

Targeted consultation on artificial intelligence in the financial sector

Fields marked with * are mandatory.

Introduction

In financial services and beyond, there is a broad technology-driven trend towards greater use of AI. The Commission highlighted the need for a targeted consultation on the use of AI in financial services. The goal is to identify the main use cases and the benefits, barriers and risks related to the development of AI applications in the financial sector.

In general, the development and use of AI in the EU will be regulated by the [AI Act](#), the world's first comprehensive AI law. The AI Act which was voted by the European Parliament on 13 March and expected to enter into force in July, aims to guarantee the safety and fundamental rights of people and businesses, while strengthening AI uptake, investment and innovation across the EU. To support further these objectives, an [AI innovation package](#) has been adopted by the Commission on 24 January 2024. It contains a series of measures to support European startups and SMEs in the development of trustworthy AI that respects EU values and rules. This follows the political agreement reached in December 2023 on the AI Act.

The AI Act is designed to complement the already existing financial services *acquis*, that, while not explicitly targeted at regulating AI, is an important framework to manage the related risks in specific applications and includes several relevant requirements for financial entities when providing financial services. It does so by pursuing objectives to ensure healthy financial markets, such as transparency, market integrity, investor protection and financial stability. For example, when providing investment services, including through reliance on AI such as trading algorithms, investment firms must comply with the [MIFID/R framework](#) and the [market abuse rulebook](#).

The aim of this consultation is not to lead to policy work that would generate new duplicative requirements in relation to the use of AI by the financial sector, or to new requirements that have the potential to stifle AI innovation.

Objective of the consultation

The present targeted consultation will inform the Commission services on the concrete application and impact of AI in financial services, considering the developments in the different financial services use cases.

The views from stakeholders will support the Commission services in their assessment of market developments and risks related to AI and in the implementation of the AI Act and existing financial services legislation in the financial sector. The consultation is focused on the objectives of the financial sector *acquis* and the AI Act and is not intended to focus on other policy objectives such as competition policy. It is intended to improve the effective implementation of these legal frameworks.

This targeted consultation will include questions with multiple choice and open answers. The questionnaire contains three parts:

1. a first part with general questions on the development of AI
2. a second part with questions related to specific use cases in finance
3. and a third part on the AI Act related to the financial sector

For the purpose of this targeted consultation, the concept of AI corresponds to the definition of an AI system established in the AI Act, which covers “*any machine-based system designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments*”.

Target group

The targeted consultation will gather input from all financial services stakeholders including companies and consumer associations. Views are particularly welcome from financial firms that provide or deploy/use AI systems. This consultation is designed for respondents developing or planning to develop or use AI applications in financial services.

Responding to the consultation

Respondents are invited to complete the questionnaire by 13 September 2024. They are invited to elaborate by providing input and additional insights to their answers.

Outcome

Depending on the progress made, the Commission will publish a report on the findings and an analysis of the main trends and issues arising with the use of AI applications in financial services.

Please note that the information collected will not be shared with third parties and if used, it will be anonymised, in such a manner that it does not relate to any identified or identifiable financial institution.

Please note: In order to ensure a fair and transparent consultation process **only responses received through our online questionnaire will be taken into account** and included in the report summarising the responses. Should you have a problem completing this questionnaire or if you require particular assistance, please contact eu-digital-finance-platform@ec.europa.eu.

More information on

- [this consultation](#)
- [the consultation document](#)
- [digital finance](#)
- [the digital finance platform](#)

- [the protection of personal data regime for this consultation](#)

About you

* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business

- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

* First name

Daniela

* Surname

VANDONE

* Email (this won't be published)

daniela.vandone@unimi.it

* Organisation name

255 character(s) maximum

Financial Services User Group (FSUG) - European Commission

* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

Transparency register number

255 character(s) maximum

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

* Country of origin

Please add your country of origin, or that of your organisation.

- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Djibouti
- Dominica
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Eswatini
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macau
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar/Burma
- Saint Martin
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- São Tomé and Príncipe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen

- Bolivia
- Grenada
- Namibia
- Sweden
- Bonaire Saint Eustatius and Saba
- Guadeloupe
- Nauru
- Switzerland
- Bosnia and Herzegovina
- Guam
- Nepal
- Syria
- Botswana
- Guatemala
- Netherlands
- Taiwan
- Bouvet Island
- Guernsey
- New Caledonia
- Tajikistan
- Brazil
- Guinea
- New Zealand
- Tanzania
- British Indian Ocean Territory
- Guinea-Bissau
- Nicaragua
- Thailand
- British Virgin Islands
- Guyana
- Niger
- The Gambia
- Brunei
- Haiti
- Nigeria
- Timor-Leste
- Bulgaria
- Heard Island and McDonald Islands
- Niue
- Togo
- Burkina Faso
- Honduras
- Norfolk Island
- Tokelau
- Burundi
- Hong Kong
- Northern Mariana Islands
- Tonga
- Cambodia
- Hungary
- North Korea
- Trinidad and Tobago
- Cameroon
- Iceland
- North Macedonia
- Tunisia
- Canada
- India
- Norway
- Turkey
- Cape Verde
- Indonesia
- Oman
- Turkmenistan
- Cayman Islands
- Iran
- Pakistan
- Turks and Caicos Islands
- Central African Republic
- Iraq
- Palau
- Tuvalu
- Chad
- Ireland
- Palestine
- Uganda
- Chile
- Isle of Man
- Panama
- Ukraine
- China
- Israel
- Papua New Guinea
- United Arab Emirates
- Christmas Island
- Italy
- Paraguay
- United Kingdom
- Clipperton
- Jamaica
- Peru
- United States

- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Cuba
- Curaçao
- Cyprus
- Czechia
- Democratic Republic of the Congo
- Denmark
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Russia
- Rwanda
- Saint Barthélemy
- Saint Helena
- Ascension and Tristan da Cunha
- Saint Kitts and Nevis
- Saint Lucia
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Western Sahara
- Yemen
- Zambia
- Zimbabwe

* Field of activity or sector (if applicable)

- Accounting
- Auditing
- Banking
- Credit rating agencies
- Insurance
- Pension provision
- Investment management (e.g. hedge funds, private equity funds, venture capital funds, money market funds, securities)
- Market infrastructure operation (e.g. CCPs, CSDs, Stock exchanges)
- Social entrepreneurship
- Other
- Not applicable

* Please specify your activity field(s) or sector(s)

Stakeholder Group

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association', 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

* Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

Anonymous

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

Public

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

I agree with the [personal data protection provisions](#)

Part 1: General questions on AI applications in financial services

Question 1. Are you using or planning to use AI systems?

- Yes, we are already using AI systems
- Not yet, but we plan to use AI systems within the next 2 years
- No, we are not using it and we don't plan to use AI systems within the next 2 years

Don't know / no opinion / not applicable

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

1. AI Transparency and Explainability

One of the emerging challenges is ensuring transparency and explainability in AI-driven financial services. Consumers and investors need to understand how AI algorithms make decisions that affect their investments, risk assessments and pricing for insurance and creditworthiness assessments with regards to the provision of loans. The EU Regulation currently focuses on who will employ the AI system and ensuring they understand its output well enough. The requirement for sufficient transparency does not extend to the consumers whose data is being processed. Regulators should require firms to provide clear and enforceable explanations of AI-driven processes, including both the collection and use of data, and ensure that these explanations are accessible to non-expert users of financial services. This transparency is crucial not only for maintaining trust but also for enabling them to make informed decisions and to ensure that the AI decisions are accurate and/or unbiased.

2. Ethical AI and Bias Mitigation

As AI systems are increasingly used in many different financial services use cases, such as investment decisions, insurance underwriting and creditworthiness assessments for loans, there is a growing need to address ethical concerns, particularly related to bias in AI models, privacy concerns, and effective consent. Regarding bias, the relevant score is established based on correlations between the data gathered and historical data. The quality of their predictions is only as good as the quality of the training data. If the training data reflects past inequality, any applicant who shares features with a historically underserved group will be flagged as less creditworthy than a comparable applicant who does not share the relevant feature. Furthermore, algorithms might misinterpret or overestimate the importance of certain behaviours, leading to unfair outcomes, or those might be taken out of context.

Regarding consent, allowing data processing as soon as the consumer 'consents' can be problematic. This is especially true when the consent is buried within the general terms and conditions, such as when banks analyze their own customers based on data gathered from their payment card and transfer history. More complex issues arise concerning consent and privacy when scoring agencies utilize alternative data sources. The broad wording of general terms and conditions might encompass credit scoring in social media contexts. If not, consent is often requested when signing up for a credit platform. Questions also arise about 'uninformed consent' when certain user interface aspects guide consumers into mechanically accepting such data processing.

