment also expected to recover as economic activity picks up during 2021 and beyond.
- Some indications that this pick-up may be occur earlier and/or be more marked in the US vs UK.

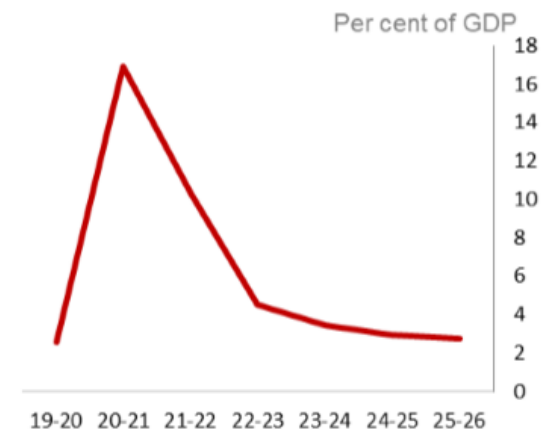
Chart 7: UK and US fiscal policy have diverged

Panel A: Discretionary spending measures taken or announced since March 2020



Sources: OBR, CBO, IMF and Bank calculations.
Notes: Excludes loan schemes and guarantees. US includes assumed \$1.87trn ARPA spending.

Panel B: UK public sector net borrowing, March 2021 OBR projection



Source: OBR.

Source - <https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/march/silvana-tenreyro-response-to-the-covid-19-pandemic.pdf?la=en&hash=3EB9EBB5D1CCE587FA204DE2BE585E29028B9CC0>

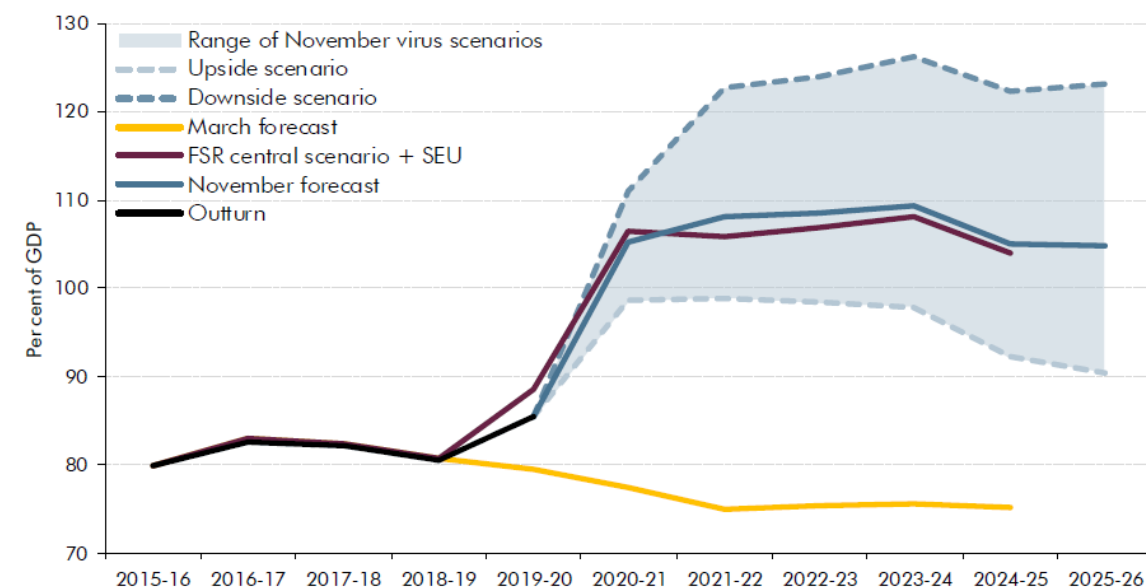
Economic Context

Debt and nominal interest rates

In its November 2020 Economic and fiscal outlook, the OBR noted:

- “debt reaches its highest level as a share of GDP since 1958-59”
- “Despite sharply higher debt, further falls in interest rates and further gilt purchases by the Bank of England under quantitative easing mean that the cost of servicing that debt is actually lower than we forecast in March.”
- “But the higher stock of public debt and the significant shortening in the effective maturity of that debt this year, - - -, has increased the vulnerability of the public finances to future economic shocks, in particular to a sharp increase in short-term interest rates.”

Chart 1.9: Public sector net debt: central forecast and alternative scenarios



Source: ONS, OBR

Source: <https://obr.uk/coronavirus-analysis/> - Economic and fiscal outlook – November 2020

Low for even longer?

Economic Context

Inflation and nominal interest rates

Uncertainty abounds:

- “For many years, the inflationary tiger slept. The combined effects of unprecedentedly large shocks, and unprecedentedly high degrees of policy support, have stirred it from its slumber. In this environment, the tiger-taming act facing central banks is a difficult and dangerous one.”¹
- The same speech noted a marked widening in the range of BoE’s projected levels for CPI over 2021-2024.

