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# REPORT OF THE JC SC CPFI WORKSHOP ON BEHAVIOURAL INSIGHTS 14 - 15 February 2024

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“HOW COULD SUPERVISORY AUTHORITIES MAKE USE OF  
BEHAVIOURAL INSIGHTS IN THEIR DAY-TO-DAY SUPERVISORY AND  
POLICY WORK?”

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# 1. Executive Summary

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1. On 14 and 15 February 2024 the three European Supervisory Authorities (ESAs) organized, under the umbrella of the Joint Committee of the European Supervisory Authorities' Consumer Protection and Financial Innovation Sub-Committee (JC SC CPFI), a workshop for National Competent Authorities (NCAs) to facilitate information sharing and exchange of experiences on how behavioural insights could be applied to NCAs policy and supervisory work. It also aimed at identifying the challenges faced by NCAs.
2. Behavioural insights are instrumental in supporting financial markets to deliver better products and services for consumers, while protecting them from harm. Behaviourally and evidence-based interventions have the potential to strengthen supervision and improve policy outcome if they are used from the start, when designing new policies, for example, but also when assessing their implementation and the overall impact on consumers' outcomes.
3. In fact, traditional finance models are based on the assumption that "economic agents" are rational. However, various studies and some market failures have demonstrated that investors are subject to heuristics and behavioural biases. This means that, in many situations, their financial decisions are at least partially influenced by non-relevant aspects stemming from the decision environment and context, which might lead to sub-optimal outcomes for them.
4. The decision-making process becomes even more relevant in the financial markets where it can have long term consequences for customers. Furthermore, financial services are an area where people are faced with complexity, risks assessment and uncertainty, and thus are more prone to behavioural biases which affect their decision-making process.
5. These biases should be taken also into consideration in policy making. By making use of behavioural insights policy makers could get evidence on how people "actually" behave and integrate this in the design and in the implementation of policies.
6. The use of behavioural insights could help to increase the effectiveness of consumer protection measures, their implementation and the actual effect they have on consumers, as well as to reduce the existing discrepancy between the desired outcome of certain regulatory consumer protection measures.
7. Moreover, behavioural insights could be used to nudge financial institutions to act in consumers' best interest, and ultimately this could lead to increased trust in financial service providers and financial markets.
8. Another important aspect is enabling financial institutions to move towards a risk management culture. Considering behavioural patterns and their drivers within risk management, will allow firms to better predict and measure future risks as well as better identify work processes that may have unintended consequences.
9. At the same time there is also a need for NCAs to assess their own culture and behaviour in order to increase effectiveness of their supervisory interventions.

10. Overall, the workshop's presentations highlighted the benefits that the regulatory bodies could get by taking into account behavioural insights in their policy and supervisory work.
11. More NCAs are increasing the use of behavioural insights to inform their supervisory and policy making work. However, out of the NCAs participating in the workshop, respectively to the break-out sessions, approximately 60% reported during the polls to not have yet started using behavioural insights in their activities. It is however important to note that approximately one in three NCAs participating in the workshop are in the starting phase, looking to incorporate behavioural insights in their work in the near future.
12. Of the NCAs already integrating behavioural insights in their work, some are more advanced, having already integrated behavioural teams in their structure, while others outsource the activities (including through peer reviews), or are collaborating with academia and experts.
13. What emerged from NCAs' presentations is that multiple methods could be used to gain insights into consumer behaviour. For example, behaviour could be observed by doing various laboratory or field experiments, setting up focus groups, launching consumers' online surveys with integrated experiments etc.
14. Behavioural insights and consumer research, more broadly, provide valuable tools for supervision, for example, when setting up methodologies for measuring the level of insurance knowledge etc.
15. NCAs demonstrated a lot of interest in the topic, which was especially insightful for those NCAs who are in the starting phase. The discussion of practical examples was found to be very useful and informative.
16. NCAs expressed their interest to continue this exchange with regular workshops or other type of activities that could aim to create an expert network.