3. Dynamic Regulation / Adaptability

Given the rapid pace of AI development, it is crucial that regulatory frameworks are dynamic and adaptable. Regulators should adopt a forward-looking approach, anticipating future AI developments and adjusting regulations accordingly. This may involve creating regulatory sandboxes that allow for the safe testing of new AI applications under close supervision, enabling a proactive rather than reactive regulatory stance. According to Article 74(6) of the EU Artificial Intelligence Act, for AI systems with high risk used by financial institutions, the relevant national authority for financial supervision of those institutions is the market surveillance authority. Banking regulators must supervise and offer guidance on the complicated interplay between AI fairness, statistical discrimination, macroprudential stability and internal risk management within credit institutions.

4. Investor Empowerment through AI

AI has the potential not only to enhance services but also to empower investors by providing them with sophisticated tools for analyzing their investments. Regulatory frameworks should encourage the development of user-friendly AI tools designed to enhance investor autonomy. This could include AI-driven platforms that help investors simulate different market scenarios, assess the potential impact of their investment choices, and better understand risk profiles. These tools should ensure there are no conflicts of interest in its provision, so that the results are not skewed favoring some financial services providers on the basis of remuneration or incentives models.

5. Cross-Border Coordination

Given the global nature of financial markets, there is a need for cross-border regulatory coordination in the oversight of AI in financial services. Differences in national regulations can lead to regulatory arbitrage, where firms exploit less stringent rules in certain jurisdictions. International cooperation and harmonization of AI regulations can help mitigate these risks and ensure consistent consumer and investor protection across borders.

Question 4. Will you be deploying AI for new or additional processes within your organisation?

- Yes
- No
- Don't know / no opinion / not applicable

Question 5. Are you developing or planning to develop in-house AI applications?

- Yes
- No

- Don't know / no opinion / not applicable
-

Question 6. Which tools are you using to develop your AI applications?

Examples: machine learning, neural networks, natural language processing, large language models, etc.

Please explain and give examples when possible:























5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Benefits of using AI applications in financial services

Question 7. Please score the following benefits from most significant (10) to least significant (1).

	1	2	3	4	5
	-				
Fraud detection: AI algorithms can analyse large amounts of data to detect patterns and anomalies that may indicate fraudulent activity, helping to reduce financial losses for businesses and customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk management: AI can analyse and predict market trends, assess credit risks, and identify potential investment opportunities, helping financial institutions make more informed decisions and manage risks more effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automation of routine tasks: AI can automate repetitive tasks such as data entry, transaction processing, and document verification, freeing up time for employees to focus on more complex and strategic activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost savings: by automating processes and improving efficiency, AI can help financial institutions reduce operational costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personalised financial advice: AI can analyse customer data to provide personalised financial advice and recommendations, helping customers make better financial decisions and improve their financial well-being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compliance and regulatory support: AI can help financial institutions stay compliant with regulations by analysing and interpreting complex regulatory requirements and monitoring transactions for suspicious activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced decision-making: AI can analyse large amounts of data and provide insights that can help financial institutions make better investment decisions, assess credit risks, and optimise their operations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved security: AI can enhance security measures by identifying potential security threats, detecting unusual patterns of behaviour, and providing real-time alerts to prevent security breaches.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>Streamlined processes: AI can streamline various financial processes, such as loan underwriting, account opening, and claims processing, leading to faster and more efficient services for customers.</p>											
<p>Improved customer service: AI can be used to provide personalised and efficient customer service, such as chatbots that can answer customer queries and provide assistance 24/7.</p>											

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Consumers and retail investors believe that AI can bring benefits, but it has not yet been delivered. They also show a need to raise awareness further and educate consumers about what AI is, when and how it is used, what the risks are, and what to do if something goes wrong. For example, robo-advisors, when implemented efficiently, benefit user experience and perceived objectivity of the algorithm, the (potential) absence of conflicts of interests and biases of human advisors, as well as increased financial inclusion and literacy.