With central banks taking a dovish stance:

- US – The Federal Open Market Committee (“Fed”) moved in 2020 to a Flexible Average Inflation Targeting (FAIT) approach that aims to target 2% inflation on average over time.
- UK – “The Committee does not intend to tighten monetary policy at least until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% inflation target sustainably.”²
- UK - “We decided to ask the banks to make preparations within the next six months, in case we need to use negative interest rates to provide further support.”²

Even lower for even longer?

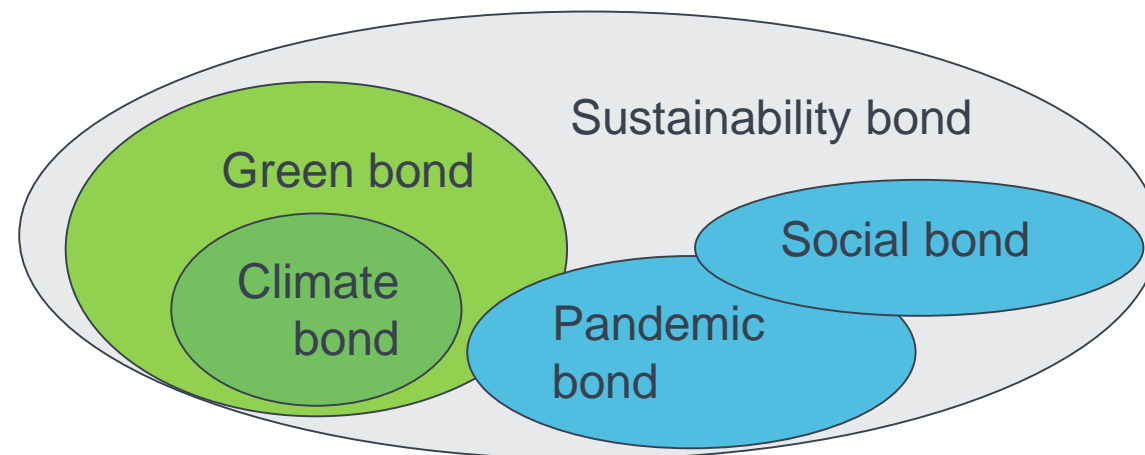
Source 1 - <https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/february/inflation-a-tiger-by-the-tail-speech-by-andy-haldane.pdf?la=en&hash=78C0DB3A631A7B9E2DF6EFBCFE9B3D138D87C449>

Source 2 - <https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/march/getting-over-covid-speech-by-andrew-bailey.pdf?la=en&hash=6109B38B69A2520CEF38640E3687AF6915492BEC>

Green Bonds

What is a green bond?

A certified or labelled bond, with a defined use of proceeds for allocation towards environmental projects

