AIFS0032

Written evidence submitted by Hymans Robertson LLP

Executive Summary

Artificial Intelligence is transforming financial services, delivering enhanced customer experiences, operational efficiencies, and improved decision-making. At Hymans Robertson LLP, we recognise AI's potential in enhancing data quality, customer communications, and service delivery.

However, the promise of AI must be balanced against significant risks: data security vulnerabilities, algorithmic bias, and the potential erosion of human judgment in critical financial decisions. We advocate for a proportionate regulatory approach that enables innovation while establishing robust safeguards. The UK has a unique opportunity to create a globally leading AI governance framework that builds on our financial services expertise while avoiding regulatory fragmentation.

About Hymans Robertson

Established in 1921 as a limited liability partnership, Hymans Robertson's purpose is to help businesses, pension funds and other financial institutions create more certain financial futures for themselves, their employees, members, and customers.

We work alongside our clients to offer independent pensions, investments, benefits and risk consulting services, as well as data and technology solutions.

We have four offices (in Edinburgh, Glasgow, London and Birmingham) and over 1,400 staff including 96 partners, 21 of whom are owning partners.

Our business is B Corp certified by B Lab – a global non-profit network with a mission to inspire and enable people to use business as a force for good. This certification means we have demonstrated high standards of accountability and transparency on various issues, from employee benefits to charitable giving.

As early adopters of innovative technologies in financial services, we have been actively exploring how integrating AI into our service offerings can enhance client outcomes while maintaining rigorous ethical standards. Our approach combines technological advancement with human expertise, allowing us to witness firsthand both the transformative potential of AI and the governance challenges it presents.

We are responding to this inquiry because we believe our unique position at the intersection of pensions, financial advice, and technology implementation gives us valuable insights into how AI can be effectively and responsibly deployed across the financial services sector. Our submission draws on practical experience implementing AI solutions while maintaining robust governance frameworks that protect consumer interests.

How is AI currently used in different sectors of financial services and how is this likely to change over the next ten years?

Current State of AI Adoption in Financial Services

Recent Bank of England and FCA research shows that AI adoption across UK financial services has accelerated dramatically, with 75% of firms now using AI in some capacity, up from 58% in 2022. This significantly outpaces the broader UK economy, where only 15% of businesses report AI adoption.

Within financial services, adoption varies by subsector:

- The banking and insurance sectors are leading AI adoption, with 95% of insurance companies and 94% of large international banks integrating AI. These firms deploy multiple AI applications, with large banks averaging 9 and planning to expand to 21 within three years.
- In investment management and trading, AI has transformed algorithmic trading, with algorithms responsible for over 60% of London Stock Exchange orders by 2007 and about 92% of global foreign exchange trading today. What started as rule-based systems now uses machine learning for adaptive market strategies.
- Compliance and RegTech have quickly adopted AI, with applications in anti-money laundering (AML), fraud detection, and "Know Your Customer" (KYC) processes. These areas consistently deliver measurable benefits.
- In retail banking, AI-powered services like virtual assistants, robo-advisers, and personalised product recommendations have become common, enhancing customer engagement and improving operational efficiency.
- AI's integration across these sectors is reshaping financial services, boosting efficiency, and personalising customer experiences.

Transforming the pensions experience

Within our own specialisation of pensions, AI is significantly impacting the sector through:

- Enhanced data management: AI can improve the accuracy and completeness of pension data – a critical foundation for trustworthy calculations and advice. Our pilot program using AI-based data validation tools on unstructured data (scanned paperwork) shows promising early results, potentially unlocking substantial information that is currently only retrievable through time-consuming manual processes. This is particularly relevant for the upcoming Pensions Dashboard.
- Personalised member engagement: Traditionally, pension communications have been largely one-directional and often unengaging until too late for meaningful retirement planning changes. AI enables truly interactive experiences through conversational assistants that provide immediate clarification on complex concepts. Members are already turning to public AI tools like ChatGPT to interpret pension information—tools lacking appropriate regulatory guardrails.