More in general, from the consumers perspective benefits may come, however at the moment there are still many concerns related to AI in finance:

1. Data Quality: AI systems are only as effective as the data they are trained on. Poor-quality or incomplete data can result in inaccurate predictions, decisions and recommendations[1]. Additionally, AI is susceptible to algorithmic bias and errors, where the model systematically favors certain outcomes, leading to inequitable results. It can also present false or misleading information as facts, a phenomenon known as "hallucinations." [2]

2. Data breaches and misuse: AI systems require access to vast amounts of personal and financial data, making them prime targets for cyberattacks and data breaches. For instance, criminals could modify and misuse otherwise benign AI for specific malicious activities, such as cyberattacks, spreading misinformation, market manipulation, or using deep fakes to undermine confidence in financial institutions, thereby increasing their threat potential. Additionally, there is a risk of misusing or selling sensitive information without consumers' consent, leading to privacy violations.

3. Opaque decision-making: AI algorithms often function as "black boxes," making difficult to understand or explain decisions, which can undermine trust and accountability[3]. Additionally, excessive reliance on AI can reduce human oversight, potentially leading to unchecked errors or unintended consequences. In the case of creditworthiness assessments, the client should always have the possibility to claim for a "human analysis" of his credit application

4. Discrimination

AI algorithms can perpetuate or even amplify existing biases in financial decision-making, resulting in unfair treatment of certain groups based on race, gender, age, or socioeconomic status, and this can lead to discriminatory practices in lending, credit scoring, and insurance underwriting[4]. AI can also be used to exploit consumer behavior, such as encouraging overspending or incurring unnecessary debt through targeted advertising.

5. Accessibility

Not all consumers have equal access to technology or the digital literacy required to use AI-driven financial tools, potentially exacerbating the digital divide. Therefore, consumers who are not comfortable with or do not have access to digital platforms may be excluded from the benefits of AI applications

[1] See Perez-Cruz, F. and Shin, H.S. (2024), Testing the cognitive limits of large language models, BIS Bulletin, Bank for International Settlements, n. 83.

[2] See Salvagno M., Taccone F., Gerli A. (2023) Artificial intelligence hallucinations, Critical care

[3] See Giudici P. F. and Raffinetti E. (2023) "Intelligence in finance", Finance Research Letters

[4] Kilic M., Kahyaoglu S. (2024) Algorithmic Discrimination and Ethical Perspective of Artificial Intelligence, Springer

Katja Langenbacher, AI credit scoring and evaluation of creditworthiness – a test case for the EU proposal for an AI Act' in Continuity and change – how the challenges of today prepare the ground for tomorrow (ECB Legal Conference 2021).

Question 9. Please score the following challenges from most significant (10)

to least significant (1):

	1 -	2	3	4	5	6	7	8	9	10 +	
Lack of access to the required data, in general.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lack of access to the data in an appropriate digital format.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lack of access to appropriate data processing technology, e. g. cloud computing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Data privacy: it is crucial to ensure that sensitive financial information remains confidential.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lack of trust in relation to performance levels/ security aspects/ certified solutions/ reliability of the technology.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

<p>Regulatory compliance with financial regulation: financial services are heavily regulated and not all types of AI applications are in line with requirements under these regulations.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Innovation: the ability to leverage on combining AI with other technologies to enhance its potential and generate new services?</p>	○	○	○	○	○	○	○	○	○	○	
<p>Transparency and explainability: AI algorithms can be complex and opaque. It can be difficult for humans to understand how AI arrives at certain conclusions, which can create issues of trust and accountability.</p>	○	○	○	○	○	○	○	○	○	○	

<p>Bias and discrimination: AI models are trained using data, and if the data is biased, the AI model can also be biased, leading to unfair outcomes.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Reputational risk from undesirable AI behavior or output.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Liability risks: legal uncertainty on who bears the liability in case of damages generated by the malfunctioning of the AI applications.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Skills gap: the development of AI requires specific tech skills, and there is a shortage of such skills.</p>	○	○	○	○	○	○	○	○	○	○	

<p>Dependability: as financial institutions rely more and more on AI; the dependability of these systems becomes paramount. Any malfunction or error (e.g. in risk management) can lead to significant financial losses.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Job displacement: the use of AI can potentially automate certain roles in the financial sector leading to job displacement.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Cybersecurity: AI systems could be targeted by cybercriminals, leading to potential data breaches or manipulation of AI systems.</p>	○	○	○	○	○	○	○	○	○	○	

<p>Integration challenges: integrating AI technologies with existing systems and processes can be complex and expensive.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Additional cost: the deployment and use of AI requires up-front investment and ongoing resources (acquiring or developing applications, keeping them up to date, training/skills).</p>	○	○	○	○	○	○	○	○	○	○	

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Representatives of consumers and retail investors have raised on several occasions, in their policy recommendations and research, that special attention should be addressed when regulating Artificial Intelligence.