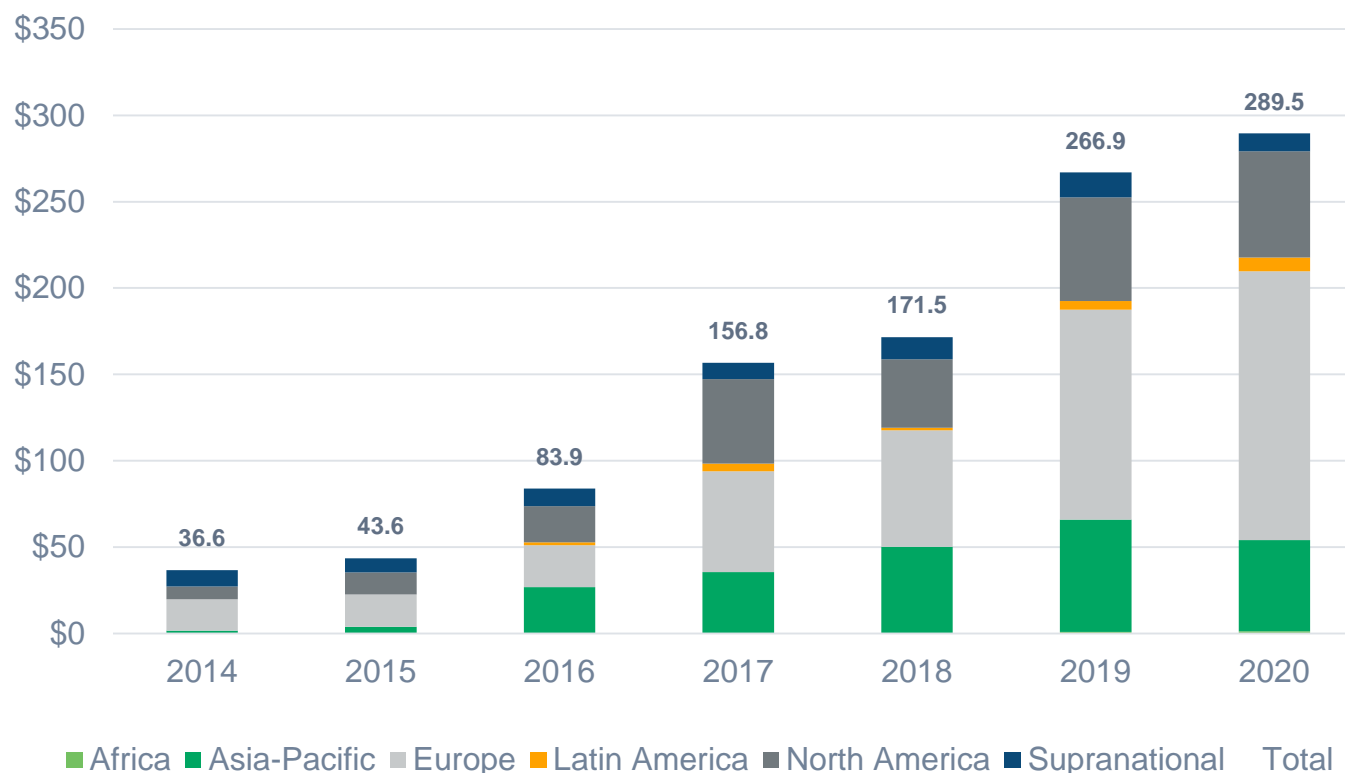


	<u>Green Bond Principles (ICMA)</u> <i>Voluntary principles</i>	<u>Climate Bonds Standard</u> <i>Certification</i>	<i>Proposed</i> <u>EU Green Bonds</u>
Use of Proceeds	Finance projects with green outcomes (e.g. ICMA green project mapping)	Projects within the 'Climate Bonds Taxonomy'	<i>Consistency with EU Taxonomy</i>
External Review	Issuers to evaluate outcomes with help from external qualified reviewers	Initial and ongoing review of issuer/usage by Approved Verifier	Mandatory <i>accredited, external review</i>
Management of proceeds	Allocation is independently audited and also disclosed	Earmarking of funds, and tracking of proceeds	<i>Similar measures</i>
Reporting	Issuers should report ongoing environmental impacts	Annual reporting of allocation, eligibility and impact	<i>Annual allocation and impact reporting</i>

Green Bonds

Overview of the green bond market

Green Bond Market - New Issuance
(\$ billion notional)



Source: [Market Data | Climate Bonds Initiative](#)

Currency	Notional Outstanding (\$Bn)	Average Maturity	Average Rating	Current Average YTM
EUR	407.1	9.8	AA3/A1	0.19%
USD	124.8	7.97	A1/A2	1.63%
CAD	20.5	6.99	AA2/AA3	1.41%
GBP	14.1	8.24	A1/A2	1.37%
SEK	13.8	4.31	AAA/AA1	0.21%
AUD	12.3	5.78	AA1/AA2	1.13%
JPY	1.5	2.71	A1/A2	0.14%
CHF	1.4	3.67	AA2/AA3	-0.30%
Others	6.8	4.4	AA2/AA3	1.47%
Total	602.3	8.97	AA3/A1	0.58%

Usage	Notional Outstanding (\$Bn)	Average Maturity	Average Rating	Current Average YTM
Alternative Energy	464.7	8.6	AA3/A1	0.54%
Energy Efficiency	416.6	9.8	AA3/A1	0.51%
Green Building	273.4	8.5	AA3/A1	0.50%
Sustainable Water	199.7	9.7	AA2/AA3	0.46%
Pollution Prevention	165.3	10.0	AA3/A1	0.37%
Others	6.8	4.4	AA2/AA3	1.47%

Source: Bloomberg Barclays MSCI Green Bond Index, 12 April 2021

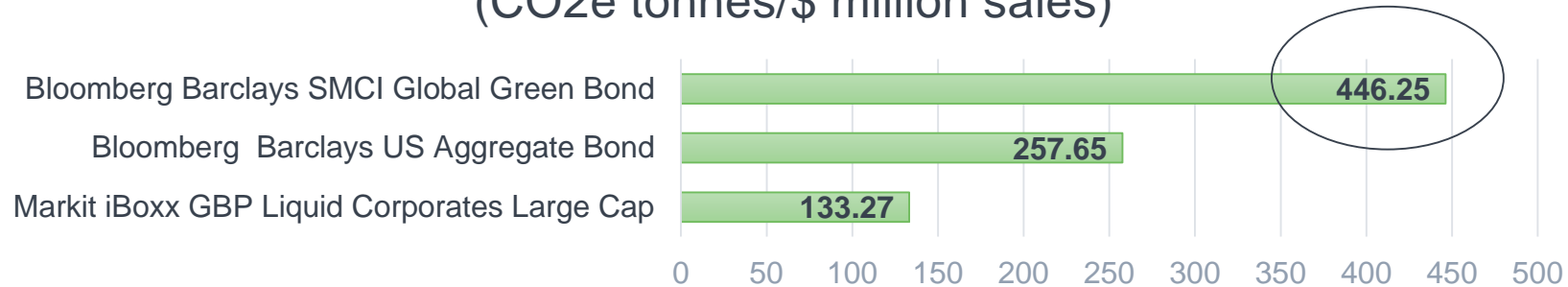
Green Bonds

The investment case?