- Enhanced administration: "Agentic AI" systems will enable real-time fulfilment of member requests. For example, rather than using static calculators or waiting for manual processing, members could instruct an AI agent to generate personalised retirement projections instantly within secure environments.

Fintech vs. traditional institutions

The research clearly shows interesting dynamics between incumbents and challengers:

- Fintech companies demonstrate advantages in AI adoption due to their digital-native infrastructure and freedom from legacy systems. Many are "AI-first" by design, incorporating machine learning into their core business models from inception. Industry studies indicate that fintech firms typically deploy and iterate on AI solutions faster than established institutions.
- Traditional institutions are rapidly catching up. While initially slower to adopt AI, major UK banks and insurers have dramatically increased their AI investments. A 2024 Lloyds survey found that 63% of financial institutions are now investing in AI, nearly double the 32% reported just a year earlier. These incumbents bring significant advantages through their vast datasets, with large banks able to train models on millions of customer records.
- Competitive pressure is driving convergence as fintech disruptors leverage AI to gain market share, established players are responding through partnerships, acquisitions, and internal innovation. Many major financial institutions have created dedicated AI teams and appointed Chief AI Officers specifically to accelerate adoption.

Financial services vs. other sectors

The financial services sector substantially outpaces other industries in AI adoption:

- While 75% of UK financial firms use AI, the economy-wide adoption rate is just 15% of businesses
- Even among large enterprises (250+ employees) across all sectors, only about 30% use AI
- The IT sector (29.5% adoption) and legal sector (29% adoption) trail financial services significantly
- Most other sectors report single-digit or low-teen percentages of firms using AI

This leadership position stems from the sector's data richness, competitive pressures, substantial IT investment capacity, and regulatory demands that AI can help address efficiently.

Future growth areas

Over the next decade, we expect the most significant AI growth to occur in the following areas:

AI is transforming fraud detection, risk management, and regulatory compliance across banking, pensions, and insurance by analysing vast datasets, detecting patterns, and identifying anomalies in real time. While only 2% of AI use cases are fully autonomous, we expect gradual increases in system autonomy as confidence grows.

AI is also enabling personalised financial services, such as retirement planning in the DC pension market, by offering individualised projections based on spending patterns, life circumstances, and behavioural insights.

In regulatory compliance, AI is evolving from rule-checking to contextual understanding, reducing compliance burdens and improving oversight. With 84% of UK financial firms appointing specific AI oversight individuals, governance frameworks will mature alongside technology.

Generative AI applications for customer service and internal productivity are in early stages but are expected to disrupt financial service delivery as they mature.

The AI race continues, with UK Finance reporting that 32% of firms have seen productivity gains and 22% a competitive edge, driving ongoing investment and innovation.

To what extent can AI improve productivity in financial services?

Bridging the UK advice and guidance gap

The UK financial advice market faces a serious accessibility issue that AI is uniquely positioned to address. Currently, only 8% of consumers receive full financial advice, with the remaining 92% making complex financial decisions with limited guidance. This advice gap stems from affordability perceptions, demographic imbalance (88% of advised clients are over 40), and regulatory pressures.

AI improves productivity and accessibility through:

Enhanced adviser productivity: The financial advice process involves collecting and processing vast amounts of client information. Paraplanners and administrative staff spend hours manually reviewing documents, extracting details, and organising client profiles. The labour-intensive nature directly contributes to high costs of financial advice.

AI technologies can transform this process by:

- Automatically analysing meeting transcripts to extract key client information
- Processing complex financial documents to identify relevant data points
- Identifying inconsistencies or gaps in client information
- Generating comprehensive client profiles
- Performing preliminary scenario analysis
- Producing draft recommendations for adviser review

By embedding these efficiencies, we aim to reduce recommendation development time from days to hours, directly addressing cost barriers that currently restrict advice to wealthier segments.

