13 September 2024

FIA and FIA EPTA Response to the European Commission's Targeted Consultation on Artificial Intelligence in the Financial Sector

The Futures Industry Association (FIA)[1] and The European Principal Traders Association (FIA EPTA)[2] welcomes the opportunity to respond to the European Commission's Targeted Consultation on Artificial Intelligence in the Financial Sector which seeks to identify the main use cases alongside the benefits, barriers and risks related to the development of AI applications in the financial sector.

Innovation has long been a catalyst for growth and opportunity in derivative markets. New technologies have fostered new business opportunities, new products and enhanced the accessibility and transparency of markets for existing and new participants. Furthermore, the evolution of technology has underpinned the global reach of our markets, breaking down geographic barriers and enabling global markets to compete and thrive while safeguarding customers and investors.

We recognise that many policymakers are examining current and future uses of AI technology in the financial sector. Regulatory coordination and a globally harmonised approach to regulation is essential to avoid regulatory divergence and overlap which will create unnecessary complexities for firms whilst also acting as a barrier to AI entry and adoption, thus stifling innovation in our markets.

We commend the Joint Statement[3], signed on 23 July by EU, UK and US competition authorities where regulators committed to further cooperation when monitoring the AI landscape. We are confident that coordination and cooperation between regulators will limit regulatory divergence.

In the financial services sector, market participants' use of technology, including AI, is already subject to comprehensive regulatory scrutiny. This regulatory framework is technology-neutral and should remain so. We caution against more vertical legislation for the financial sector which will cause regulatory overlap when considered alongside existing regulation. FIA and FIA EPTA members believe that existing rules and regulations, including MiFID II, GDPR and DORA already provide the controls and oversight needed to promote and protect the integrity and resilience of European markets.

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[1] FIA is the leading global trade organization for the futures, options and centrally cleared derivatives markets, with offices in Brussels, London, Singapore and Washington, DC. Our membership includes clearing firms, exchanges, clearinghouses, trading firms and commodities specialists from about 50 countries as well as technology vendors, law firms and other professional service providers.

[2] The European Principal Traders Association (FIA EPTA) represents the leading Principal Trading Firms in the EU and UK. Our members are independent market makers and providers of liquidity and risk transfer for markets and end-investors across Europe, providing liquidity in all centrally cleared asset classes including shares, bonds, derivatives and ETFs. FIA EPTA works constructively with policymakers, regulators and other market stakeholders to ensure efficient, resilient and trusted financial markets in Europe. More information about FIA EPTA and independent market makers is available on: www.fia.org/epta and www.wearemarketmakers.com

[3] https://www.gov.uk/government/publications/joint-statement-on-competition-in-generative-ai-foundation-models-and-ai-products/joint-statement-on-competition-in-generative-ai-foundation-models-and-ai-products

Technological advancement is not new to the futures industry. Many of our members have been working with AI for many years and are managing any associated risks accordingly, including via well-established 3 Lines of Defence operating models. Furthermore, the banking sector is already subject to strong sectoral regulation and supervision, which promotes consumer and investor protection, risk management, financial stability and well-functioning markets. This regulatory framework ensures that companies have robust governance arrangements in place for the use of technology, including AI, and that risks are approrpraitely managed.

Today, AI is used in areas such as risk management, fraud detection and customer service with the potential to improve decision-making and increase efficiencies. It is with this in mind that we set out our response to the Commission's targeted consultation.

Question 2: What are the positive things you encounter when using AI?

The use of AI applications is not new to the financial sector. That said, the implementation of AI for a particular use case varies from firm to firm. Generally speaking, AI applications offer increased benefits when distilling written materials, extracting data to isolate specific information and/or summarising large volumes of data from single or multiple sources through general data scrutiny.

Implementation of AI for a particular use will ultimately depend on the business need and involve assessing whether an AI solution would perform better than existing solutions in terms of speed, accuracy, cost, security and other factors depending on the specific use case.

Widespread use of AI, and unlocking potential benefits, remain at an early stage. Early use cases of AI technology tend to focus on non-customer-facing activities where AI solutions can reduce costs and improve efficiencies through synthesizing large data sets and performing general queries to aid in decision-making. AI applications can be used in order to automate repetitive tasks and processes which enable firms to streamline operations and reduce manual error.