Currency	Average Rating	Green Bond Average OAS	Aggregate Bond Average OAS	“Green Premium”
EUR	AA3/A1	57 bps	62 bps	- 5 bps
USD	A1/A2	61 bps	70 bps	- 9 bps
CAD	AA2/AA3	50 bps	63 bps	- 13 bps
GBP	A1/A2	81 bps	91 bps	- 10 bps

Source: Bloomberg Barclays MSCI Green Bond Index, 13 April 2021

Average Carbon Intensity (CO2e tonnes/\$ million sales)



Source: indices stated above and MSCI Carbon Intensity data, 7 April 2021

Green Bond – Asset Selection

Optimising for yield; verifying on green

Global Green Bond Universe

Current Spread = Current Market Yield – Domestic Risk-Free (same duration) – Cost of Currency Hedge

Attractive Spread > Benchmark, e.g. = cost-of-capital * Solvency II Spread Risk Capital

Verify “Green”, e.g. metrics: projected decarbonisation plans vs current carbon intensity

Currently Liquid? Survey of bond market quotes/sizes/availability

The benefit of currency hedging:

- Significant increase in universe
- Potential increase in yields

Dynamic

*Varies with price,
market liquidity and
carbon emission data*

Attractive & Liquid Set

Assess against usual investment criteria:

- ALM and diversification objectives
- Green and sustainability objectives
- Portfolio constraints and limits

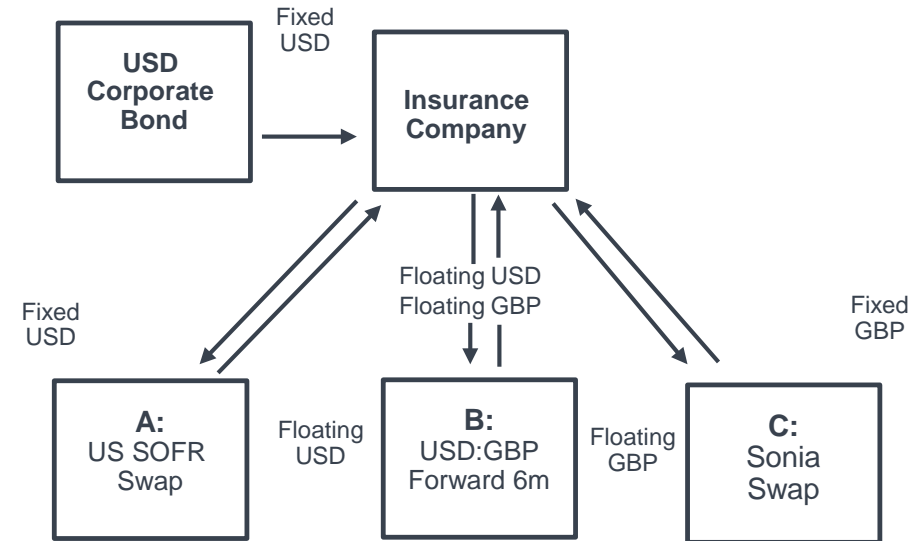
Overseas Bonds – Hedging Currency Risk

Alternative approaches

1 Cross-currency swap



2 Interest rate swaps + FX forwards

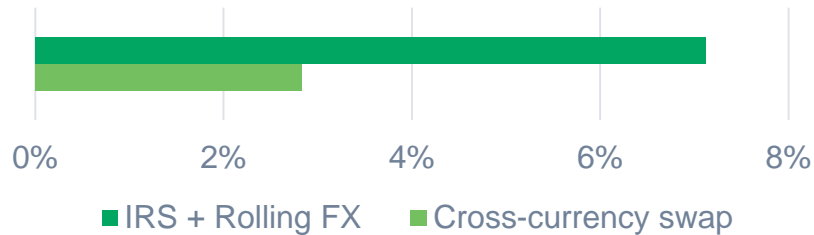


	Cross-Currency Swap	Interest Rate Swaps + Rolling FX
Comparative Advantages	<ul style="list-style-type: none"> • Single/simpler hedge • Cashflow certainty (MA applicable) • Non-cleared collateral flexibility 	<ul style="list-style-type: none"> • More liquid instruments • More straightforward to unwind • Potential tactical cost benefits