## 2. Introduction

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### 2.1 Background

17. The three European Supervisory Authorities (ESAs)<sup>1</sup> regularly cooperate and work closely through the Joint Committee of the European Supervisory Authorities' Consumer Protection and Financial Innovation Sub-Committee (JC SC CPFI) to foster cross-sectoral regulatory and supervisory convergence. They further exchange information and best practices within the scope of their respective responsibilities among themselves and with the European Systemic Risk Board (ESRB).
18. The Joint Committee (JC) activities seek to strengthen the protection of European consumers in relation to banking, insurance and pensions and securities products.
19. The topic of behavioural finance was mentioned in the JC of the ESAs Work Programmes (WP) for the last few years<sup>2</sup>, as follows: *"In light of potential consumer protection concerns and benefits, the ESAs will assess the use of insights from behavioural finance when dealing with existing and potential clients, especially when providing or collecting information. The ESAs will further consider how behavioural finance findings can be used by national competent authorities and incorporated in their supervisory practices in order to strengthen financial consumer protection"*.
20. The 2024 JC WP<sup>3</sup> states *"If time and resources allow, the ESAs will consider assessing the use of behavioural finance insights by national competent authorities in their daily work and in their supervisory practices in order to strengthen financial consumer protection"*.
21. In light of this, the ESAs organised on 14 and 15 February 2024 (two half-days) a workshop for National Competent Authorities (NCAs) to explore the added value of various types of behavioural insights, derived from behavioural economics as well as organisational psychology, for policy and supervisory purposes. NCAs demonstrated a strong interest on the topic, with more than 300 registered participants.
22. The aim of the workshop was to facilitate an exchange of experiences, good practices and lessons learned among NCAs, from the use of behavioural insights for policy and supervisory purposes. It also aimed at identifying the challenges faced by NCAs, the supervisory or policy areas that benefit from behavioural insights and any lessons learned from NCAs in the process.
23. The programme of the workshop included an introduction by academics on a wide variety of 'behavioural insights' that helped setting the scene and provided a first overview on how these insights are / can be applied to supervisory and policy work. This was followed by presentations from the European Insurance and Occupational Pensions Authority (EIOPA), the European Securities and Markets Authority (ESMA), and the Organisation for Economic Co-operation and

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<sup>1</sup> The European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA).

<sup>2</sup> JC 2021 34, JC 2022 28

<sup>3</sup> JC 2023 25

Development (OECD) regarding recent projects they carried out to incorporate behavioural insights in their work. Finally, during the second day, several NCAs and the Danish Competition and Consumer Authority<sup>4</sup> gave an overview on how behavioural insights are integrated in their supervisory and policy activities at national level, as well as they presented some of the work they carried out in the area.

24. In what follows, this report aims to provide a high-level overview of the main topics discussed as part of the workshop. The following sections include summary of the presentations delivered by the speakers, while the Annex contains a catalogue compiling different studies and reports carried out and developed by some of the NCAs on the topic of behavioural insights.

## 3. Good practices and lessons learnt from the European Insurance and Occupational Pensions Authority and the European Securities and Markets Authority

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### 3.1 The European Insurance and Occupational Pensions Authority (EIOPA) recent work making use of behavioural insights

#### ***Why are behavioural insights relevant for the insurance and pensions sectors?***

25. In the insurance and pension markets, consumers face complex choices and uncertainty while they must assess risk and make trade-offs between the present and the future.
26. When faced with complexity, multiple choices, risks, uncertainty and incomplete information, people are more prone to behavioural biases which affect their decision-making process.
27. Examples of biases that are relevant to the insurance and pension sectors include:
- the tendency to under-estimate risk, e.g. how likely it is that an undesirable event will occur (e.g. the risk of flooding).
  - the tendency to focus on the short-term to avoid ambiguity, leading to postponed decisions.
  - the tendency to rely on intuition and use simple rules of thumb or ‘mental shortcuts’ (e.g. relying only on how an investment has performed in the past and assuming this will

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<sup>4</sup> The Danish Competition and Consumer Authority (DCCA) is an authority under the Danish Ministry of Industry, Business and Financial Affairs who is responsible for consumer policy, consumer protection and consumer affairs. The DCCA is responsible for the enforcement of the Danish Competition Act and for consumers protection. It has a dedicated team of behavioural experts that conduct scientific studies to explore, for example, whether consumer policy initiatives achieve the expected outcome for consumers.

continue into the future) leading to sub-optimal decisions (e.g. a selection of investments that is not best suited to their needs).