An example of this is through enhanced Compliance processes such as fraud detection whereby AI technology can be used to analyse vast amounts of data with speed and accuracy in order to detect anomalies in trading patterns. Another example of AI technology being used in this space is communication surveillance where AI applications can summarise and help detect anomalies within large volume of data, including email and voice communications.

Additional examples include:

- Extracting data from documents for processing (e.g. AI-based Optical Character Recognition to locate and extract required data from diverse document types).

- Analysing large quantities of data (e.g. summarising lengthy documents such as research reports).

- Predictions and forecasting by analysing historical data and identifying patterns.

- Improvements in risk identification and prevention, enhancing capabilities in areas such as anti-money laundering, trade surveillance, and fraud detection.

- Translation or generation of text (e.g. German to English, or from technical requirements into draft computer code).

- The deployment of AI in customer interfaces, such as chatbots, may also improve customer service by providing quick and efficient responses to inquiries and enhancing overall customer satisfaction.

- AI can aid in creating new, innovative products and services tailored to customer needs.

Some exemplary benefits of using AI applications are:

- Faster processing (of large datasets and documents).

- More accurate outcomes (e.g. finding the 'needle in the haystack').

- Operational efficiencies and productivity (reduced manual input and a reduction of surveillance false positives to review).

A further positive noted for AI is that it can be a 'general purpose' technology. There is a vast amount of use cases where it could bring potential benefits.

Question 3: What are the negative things you encounter when using AI?

It is important to note that, like all technologies, any negativity and risk posed by AI is entirely dependent on the purpose for which it is used and the associated output. Furthermore, negative aspects, including perceived risks, relating to AI may change over time. As a result, we encourage policymakers and regulators not to consider the response to Question 3 as being solely AI risk. In fact, we argue that the risks/negative aspects set out below can be categorized as technology risk for which market participants are well versed in managing/mitigating through risk mitigation models. Many of our members have been working with AI for many years and are managing any associated risks accordingly, including via well-established 3 Lines of Defence operating models.

Furthermore, financial services are already subject to strong sectoral regulation and supervision, which promotes consumer and investor protection, sound risk management, financial stability and well-functioning markets. This regulatory framework ensures that companies have robust governance arrangements in place for the use of technology, including AI, and that risks are appropriately managed.

With that in mind, focus areas include:

- Cyber security risk is inherent in all technology-based solutions or applications, and the sector is experienced in addressing such risks both through industry practice and regulation such as DORA and NIS2. As an emergent technology, AI applications also face these challenges and developers/end-users

must address and mitigate against cyber security risk within the various lifecycle stages of AI product development and their use.

- Concentration risk may exist where a limited number of solution providers exist. This is especially prevalent where the particular use case for an application is nuanced.

- Third party risk is common when a firm chooses to outsource certain services or uses software developed by a third party. Existing rules seek to manage this risk, for example DORA and outsourcing requirements under MIFID II.

- As with any roll-out of new technology, it is necessary to embed AI within the existing tech framework. This may include acquiring staff with specific skills to build and maintain AI applications and investing in training staff.

Question 8: What are the main benefits/advantages you see in the development of your AI applications?

FIA and FIA EPTA represent a broad area of financial market participants. As a result, our comments below do not reflect one AI application but rather the general view of how AI applications can benefit financial markets. Our members believe that the development and implementation of AI applications in the financial sector can offer numerous benefits that enhance operational efficiency, risk management and overall market competitiveness.

AI applications streamline various processes within financial market participants, from automating routine tasks to optimising complex operations. This leads to significant cost reductions and faster processing times. For example, AI-driven automation in back-office operations, such as document processing and compliance checks, may enable institutions to handle large volumes of transactions with increased efficiency and potentially less errors.

In addition, FIA and FIA EPTA members believe that AI can play a role in risk assessment and management by analysing large amounts of data in real time to detect potential risks and anomalies. AI applications may identify patterns that indicate fraudulent activity or market risks with greater speed and accuracy than traditional methods. This enables financial institutions to take proactive measures to mitigate risks, protecting both the organisation and the financial ecosystem.