Overseas Bonds – Hedge Collateral Considerations

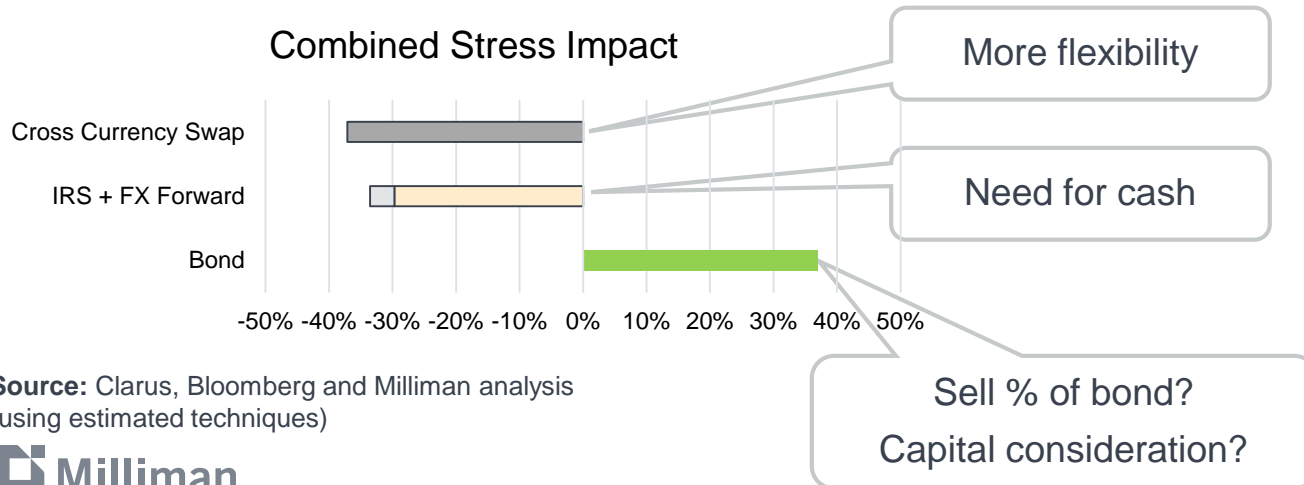
Initial margin and variation margin

Initial Margin – example 8-year US corporate bond



Variation Margin calls under stress:

Combined: Solvency II rates up + 25% USD strengthen



Source: Clarus, Bloomberg and Milliman analysis (using estimated techniques)

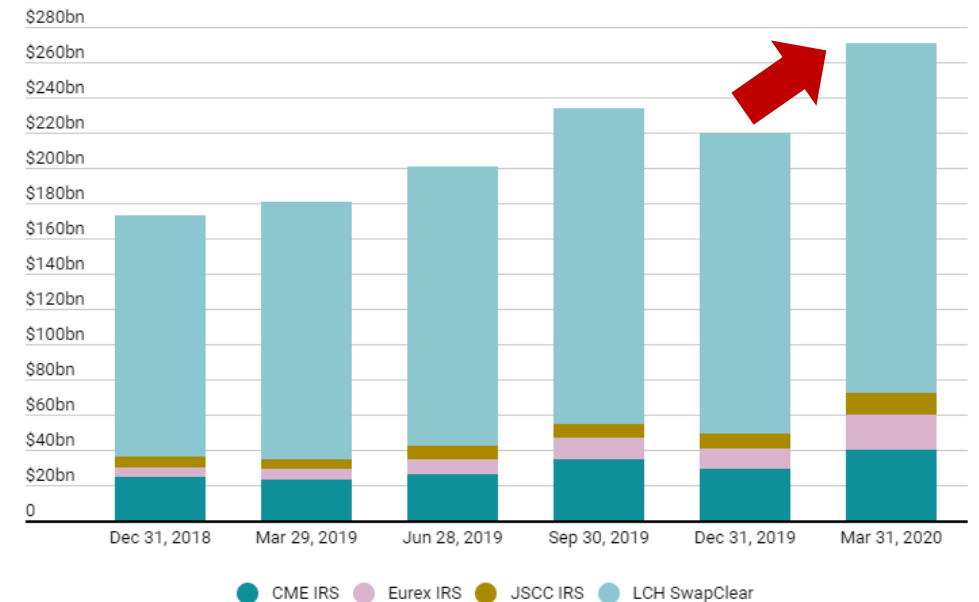


Initial Margin – can increase under stress

(Risk not captured under Solvency II SF)

e.g. 2020 Q1 “Dash for Cash”

1. Initial margin at interest rate swaps CCPs



Swaps data: [initial margin soars in Q1 2020 - Risk.net](https://www.risk.net); Clarus data

Over-the-Counter Non-cleared Derivatives

Regulatory initial margin requirements for un-cleared contracts

Exchange margins for OTC derivatives:

- **Variation Margin:** all in-scope counterparties exchange VM from March 2017 (EU 2016/2251)
- **Initial Margin:** implementation undergoes in phases (since 2017), notional threshold base

Regulatory context:

- Regulation (EU) No 648/2012 (EMIR)
- Binding Technical Standards 2016/2251
- Bank of England: Consultation Paper 6/21

Counterparties meeting below criteria to exchange regulatory IM:

- All entities that are in-scope for VM requirements; and
- Aggregate Average Notional Amount (AANA) of non-cleared derivatives exceeding relevant threshold

Phases and threshold for IM requirements:

- **Phase 5 (September 2021):** AANA exceeds €50 billion
- **Phase 6 (September 2022):** AANA exceeds €3 billion
- Subject to first €50 million IM not needed to exchange (to be agreed between counterparties)

More buy-side counterparties to post regulatory and separately managed Initial Margin from September 2022