For instance, the research performed by BETTER FINANCE on Robo advisors clearly stated that in order to regain the trust of consumers, it is necessary to propose a legislative framework for Artificial Intelligence and to ensure that the use of algorithm is fair, transparent, and accountable to consumers and does not harm EU citizens' fundamental rights. In addition, we have long been advised to undertake an in-depth fitness check of all relevant EU legislations in the insurance and financial sector in order to propose legislative updates where necessary.

The provision on the voluntary creation and application of codes on the use of AI in other financial services (other than credit directive and credit institutions) will not be enough to address potential risks and consumer detriment caused by the use of AI in the retail financial market. Our research on Robo-advisors shows that there are persistent issues in terms of reliability and advice suitability of the algorithms (automated) when used to propose investments to financial services users.

Consumers very often complain about the high fees charged for the investment product, higher than those explained during the advice process due to a lack of transparency and comparability. New fintech platforms as Robo-advisors, operate as an alternative to more traditional financial advisors, with comparatively lower fees and offering access to simpler and cheaper products such as ETFs. However, the use of algorithm and Automated Decision Making (ADM) may cause risks to consumers concerning e.g. the level of suitability of the investment advice. For example, several platforms provide investment advice that seems inconsistent with the investor and risk profile of the mystery shoppers. There are also prevalent strong discrepancies in terms of investment gains and high dispersion of asset allocation for the same investor profile.

Ethical codes and principles should be at the basis for fair, non-discriminatory and non-harmful use of AI. Specific rules should be also developed to address the pricing problem in the insurance sector. The use of algorithm may generate substantial risks to consumer as discrimination or unfair practices. Some group of customers may be directly excluded by the algorithm being determined as too risky (too costly). Application of a segmentation of customers could result in strong differences of pricing for group of customers thus going against the fundamental rights of citizens that should be treated equally. Therefore, a code of conduct and AI governance should prevent unfair and discriminatory practices.

The rights of consumers provided by Recital 71 of the GDPR, which stated that "The data subject should have the right not to be subject to a decision, which may include a measure, evaluating personal aspects relating to him or her which is based solely on automated processing and which produces legal effects concerning him or her or similarly significantly affects him or her, such as automatic refusal of an online credit application or e-recruiting practices without any human intervention (...)" should be respected in all cases. Please see, in this respect, the ECJ decision in Case C-634/21[1].

Finally, from the consumer's perspective, a crucial issue is liability. Determining who is responsible for errors or failures in AI systems can be complex, raising significant questions about accountability and consumer protection. For instance, if an AI system makes an erroneous decision that negatively impacts a consumer's financial situation, it can be challenging to pinpoint whether the fault lies with the AI developer, the financial institution using the AI, or another party involved in the system's implementation. This ambiguity can complicate the process of seeking redress and ensuring that consumers are adequately protected and compensated for the damages they suffered. Ensuring clear guidelines and frameworks for liability is essential to maintain trust and fairness in the use of AI in financial services.

Question 11. Please rank the potential negative impact that widespread use of AI can have on the following risks, 8 being the highest risk:

	1	2	3	4	5	6	7	8
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Operational risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquidity risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial stability risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market integrity risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investor protection risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer protection risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reputational risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your answer to question 11 and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 12. AI may affect the type and degree of dependencies in financial markets in certain circumstances, especially where a high number of financial entities rely on a relatively small number of third-party providers of AI systems.

Do you see a risk of market concentration and/or herding behavior in AI used for financial services?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain in which areas of AI you see a risk of concentration:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The development of AI applications in finance often involves large tech firms, leading to market concentration within a few major companies, which can limit consumer choice and stifle innovation in the financial sector. Besides, if the majority of financial institutions use the same or very similar foundational models provided by a few suppliers, decisions based on AI are likely to suffer from similar biases and technological challenges, increasing reliance on these system providers. Ultimately, this could lead to fewer institutions remaining in the market, accelerate too-big-to-fail externalities, and transfer economic rents from consumers to financial institutions.

AI and compliance burden

Question 13. Can AI help to reduce the reporting burden?