AI applications enable financial market participants to synthesize large data sets with greater accuracy and speed. Furthermore, AI applications have the potential to provide insights that support strategic decisions in areas such as investment research, general knowledge queries, and regulatory compliance. In addition, AI applications are highly scalable, allowing financial institutions to grow and adapt to changing market conditions without significant increases in operational costs. This can improve the decision-making process and leads to better outcomes for both the firm and the wider financial sector. FIA and FIA EPTA members believe that existing rules and regulations, including MiFID II, GDPR and DORA already provide the controls and oversight needed to promote and protect the integrity and resilience of European markets.

In summary, benefits/advantages in the development of AI applications include:

- Faster processing of large datasets and documents;
- Increased accuracy (e.g. finding the 'needle in the haystack' and raising fewer false positives);
- Increased Operational efficiency & productivity (reduced manual input, reduced false positives to review);
- AI may enhance and augment human performance freeing up human workers to focus on more strategic and creative endeavours, potentially increasing overall value;
- AI algorithms can analyse customer data and preferences which enable firms to provide more personalized offerings and experiences;
- AI models can identify patterns in historical data potentially enabling more accurate predictions and forecasts, which could inform better decision-making across the organization.

It is important to note that these are potential benefits, and the specific results will depend on the successful development and implementation of AI applications within the risk framework that members have in place.

Question 10: What are the main difficulties/obstacles you are facing in the development of your AI applications?

As mentioned above, it is important to reiterate that, like all technologies, difficulties/obstacles faced in the development of AI is entirely dependent on the purpose for which it is used and the associated output. Furthermore, negative aspects, including perceived risks relating to AI, may change over time.

As such, we argue that difficulties/obstacles faced in the development of AI can be categorized as technology risk for which market participants are well versed in managing/mitigating through risk mitigation models.

Regulatory divergence across jurisdictions creates compliance challenges for firms when developing and incorporating in-house AI applications that must comply across multiple regulatory frameworks.

Additonally, the following difficulties/obstacles exist when developing AI applications:

- Data sourcing, quality and cleansing to make suitable for AI use;
- Industrialization and implementation of the system and integration within banking processes;
- Explainability of the results;
- Talent Availability - Finding relevant and up-to-date skills on the market (i.e. knowledge of AI and Data Science combined with relevant experience in financial services domain);

- Infrastructure and development costs and complexity;
- Training needs to non-technical staff;
- Third Party Vendor Risks: Due to the nascent nature of the technology, third party vendor risks have to be carefully assessed.

Question 17: Do you face hurdles in getting access to the data you need to develop AI applications in financial services?

- (●) Yes
- ( ) No

Don't know / no opinion / not applicable

If 'yes', please explain which type of data you would need to have access to:

The draft EU Framework for financial data access (FIDA) which was proposed by the European Commission in June 2023 and is under scrutiny with the EU co-legislators will play a key role in creating a robust legal framework that provides legal clarity and certainty of data security. If adopted, FIDA could be a catalyst for an efficient data sharing economy. In turn, the large amounts of financial data that would be shared as a result of an effective FIDA framework could be used in many potential AI use cases to improve the attractiveness and efficiency of the financial markets.

That said, our members are concerned that the approach to data sharing that is currently under discussion in the FIDA negotiations does not afford legal clarity on the scope of data and leaves the determination of fundamental definitions to market-driven initiatives (schemes).

Moreover, the FIDA proposal is not aligned and is potentially inconsistent with the wide range of existing legal frameworks for financial services, which results in ambiguity and inconsistent regulatory obligations. As a consequence, there is a clear risk that the FIDA initiative will result in an inconsistent legal framework that will hinder innovation.

We encourage the EU co-legislators to review this proposal in terms of making it fit for purpose so that AI initiatives can start building on it.

Question 19: Should public policy measures (eg. legislative or non-legislative) encourage the exchange of data between market participants, which can be used to train AI systems for use cases in finance?

Our members currently have access to sufficient existing internal datasets to develop AI applications. Looking ahead, and depending on further assessment, the industry may benefit from access to more extensive datasets from within and beyond financial services that can be used to train AI systems.

In this context, we support public policy measures encouraging voluntary data exchange between financial market participants and with participants from other sectors, particularly when it fosters the development of secure and reliable AI systems for non-competitive purposes.