Scalable guidance solutions: AI-powered tools can provide personalised, contextual guidance at a fraction of traditional advice costs, helping consumers understand options without crossing regulatory boundaries into formal "advice."

Transforming the DC pension market

Beyond the adviser market, AI offers significant productivity improvements in the defined contribution (DC) pension sector:

Personalised retirement planning: Traditional retirement planning relies on standardised assumptions about investment returns, inflation, and longevity. AI can dramatically improve this approach by:

- Creating truly individualised forecasts based on spending patterns and personal circumstances
- Adapting retirement projections in real-time as circumstances change
- Providing tailored education content based on identified knowledge gaps
- Generating personalised "nudges" at optimal points to encourage positive savings behaviour

Administrative efficiency: Pension administration remains labour-intensive, with significant resources dedicated to routine tasks. AI implementation can reduce processing times for typical member requests while improving accuracy. For example, AI-powered systems can:

- Extract data from unstructured documents like employment records
- Validate member identity through multiple factors simultaneously
- Automate responses to common inquiries
- Identify and flag unusual patterns that may indicate potential errors

The societal benefits are substantial: improved retirement outcomes, more efficient capital allocation, reduced financial anxiety, and greater financial resilience across demographic groups.

What are the risks to financial stability arising from AI and how can they be mitigated?

AI risks and limitations

We believe the key AI risks as follows:

- **AI Hallucination and Misinformation (High Risk):** Generative AI, particularly Large Language Models (LLMs), can produce plausible but incorrect outputs, known as hallucinations. In financial contexts, hallucination rates can range from 10% to over 30%, posing risks when used for critical decision-making. This risk increases with ambiguous financial terminology or novel scenarios not well-represented in training data.
- **Data Security and Privacy Vulnerabilities (Medium-High Risk):** AI systems processing financial data expand attack surfaces, especially when integrated with legacy

systems. Research shows AI-specific threats, such as model APIs and data leakage, require updated security protocols and controls to mitigate vulnerabilities.

- **Cybersecurity Threats (High Risk):** Generative AI is being used to create convincing phishing content, often tailored using public information, making it harder for recipients and filters to detect. This lowers the barrier to entry for attackers and contributes to an escalating arms race between defensive and offensive AI tools.
- **Systemic Risks (Medium Risk):** Increased system interconnections can create hidden dependencies, causing cascading errors if AI systems fail. Errors can propagate quickly, especially in financial and operational systems, necessitating firebreaks and human oversight to prevent large-scale issues.
- **Market Concentration Risk (Medium-High Risk):** The complexity and cost of AI development have led to market concentration, with a few firms controlling model development and infrastructure. This reduces system diversity, creating vulnerabilities in pricing, decision-making, and interoperability.

Effective mitigation approaches

Based on our implementation experience, we recommend:

- Continuous monitoring systems with feedback mechanisms and independent verification through dedicated AI oversight teams
- Zero-trust security frameworks for AI systems with granular access controls and comprehensive encryption
- Regular adversarial testing with simulated attacks on AI systems
- Mandatory circuit breakers that pause automated processes when predefined risk thresholds are breached
- Encouraging technology diversity through open standards and interoperability requirements

What are the benefits and risks to consumers arising from AI, particularly for vulnerable consumers?

Consumer benefits:

- Truly interactive pension experiences through conversational AI assistants
- Personalised videos bringing retirement projections to life
- Real-time fulfilment of requests rather than waiting for manual processing
- Increased access to financial guidance for underserved populations
- More efficient service delivery with reduced administrative lags

Risks for vulnerable consumers:

- Algorithmic bias potentially leading to unfair outcomes for certain demographic groups

- Data privacy and security concerns for sensitive financial information
- Pension scammers leveraging AI technologies to create increasingly convincing fraudulent communications
- Potential exclusion of individuals with lower digital literacy or complex financial needs

Addressing bias and ensuring fairness

We believe fairness and bias mitigation can be achieved through:

Proactive bias detection: Implementing frameworks for identifying and mitigating bias in AI systems, with regular testing across different demographic groups to ensure equitable outcomes.