- Yes
- No
- Don't know / no opinion / not applicable

Question 14. Do you think AI can facilitate compliance with multiple regulatory standards across the EU and thus facilitate market integration or regulatory compliance?

For example, would you consider it feasible to use AI for converting accounting and financial statements developed under one standard (e.g. local GAAP) to another standard (e.g. IFRS)?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain and elaborate on your answer to question 14 and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Data access

Question 15. In order to develop AI applications, do you need access to external datasets that you currently don't have access to?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain your answer to question 15:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 16. Which datasets would you need to develop meaningful AI applications and for which purpose/use case?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

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
-

Question 18. Are you familiar with the [EU Data Hub](#), a data sharing tool for supervisors and financial companies?

- Yes
 - No
 - Don't know / no opinion / not applicable
-

Question 19. Should public policy measures (e.g. 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?

- Yes
 - No
 - Don't know / no opinion / not applicable
-

Business model

Question 20. Has AI changed your business model?

- Yes
 - No
 - Don't know / no opinion / not applicable
-

Question 21. Which parts of the value chain are being improved with AI?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 22. Are there functions that cannot/would not be improved by AI?

- Yes
 - No
 - Don't know / no opinion / not applicable
-

General purpose AI

For the purpose of this targeted consultation, respondents should consider general purpose AI as defined in [the AI Act](#) (article 3(63)), i.e. meaning any “AI model, including where such an AI model is trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications, except AI models that are used for research, development or prototyping activities before they placed on the market”.

Question 23. Do you use general purpose AI models, including generative AI, and their respective reference architectures?

- Yes
 - Not yet, but we plan to use general purpose AI models within the next 2 years
 - No
 - Don't know / no opinion / not applicable
-

Question 24. How do you plan to operationalise and adopt general purpose AI at scale?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

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?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

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?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

AI Governance in relation to non-high risk use cases, and which are not subject to specific requirements under the AI Act

Question 28. Have you developed, or are you planning to develop an AI strategy or other relevant guidelines within your organisation for the use of AI systems?

- Yes
- No
- Don't know / no opinion / not applicable

Question 29. Have you put in place or are you planning to put in place governance and risk management measures to ensure a responsible and trustworthy use of AI within your organisation?

- Yes
- No
- Don't know / no opinion / not applicable

Forecasts

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

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 31. Which financial services do you expect to be the most impacted by AI?

Please explain and give examples when possible:

5000 character(s) maximum

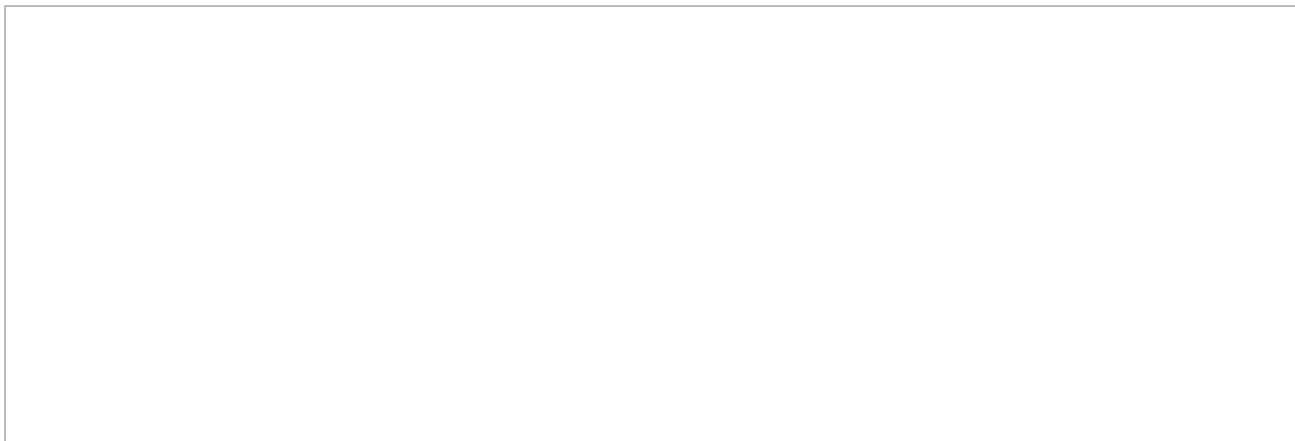
including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 32. Do you have any additional information to share?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.



Part 2: Questions related to specific use cases in financial services

Question 34. In which sector(s) are you using AI?