This approach could be beneficial in areas like Anti-Money Laundering (AML), Terrorist Financing Prevention (TFP) and cybersecurity for fraud prevention/detection – areas explicitly addressed by the AML Package's Public-Private Partnerships. Sharing data can significantly improve AI systems' ability to identify and flag suspicious activity within the financial system.

However, such initiatives must be carefully designed to prevent risks of regulatory arbitrage, data privacy and security risks, distortions in competition or undue advantages for specific market participants. Moreover, designing such inititaives requires robust safeguards in relation to confidentiality, privacy, and cybersecurity.

Additionally, public-private partnerships to create data sharing ecosystems and platforms, and educational and awareness campaigns would be beneficial for creating a data sharing culture.

Question 25: How does the increasing availability of general purpose AI models, including generative AI applications, impact the need to access new datasets?

General-purpose AI models like large language models can improve the efficiency of a wide variety of tasks, from customer service chatbots to report generation and data analysis. This can significantly boost efficiency and productivity across the organization.

AI-powered chatbots and virtual assistants can provide more natural interactions for customer support and engagement. Generative AI can also be used to generate personalized communications, content, and insights for customers.

General purpose AI models can bring value (e.g. productivity tools, translation, summarisation) without the need for further training on new datasets. At the same time, it is also true that the larger the selection of relevant, high-quality datasets available for training and testing, the better these models can learn and generalise, leading to enhanced performance. Moreover, generative AI applications benefit from continuous access to new data to remain relevant and adapt to changing trends.

Increased tailoring of large language models could deliver significantly enhanced performance of finance-specific tasks, compared to general purpose models, if they are trained, refined, or fine-tuned using datasets relevant to, for example, contractual terms, customer queries and their resolutions, or both qualitative and quantitative information relevant to ESG outcomes.

Question 26: Compared to traditional AI systems such as supervised machine learning systems, what additional opportunities and risks are brought by general purpose AI models?

Prior to the arrival of generative AI (a form of general purpose AI), each AI model would have to be trained for a specific task. With generative AI it is possible to ask the model a new question with zero training and it has demonstrated capabilities in responding to a comprehensive range of requests.

This makes it possible to use in a broad range of scenarios without having to expend significant amounts of time, effort, or resources to yield rapid results.

For example, generative AI can generate computer code from a brief description, can translate text from one language to another, can draft a cover letter, create a draft plan for a new project, explain complex concepts in simple concise language, or extract required data from a large document in a specific required format.

Additionally, general-purpose AI models can efficiently process and analyse large datasets, which is crucial for tasks like fraud detection, thereby improving the speed and accuracy of data-driven decisions, benefitting both customers and markets.

This wide range of capabilities comes with challenges, such as exhibiting bias, giving incorrect results (i.e. 'hallucinations'), and even sometimes giving harmful results. However, our members have experience with managing such risks. There is already sufficient and well-established regulation in place which will be supplemented by the Digital Operational Resilience Act when it starts to apply in January 2025. Additional regulation should only be added when new risks are not already adequately surveilled and supervised, which – as of now – should only be relevant for a very small area.

Question 27: In which areas of the financial services value chain do you think general purpose AI could have a greater potential in the short, medium and long term?

The June 2024 FIA/Acuiti report, a survey of more than 100 firms active in Europe found that AI has the potential to aid investment professionals in developing and designing investment strategies, research, and analysis and, in the longer term, could also be applied to portfolio and collateral management.

In the short term, customer service, developer coding productivity and operational efficiency stand to benefit the most. AI-driven chatbots and virtual assistants can provide immediate improvements in aiding employees with customer inquiries, offering personalized assistance, and automating routine tasks such as transaction processing and document verification.

In the medium term, risk management and fraud detection are likely to see significant advancements. AI models can analyse vast amounts of data to identify patterns and anomalies, enhancing our ability to predict market trends, assess credit risks, and detect fraudulent activities. By integrating advanced AI algorithms into our risk assessment processes, market participants can develop real-time monitoring capabilities, more accurate credit scoring models and improve our fraud detection systems, thereby reducing financial losses and enhancing security within the financial sector.

Looking towards the long term, we expect tools and techniques to be developed to mitigate the concerns that currently exist around GenAI, thereby making further use cases viable, leading to tangible financial and operational benefits to both financial services firms and customers.