### ***Behavioural study on consumers' experience with insurance for natural catastrophe events***

28. The study objective was to analyse consumers' experiences with natural catastrophes (Nat Cat) events, including their understanding, and expectations about their insurance coverage, their experiences with the claims handling process while exploring consumers' needs, motivation, and decision-making behaviour when purchasing Nat Cat insurance products.
29. The methodology included literature review and desk research, interviews with consumer associations, focus groups. The experimental survey used a vignette study and a discrete choice experiment. The vignette involves randomly presenting minimally contrastive versions of a single vignette to respondents, while the Discreet Choice Experiment requires participants to make several choices among pairs of products samples of hypothetical scenarios (choice sets). The study covered 4 countries which were selected based on defined criteria with a sampling for the survey of 1200 participants per country.
30. Policy recommendations included:
- provide accessible tools and information enabling consumers to assess risk levels in their regions.
  - provide more clarity on coverage and exclusions.
  - provide incentives for implementing risk mitigation measures.
  - improve the claim handling process by making it more transparent, simple, agile and personalised also with the use of AI.

### ***Behavioural study on demand-side factors affecting the uptake of natural catastrophe insurance products***

31. The study objective was to explore consumers' needs and preferences with regard to Nat Cat insurance protection products and analyse the different factors that affect their behaviour and decision-making when choosing to purchase or not Nat Cat insurance.
32. The methodology included review of academic research and applied research, review of market practices, stakeholders' interviews in four countries, 15 qualitative interviews with consumers from one specific country with and without home insurance and a consumer survey and integrated behavioural experiment with 1000 respondents in 4 selected Member States.
33. Based on the desk research conducted and the qualitative input from the interviews, a set of potential interventions measures, including communication messages and policy measures, were then tested on a representative sample of consumers. The criteria for developing the interventions were the following:
- should be implementable in terms of costs and feasibility;
  - have significant effect on Nat Cat coverage take up;

- tackle risk and price perceptions;
- make the purchasing of coverage easier;
- establish trust in insurance;
- lower the expectancy of Government help.

34. The two studies revealed that the following factors influence consumers' decision to buy natural catastrophe insurance to different degrees:

- personal characteristics (income/ affordability; region where people live, type of house they live in, insurance education);
- attitudinal characteristics (their misperception of risks/price, lack of trust in insurers based on their previous experience, perceived difficulty of insurance purchase, behavioural biases: i.e. present bias etc.);
- socio-economic factors (premium, sales channels/sales practices, state would cover the loss, lack of clarity on costs and coverage, lack of insurance culture).

***Study on Consumers' behaviour in insurance digital sales***

35. The study's objectives were to analyse the online marketing techniques and their impact on consumers' decision including the identification of problematic practices, to explore consumers' perceptions and experiences when using online channels and to evaluate how behavioural biases could prevent fair and well-informed decision, mapping of risks for consumers when purchasing insurance via digital channels.

36. The methodology included 6 interviews with experts, focus groups, mystery shopping, online behavioural experiment, and post-experimental questionnaire to gather additional information and better interpret results from the experiment.

37. Participants were exposed to different marketing techniques (Module 1) designed to influence their choices in Module 2. Experiment design: there were 18 experimental conditions across two factors:

- factor one: presence/absence of a marketing technique (banner ads, disguise ad, time limited offer, drip price, limited option);
- factor two: presence/absence of risk factor (either add-on option or automatic renewal).

38. While digitalization brings about important benefits for both businesses and consumers alike, there are also some negative aspects that require close monitoring, such as:

- limited competition and network effect;
- lack of transparency;
- higher risk for exploiting behavioural biases through choice architecture, interface design (i.e. dark patterns);
- use of personal data and consumer profiling;
- potential exclusion of vulnerable consumers.



Figure 1: Overview of Dark Patterns

## OVERVIEW OF DARK PATTERNS

<p><b>Social Proof</b> Testimonials</p>	<p><b>Social Proof</b> Misleading notice about other consumers' actions</p>	<p><b>Forced action</b> Forced registration</p>	<p><b>Obstruction</b> Roach Motel Asymmetry between signing up (easy) and cancelling (hard)</p>
<p><b>Sneaking</b> Sneak into basket</p>	<p><b>Sneaking</b> Hidden Costs</p>	<p><b>Sneaking</b> Hidden Subscription / forced continuity</p>	<p><b>Sneaking</b> Bait and Switch</p>
<p><b>Interface interference</b> Toying with emotions Emotionally manipulative framing of the design</p>	<p><b>Interface interference</b> Confirm shaming The act of making the consumer feel guilty</p>	<p><b>Interface interference</b> Preselection (default)</p>	<p><b>Urgency</b> Countdown timer / Limited time message</p>

Source: EIOPA's Study on Digital Distribution

### 3.2 The European Securities and Markets Authority (ESMA) recent work making use of behavioural insights

#### **Why are behavioural insights relevant for the investment sector?**

39. Traditional finance models are based on the assumption according to which the “economic agents” are rational. This means (inter alia) they are able to process relevant information in an efficient and unbiased way and that their decisions are consistent with utility maximization. However, various studies and some market failures have demonstrated that investors, or at least a significant number of them, are subject to heuristics and behavioural biases.