Please select as many answers as you like

- Banking and payments
- Market infrastructure
- Securities markets
- Insurance and pensions
- Asset management
- Other

Questions per sector

Banking and payments

In banking, possible AI use cases range from credit risk assessment and credit scoring to advice, compliance, early warning (for example of unusual social media activity / massive withdrawal of deposits), fraud/AML and customer service.

Depending on the specific use cases, relevant legislation would include:

- the [AI Act](#) (for the identified high-risk use cases such as creditworthiness and credit-scoring of natural persons)
- the [Consumer Credit Directive](#) and the [Mortgage Credit Directive](#) (creditworthiness of natural persons and robo-advice)
- the [Capital Requirements Regulation \(CRR\)](#) (for example provisions on risk management in relation to credit risk assessment)
- the [Payment Services Directives \(PSD\)](#) (for example for fraud detection)
- and the [Anti-Money Laundering Directive \(AMLD\)](#) (for example for AML risk use cases)

Question BANKING 1. For which use case(s) are you using/considering using AI?

Examples: risk assessment, credit scoring, robo-advice, sustainable finance, personal finance management, regulatory compliance, fraud detection, AML, customer service, etc.

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question BANKING 2. What are the opportunities that AI brings to your use case?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question BANKING 3. What are the main challenges and risks that AI brings to your use case (e.g discrimination, opacity of the AI application developed, difficult to control/supervise it, etc.)?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The use of AI in banking has raised several ethical and legal concerns, including privacy, security, lack of transparency and algorithmic bias. In terms of privacy, AI systems pose challenges concerning how they may process or store personal data without the proper permissions. The security risks presented are related to the potential vulnerability of AI systems to malicious attacks, which can disrupt operations and lead to financial losses. There's also a concern around lack of transparency due to the difficulty of determining the source of data and how the AI outputs or decisions are made. Lastly, quite possibly the most complex challenge, is how AI systems learn and replicate the biases that may be present in their training data, leading to unfair decision-making and discriminatory outcomes.

Given these challenges, there is the potential for AI decisions to be implicit with bias, inaccurate or, as has been determined in some recent cases, discriminatory. Additionally, when there are weak security measures in place, the technology can be used for nefarious purposes such as money laundering and insider trading, which happens rapidly and may be undetectable because of the speed at which AI processes information. Therefore, banks must have policies, procedures and protocols in place to facilitate the use of AI while mitigating the associated ethical and legal challenges.

Question BANKING 4. What is the main barrier to developing AI in your use case (e.g. lack of skills and resources, readiness of the technology, high regulatory costs for compliance with the relevant frameworks, etc.)?

Please explain and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question BANKING 5. Does AI reduce or rather increase bias and discrimination in your use case?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain your answer to question BANKING 5 and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question BANKING 6. Has general purpose AI opened new possibilities or risks in your use case?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain your answer to question BANKING 6 and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question BANKING 7. On whom do you rely for the development of your AI solutions?

- External providers
- In-house applications
- Partial collaboration with external providers
- Don't know / no opinion / not applicable

Please explain your answer to question BANKING 7 and give examples when

possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Part 3: AI Act

In December 2023 the European Parliament and the Council reached a provisional political agreement on the [first comprehensive AI framework, put forward by the Commission on 21 April 2021](#). The regulation was adopted by the European Parliament on 13 March 2024 and will enter into force later this spring once it has been published in the Official Journal of the EU. This horizontal *acquis* is applicable across all economic sectors.

The [AI Act](#) defines an AI system as “a machine-based system designed to operate with varying levels of autonomy, that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments”. Recital 11 further sets out the reasons for this definition, notably setting out that it is based on key characteristics that distinguish it from simpler traditional software systems of programming approaches.

The AI Act will establish two high risk use cases for the financial sector:

1. AI systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score, with the exception of those AI systems used for the purpose of detecting financial fraud
2. AI systems intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance.

The aim of this section is to identify which are your specific needs in order for the Commission to be able to adequately assist you with appropriate guidance for the implementation of the upcoming AI framework in your specific market areas, especially in particular to the high-risk use cases identified.

Scope and AI definition

Question 33. Which of the following use cases that could fall into the categorisation of high-risk are potentially relevant to your activity?