Additionally, regulatory compliance and reporting will benefit from AI in different time horizons. AI can automate the generation of compliance reports, ensuring accuracy and timeliness while reducing the manual effort involved. This can help financial institutions to comply with evolving regulations and streamline the reporting process. For example, AI systems can improve the monitoring of transactions for suspicious activities and generate comprehensive compliance reports, enhancing our members' ability to meet regulatory requirements efficiently.

Question 30: What are the main evolutions to be expected in AI in finance?

Our members expect the focus of the AI industry to remain on improving generative AI capabilities. This will lead to improvements that mitigate some of the issues highlighted such as bias, errors, 'hallucinations', and potentially harmful results.

Our members also expect to see a number of 'fintech'-type suppliers begin to offer services where generative AI is tailored towards banks' needs. Through this means as well as through direct deployment by banks we expect to see AI deployments propagate across the industry.

Our members are also anticipating a number of further enhancements to what AI is capable of. A number of research and consultancy papers have already discussed the potential, for example, of AI agents. One consultancy described these as "virtual co-workers able to complete complex workflows." This and other potential advances in the realm of AI offer significant further potential for market participants and broadly within financial services.

Question 40: Bearing in mind there will be harmonised standards for the requirements for high-risk AI, would you consider helpful further guidance tailored to the financial services sector on specific AI Act requirements, in particular regarding the two high-risk AI use cases?

It is our members' view that, financial services sector specific guidance is not required at this stage.

Questions that have arisen regarding the implementation of the AI Act are horizontal in nature and not specific to financial services. Hence, high-level, principles-based, non sector-specific guidance would be welcomed.

This guidance would ensure that the same requirements and supervisory expectations exist across sectors which will ensure uniform application of the Act. Furthermore, providing additional financial services specific guidance is likely to increase regulatory complexity for firms while the primary principles of the AI Act remain unclear.

Therefore, in addition to any general guidance, our members request additional cross-sectorial guidelines on the following topics:

- Conformity Assessment;
- Fundamental Rights Impact assessment;
- registration process for high-risk AI systems;
- guidance on obligations for ethics, transparency and explainability.

Once horizontal guidance is received, members would require time to assess implementation of the AI Act and determine if additional guidance would help financial institutions navigate any nuances that arise and ensure that their AI systems fully comply with all applicable regulations.

Should financial services specific guidance be required, we kindly request that financial supervisors be involved in its drafting to ensure that the guidance is developed taking into account the unique aspects of the financial sector and existing regulations, governance and controls already in place and therefore ensure a smooth integration of any new AI rules into the existing supervisory framework.

Question SECURITIES 9: Machine learning trading algorithms can interact with each other in unpredictable ways on the market. Do you see any risks to market integrity and efficiency stemming from these interactions, such as collusion that can amount to market manipulation or sudden bouts of illiquidity where trading algorithms stop trading in response to unusual patterns of market behaviour?

- ○ Yes
- ◉ No

Please explain and give examples when possible.

Our members do not see indications of machine learning trading algorithms 'colluding' or manipulating the market. In many cases, machine learning within algorithmic trading is applied to predict changes in the theoretical "fair price valuation" for a given security, for parameter optimization, or predict implied volatility. As such, machine learning models are primarily used to forecast market variables and improve execution quality, not to engage in prohibited collusive behavior.

We note that any investment strategy operates within a set of preset rules, inputs, and parameters. These strategies are researched, developed, tested, approved, deployed, monitored, adjusted, and controlled via human interaction.

Critical decisions are still controlled by human traders. Each strategy is designed, researched, and constantly monitored by professionals to ensure compliance with internal controls and existing regulations.

In addition, the potential risks to market integrity and efficiency stemming from the interaction of certain algorithmic trading strategies are already addressed by existing regulations like RTS6 and the MAR. Market surveillance tools under MiFID II are continuously evolving to detect suspicious patterns, whether caused by human or machine actions and would need further adaptation as AI trading becomes more prevalent. Currently, the market abuse detection requirement is on i) the firm, ii) the trading venue, and iii) in many cases also the Regulator.

In the context of abnormal market conditions and potential bouts of illiquidity, regulation such as RTS 6 already requires firms to ensure that their algorithms do not contribute to disorderly markets by maintaining liquidity or preventing simultaneous withdrawal from trading in stressed conditions.