40. This means that investors are very susceptible to how certain choices are presented to them. In many situations, their financial decisions are at least partially influenced by non-relevant aspect from the decision context, which might lead to sub-optimal outcomes for them<sup>5</sup>. Evidence of these biases have typically been identified as coming from cognitive psychology literature and have then been applied in the financial context.

41. Examples of biases may include:

<sup>5</sup> Investors deviating from the rational choice theory do so because of a lack of time and motivation to process all the information available. Most information is analyzed through a fast and automatic processing system, used in default by most investors in most situations (so called “System 1”, vs the so called “System 2” i.e. the mind’s slower, analytical mode, where reason dominates), which is susceptible to biases and heuristics influencing decision making. In other words, in processing information, individuals are prone to use intuition rather than reasoning, thus resulting exposed to unreasonable decisions (See, inter alia, D. Kahneman, (2011), Thinking, fast and slow).

- Overconfidence and over-optimism - investors overestimate their ability to understand the information they have and their accuracy.
- Representativeness - investors assess situations based on superficial characteristics rather than underlying probabilities.
- Conservatism - forecasters cling to prior beliefs in the face of new information.
- Availability bias - investors overstate the probabilities of recently observed or experienced events because the memory is fresh.
- Frame dependence and anchoring - the form of presentation of information can affect the decision made.
- Mental accounting - individuals allocate wealth to separate mental compartments and ignore fungibility and correlation effects.
- Regret aversion - individuals make decisions in a way that allows them to avoid feeling emotional pain in the event of an adverse outcome.
- Loss aversion - people's tendency to strongly prefer avoiding losses to acquiring gains. Some studies suggest that, from a psychological point of view, losses are twice as powerful as gains. Loss aversion can cause inertia, often with negative consequences, and can also encourage short termism (so called 'myopic' loss aversion).<sup>6</sup>

#### ***Integration of behavioural insights in the ESMA MiFID II Guidelines on suitability***

42. The framework of suitability is one of the most important requirements for investor protection in the MiFID framework. The requirements on suitability ensure that firms, when providing investment advice and portfolio management to their clients, provide them with suitable personal recommendations or make suitable investment decisions on behalf of them.
43. One of the key aspects of the requirements is the collection and assessment of all information necessary in order for the firm to be able to carry out the assessment of suitability for each client. One of the tools used by firms to collect such information is the use of questionnaires, which may however be affected by behavioural biases.
44. Considering the importance of the suitability assessment for the consumer and looking at the results of some studies that have analysed how the efficiency of the use questionnaires to collect clients' information may be affected by behavioural biases<sup>7</sup>, ESMA has decided to review its guidelines on suitability to incorporate behavioural consideration.

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<sup>6</sup> Inter alia see: N. Barberis and R. H. Thaler (2003), "A Survey of Behavioral Finance", in M. Harris, G.M. Constantinides and R. Stultz, "Handbook of the Economics of Finance"; D. Dorn and G. Huberman (2005), "Talk and action: What individual investors say and what they do"; W. Forbes (2009), "Behavioural Finance"; C.H. Pan and M. Statman (2010) "Beyond Risk Tolerance: Regret, Overconfidence, and Other Investor Propensities", Working Paper; A. Nasic and M. Weber (2010), "How Risky do I invest: The Role of Risk Attitudes, Risk Perceptions and Overconfidence"; N. Linciano (2010), "How Cognitive Biases and Instability of Preferences in the Portfolio Choices of Retail Investors – Policy Implications of Behavioural Finance", A. Lefevre, and M. Chapman (2017), "Behavioural economics and financial consumer protection", OECD Working Papers on Finance, Insurance and Private Pensions, No. 42 OECD Publishing.