Liquidity Risk Management Framework

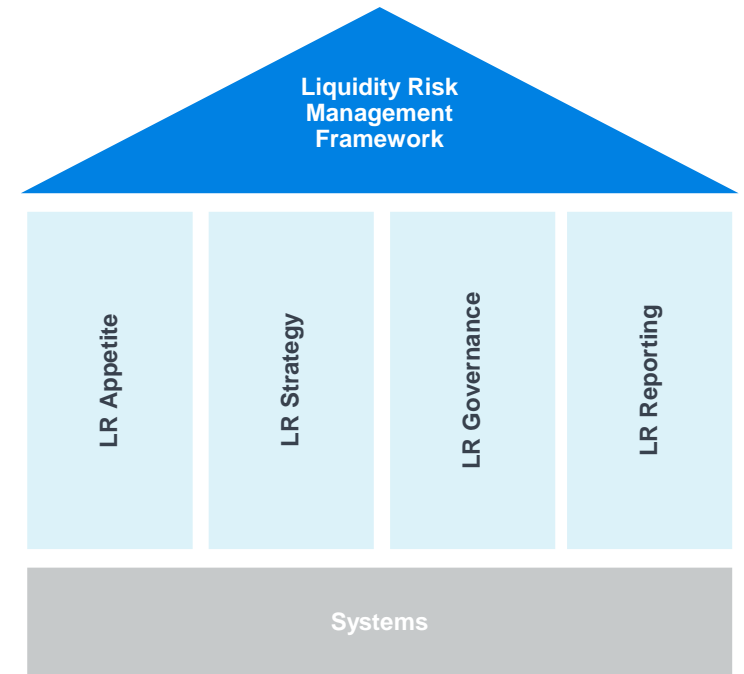
Collateral management for derivatives

“the PRA expects an insurer to maintain systems capable of monitoring intra-day liquidity positions and cash needs... Some examples of potential sources of intra-day liquidity risk include collateral or margin calls on derivatives...”

Source: PRA SS 5/19 Liquidity risk management for insurers

Insurers use derivatives to protect solvency position but normally involving transforming risk from capital to liquidity

- **Risk appetite:** risk severity and horizons
- **Risk strategy:** risk registering and scenario stress testing both IM and VM arising from market and non-market risk drivers
- **Risk governance:** roles and responsibilities of managing existing and new derivatives
- **Risk reporting:** development of metrics and early warning indicators



Liquidity Risk Management Framework

Assets posted as collateral

CSAs involve only cash / gilts

Pros:

- Most commonly used
- Maximum chance for assets posted to be eligible for collateral
- Zero or minimum hair-cuts
- Standardised pricing and reduced CVA charges

Cons:

- Increase cash and cash-equivalent to be held by insurers
- Reduce the overall investment return of assets

CSAs involve also corporates

Pros:

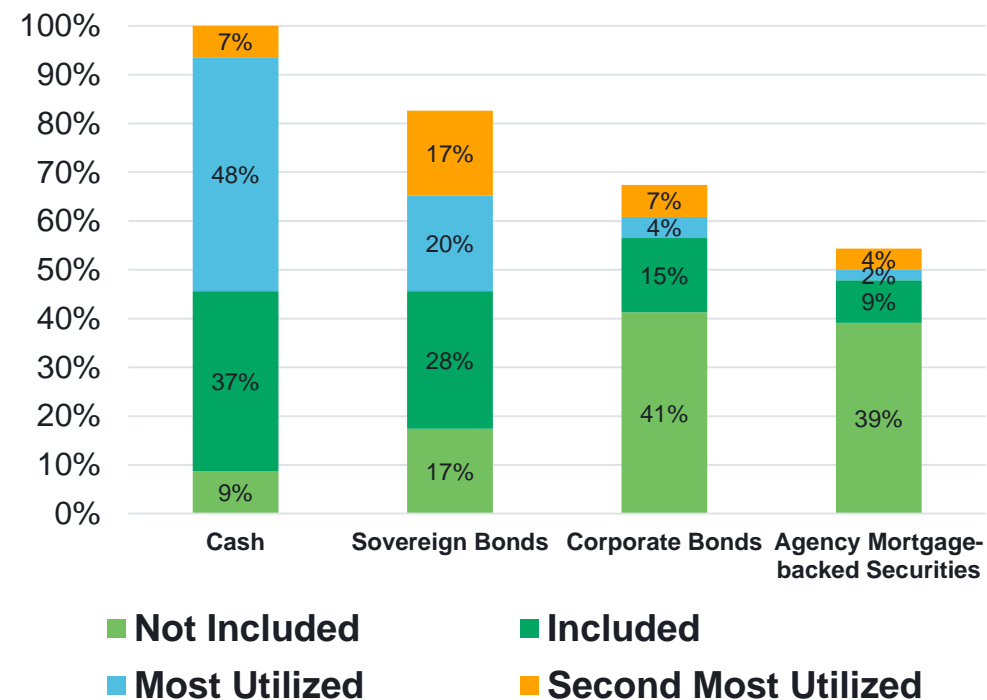
- Increase types of assets that can be used to post collateral
- Reduce level of cash and cash-equivalent to be held by insurers
- Increase the overall investment return of assets

Cons:

- Hair-cuts to the value of assets
- Operational complexities, e.g. eligibility
- More collateral management volatility

Milliman 2020 Global Derivatives Survey of Insurers

Assets used to post as collateral for OTC derivatives (survey of 54 global insurers)





Any Questions?