Explainable AI through accessible techniques: Making AI decisions understandable is crucial for building trust and identifying potential bias. Two important approaches include:

- SHAP (SHapley Additive exPlanations): This technique helps us understand which factors influenced an AI decision and by how much. In simple terms, SHAP shows what information the AI considered most important when making recommendations, like how a financial adviser would explain which aspects of your financial situation most influenced their advice.
- LIME (Local Interpretable Model-agnostic Explanations): This method creates simplified explanations of complex AI decisions by showing how changing specific inputs would affect the outcome. For example, it could demonstrate how different retirement ages or contribution levels would impact projected pension outcomes.

Enhanced accessibility: AI systems must be designed with user-friendliness in mind, ensuring individuals with lower digital literacy or complex financial needs are not excluded.

How can Government and financial regulators strike the right balance between seizing the opportunities of AI but at the same time protecting consumers and mitigating against any threats to financial stability?

Governance and regulatory considerations

Proportionate risk assessment: We recommend a tiered regulatory framework distinguishing between low-risk AI tools and high-risk applications, with mandatory impact assessments before deploying high-risk AI applications. This evaluates operational, legal, reputational, and consumer protection risks while avoiding unnecessary constraints on low-risk applications.

International alignment: The UK should seek alignment with international standards, particularly the EU AI Act, while preserving flexibility to adapt to the UK's unique financial landscape. An outcomes-based approach—grounded in existing financial regulations—would provide a more sustainable model than rigid, prescriptive AI rules.

Leveraging existing standards: Rather than creating an entirely new AI regulatory regime, we should leverage existing frameworks such as:

- UK GDPR & Data Protection Act 2018
- Financial Services and Markets Act 2000
- Consumer Duty (FCA)
- ISO/IEC 42001 (AI Management Systems)
- ISO/IEC 27001 (Information Security Management)
- The Senior Managers & Certification Regime

Global leadership opportunity: The UK can position itself as a global leader in responsible AI governance by:

- Adopting a principles-based regulatory approach promoting both protection and innovation
- Actively participating in international standard-setting bodies
- Establishing bilateral cooperation with key financial centres
- Broadening regulatory sandboxes for AI in financial services

Accountability & human oversight

AI should not operate in isolation. We advocate for a 'human in the loop' approach ensuring AI-generated insights are reviewed by qualified professionals before decisions are acted upon. This is essential for:

Regulatory and ethical oversight: Ensuring AI outputs align with client best interests, fiduciary responsibilities, and Consumer Duty requirements.

Interpretation of AI outputs: Applying professional judgment to weigh qualitative factors, client emotions, or evolving personal circumstances.

Risk mitigation: Spotting inconsistencies, flagging incorrect assumptions, and intervening when AI produces misleading conclusions.

Consumer trust and adoption: Reassuring clients that their financial future isn't entirely reliant on algorithms.

Effective human oversight can be achieved through:

- Robust AI governance frameworks (like our AI Steering Group)
- Defined escalation paths for AI outputs
- Transparent and explainable AI models
- Ongoing AI training across the business
- Alignment with information security standards

Conclusion

AI has the potential to transform financial services, improving efficiency, personalising customer experiences, and broadening access to financial advice. However, realising these benefits requires a measured approach. The risks: algorithmic bias, data security vulnerabilities, and the erosion of human judgment must be managed with strong safeguards and regulatory oversight.

A proportionate, risk-based regulatory framework, underpinned by a 'human in the loop' approach, is essential. Rather than introducing restrictive new legislation that could stifle innovation, the UK should leverage existing financial regulations and align with international standards to balance innovation with consumer protection.

The UK has an opportunity to position itself as a global leader in AI governance. The challenge is not in slowing AI's progress, but in shaping its trajectory—ensuring technology enhances, rather than undermines, financial security and prosperity for all.

April 2025