- AI systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score
- AI systems intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance

- Both
 - None
 - Don't know / no opinion / not applicable
-

Question 35. Please explain the overall business and/or risk management process in which the high-risk use case would be integrated and what function exactly the AI would carry out:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 36. Are there any related functions AI would carry out which you would suggest distinguishing from the intended purpose of the high-risk AI systems in particular to the use cases identified in question 34?

- Yes
- No
- Don't know / no opinion / not applicable

Please explain your answer to question 36 and give examples when possible:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 37. Please explain why these functions would/should in your view not be covered by the high-risk use cases set out in the AI act either because they would not be covered by the definition of the use case or by relying on one of the conditions under article 6(3) of the AI Act and explaining your assessment accordingly that the AI system would not pose a significant risk of harm if:

a) the AI system is intended to perform a narrow procedural task:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

b) the AI system is intended to improve the result of a previously completed human activity:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

c) the AI system is intended to detect decision-making patterns or deviations from prior decision-making patterns and is not meant to replace or influence the previously completed human assessment, without proper human review:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

d) the AI system is intended to perform a preparatory task to an assessment relevant for the purpose of the use cases listed in Annex III of the [AI Act](#):

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 38. At this stage, do you have examples of specific AI applications /use cases you believe may fall under any of the conditions from article 6(3) listed above?

Please describe the use case(s) in cause and the conditions you believe they may fall under:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 39. Based on the definition of the AI system, as explained above (and in article 3(1) and accompanying recitals), do you find it clear if your system would fall within the scope of the AI Act?

Yes

- No, it is not clear/ easy to understand if it falls within the scope of the AI Act
 - Don't know / no opinion / not applicable
-

AI Act requirements

Question 40. Bearing in mind there will be harmonised standards for the requirements for high-risk AI ([Mandates sent to CEN-CENELEC can be monitored here](#)), 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?

- Yes
 - No
 - Don't know / no opinion / not applicable
-

Financial legislation requirements

Question 41. Future AI high-risk use cases would also need to comply with existing requirements from the financial legislation.

Would you consider helpful further guidance meant to clarify the supervisory expectations for these use cases?

- Yes
 - No, the supervisory expectations are clear
 - Don't know / no opinion / not applicable
-

Question 42. There are other use cases in relation to the use of AI by the financial services sector which are not considered of high-risk by the AI Act, but which need to comply with the existing requirements from the financial legislation.

Would you consider helpful further guidance meant to clarify the supervisory expectations for these use cases?

- Yes
- No, the supervisory expectations are clear
- Don't know / no opinion / not applicable

Question 43. Are you aware of any provisions from the financial *acquis* that could impede the development of AI applications (e.g. provisions that prohibit the use of risk management models which are not fully explainable or the use of fully automated services for the interaction with consumers)?

- Yes
- No, I am not aware of any provision(s) of this kind
- Don't know / no opinion / not applicable

Additional information

Should you wish to provide additional information (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below. **Please make sure you do not include any personal data in the file you upload if you want to remain anonymous.**

The maximum file size is 1 MB.

You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

Useful links

[More on this consultation \(https://finance.ec.europa.eu/regulation-and-supervision/consultations-0/targeted-consultation-artificial-intelligence-financial-sector_en\)](https://finance.ec.europa.eu/regulation-and-supervision/consultations-0/targeted-consultation-artificial-intelligence-financial-sector_en)

[Consultation document \(https://finance.ec.europa.eu/document/download/054d25f5-0065-488a-96fb-2bb628c74e6f_en?filename=2024-ai-financial-sector-consultation-document_en.pdf\)](https://finance.ec.europa.eu/document/download/054d25f5-0065-488a-96fb-2bb628c74e6f_en?filename=2024-ai-financial-sector-consultation-document_en.pdf)

[More on digital finance \(https://finance.ec.europa.eu/digital-finance_en\)](https://finance.ec.europa.eu/digital-finance_en)

[More on the digital finance platform \(https://digital-finance-platform.ec.europa.eu/\)](https://digital-finance-platform.ec.europa.eu/)

[Specific privacy statement \(https://finance.ec.europa.eu/document/download/698ef635-9053-43c2-b3a3-709e18c1f88a_en?filename=2024-ai-financial-sector-specific-privacy-statement_en.pdf\)](https://finance.ec.europa.eu/document/download/698ef635-9053-43c2-b3a3-709e18c1f88a_en?filename=2024-ai-financial-sector-specific-privacy-statement_en.pdf)

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