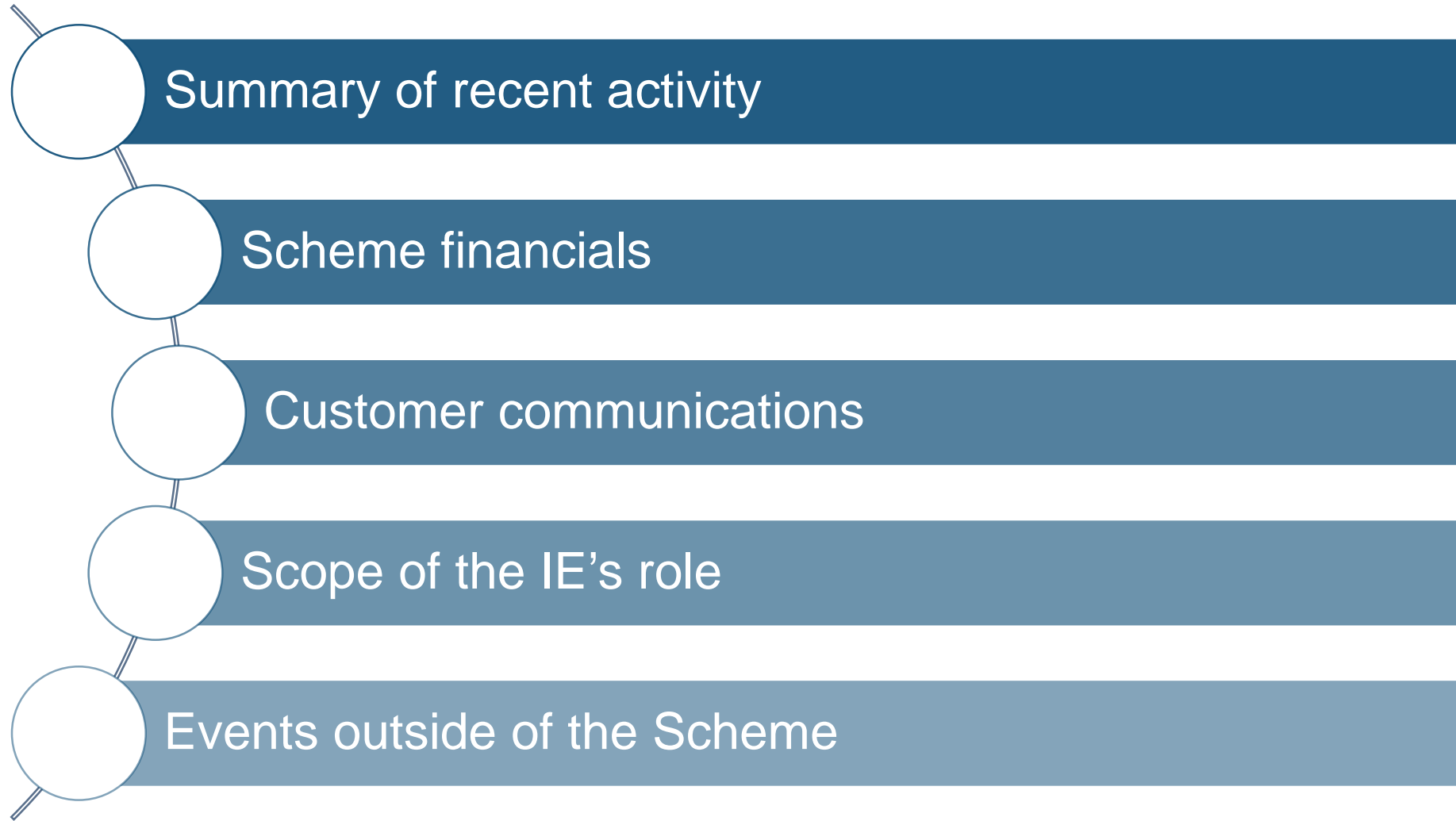
Observations from Independent Expert Roles

Jen van der Ree and Oliver Gillespie







APRIL 2021



Agenda

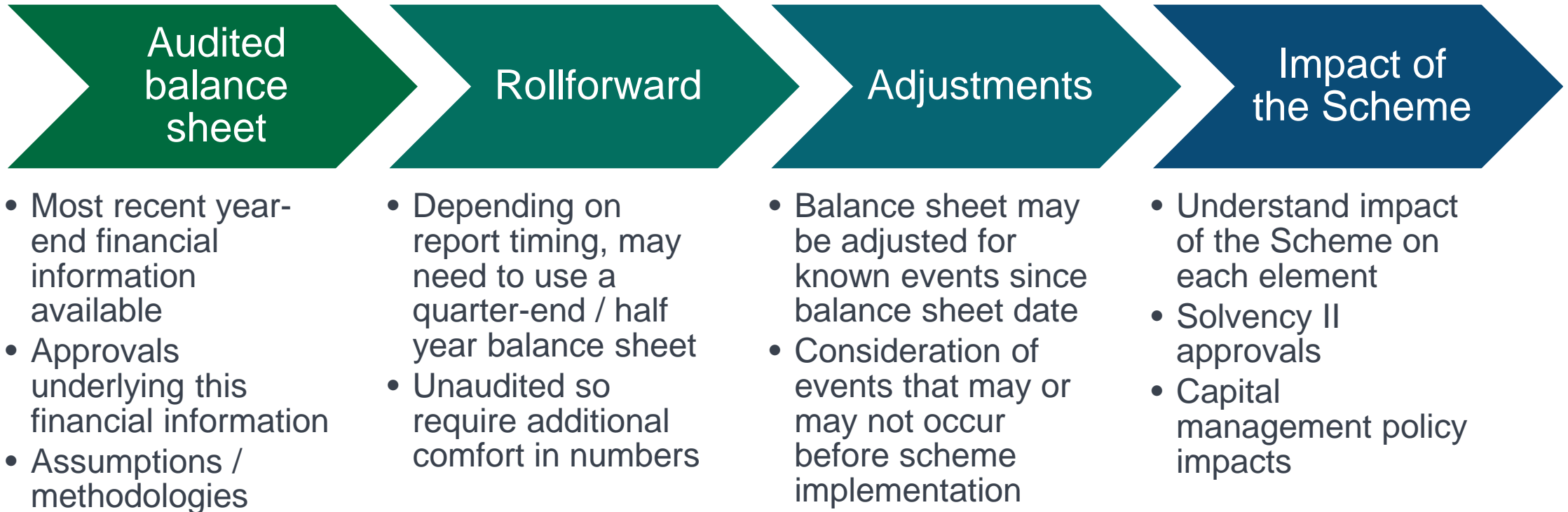


Recent / ongoing activity involving life business

	<ul style="list-style-type: none"> Merger of the Scottish Amicable Insurance Fund with the Prudential With-Profits Sub-Fund Status: Completed 1 April 2021 after scheme amendments granted 5 November 2020 	
	<ul style="list-style-type: none"> Transfer of Kingston Unity into Oddfellows Status: Completed 1 February 2021 	
	<ul style="list-style-type: none"> Part VII transfer of Canada Life's non-profit annuity business into Irish Life Assurance Status: Sanctioned 10 December 2020 	Brexit
	<ul style="list-style-type: none"> Part VII transfer of Prudential's non-profit annuities into Rothesay Life Status: Appeal upheld 2 December 2020 	
	<ul style="list-style-type: none"> Part VII transfer of Assurant Life and London General Life Company's life insurance business into Assurant Europe Life Insurance Status: Sanctioned 20 October 2020 	Brexit
	<ul style="list-style-type: none"> Transfer of Police Mutual into Royal London Status: Completed 1 October 2020 	
	<ul style="list-style-type: none"> Part VII transfer of L&G's mature savings business into ReAssure Status: Sanctioned 20 August 2020 	

Scheme financials – transfers

- Typical Independent Expert review for a transfer might look like the following:



Scheme financials – schemes of arrangements

- Impact of the scheme on the balance sheet is still key from a financial security perspective but...
- More focus required on the best estimate assumptions (and methodologies)
 - These will determine the “compromise” under the scheme
- Need to ensure any prudence/margins are identified and dealt with, e.g. in relation to goneaways:
 - Goneaway assumptions may not be fully developed
 - May be allowed for in bonus setting processes but not necessarily in the Solvency II balance sheet
 - Not having a good understanding ahead of embarking on a scheme of arrangement can lead to delays
- Changes may be required to assumptions to allow for post-scheme position

Customer communications

More detailed reviews from IE on customer communications

- Particularly on schemes of arrangement where customers are required to vote
- ...But question whether actuaries are best placed to review technical information for clarity
- Customer testing can be useful

Policyholder notifications

- Historically waivers have been sought to not notify policyholders in receiving firm (where no change)
- Moving towards notifying these policyholders now, particularly where material volumes of business are transferred in
- Increasing focus on wider advertisement

Paperless communications

- BAU communications by email / online portal – chosen “paperless”
- Environmental considerations
- More traceable than post, but need contingency plan if not opened
- Demographic considerations

The scope of the IE's role

- A general expansion in the scope of the IE role – on both Part VIIs and on Schemes of Arrangement
 - Can have a significant effect on budgets and timetables
 - Continuation of the past?
- Typical ways in which the scope is expanding
 - Areas of general regulation
 - Opine as to whether the proposals are optimal or 'best in class'
 - Give comfort on process undertaken by firm
 - The futureproofing within the proposals
 - Review best estimate assumptions
 - Give a view and detailed explanation of the legal aspects of a scheme

Events outside of the scheme

- Other activities at the same time or around the same time as the Scheme can also cause widening of scope of IE review
 - Other Schemes or transfers
 - Acquisitions of other blocks of business
- Changes to how the business is operated – may not be directly dependent on the Scheme but the interaction with the scheme could lead to some unforeseen circumstances
- The interactions can be complicated and the risk is that lots of interconnectedness or conditionality makes the IE report difficult to follow for policyholders, regulators and the Court
- There are obviously external factors (e.g. Brexit and COVID-19) that also need to be considered



Any Questions?



Thank you

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