<sup>7</sup> In particular, on the use of a questionnaire to assess the suitability see, inter alia, P. Bouchey (2004), "Questionnaire quest: New research show that standard questionnaires designed to reveal investors' risk tolerance are often flawed or misleading";

45. The process followed for the review of the guidelines, which was carried out together with NCAs include:

- an examination of relevant literature, focusing in particular on studies assessing how behavioural biases could impair the use of questionnaire by firms to collect client's information;
- the integration of supervisory experience and evidence gained by NCAs in this area;
- the consideration of the feedback submitted by stakeholders to the Consultation Paper on the review of the Guidelines.

46. The reviewed guidelines provide guidance, including through the inclusion of examples, to firms on how to incorporate behavioural considerations when developing questionnaires for the purpose of the suitability assessment. In particular, the suitability assessment may be ineffective if it does not take into account clients' behavioural biases: if the way questions are formulated does not consider those cognitive and behavioural biases (which could affect preferences and choices), the questionnaire may result to be unreliable. At the same time, the questionnaire itself ought to be unbiased: questions must be formed to prevent any perceptive or cognitive distortion from impairing the answers and affecting their validity and reliability.

47. In order to ensure an appropriate degree of reliability to the information collected through a questionnaire, a number of aspects which can affect its clarity and comprehensibility can be considered, so as to be able to improve investors' ability to provide the correct information to the firm. These include, for example:

- the layout and the structure, focusing on the format and the reading features such as font, spacing and division into paragraph, on how questions are presented and how the space for the answers is organised;
- the types of questions and the answer format (e.g., features that should be avoided are the use of questions in batteries, i.e. collecting information on a series of items through a single question, or giving the possibility to provide "no answer" more than once<sup>8</sup>, with particular reference to the information related to the financial situation; on the contrary, firms should use a number of questions to help them elicit clients' concrete needs/objectives);
- the wording and the language: in general, the language used should be simple, easy to understand and not ambiguous (jargon, acronyms and technical language could hamper the reliability of the information provided by the investor). This point is particularly critical for the assessment of the knowledge and experience and of the risk tolerance since investors often are invited to self-evaluate their financial literacy (which could lead to biases due to investors' overconfidence and optimism).

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A. De Palma and N. Picard, (2010) "Evaluation of MiFID Questionnaires in France", Study for the AMF; N. Marinelli and C. Mazzoli (2011), "The Traditional Approach to risk tolerance", in G. Lucarelli and C. Brighetti (2011), "Risk Tolerance in Financial Decision Making"; N. Marinelli and C. Mazzoli (2010), "Profiling investors with the MiFID: current practices and future perspectives", Research paper for Ascosim; N. Linciano and P. Soccorso (2012), "Assessing investors' risk tolerance through a questionnaire", CONSOB passim; C. H. Pan and M. Statman (2012), "Questionnaires of risk tolerance, regret, overconfidence, and other investor propensities", SCU Leavey School of Business.

<sup>8</sup> This will all take into account the fact that firms cannot discourage a client from providing information necessary for his profiling.

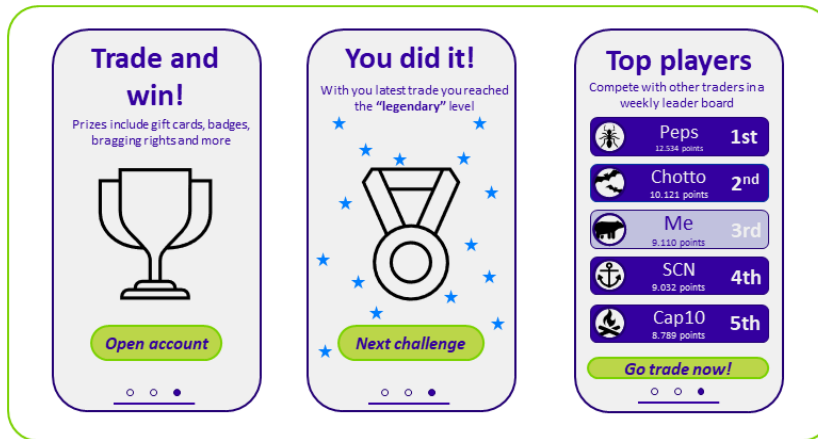
### ***Discussion paper on MiFID II investor protection topics linked to digitalisation***

48. One topic that ESMA has been observing is the digitalisation of financial services. The COVID pandemic has accelerated the trend amongst investors to use applications, websites and digital tools when managing their finances. These digital tools can also be used to seek recommendations or advice prior to purchasing or selling financial instruments. However, over the last years many retail investors also turn to social media to seek these recommendations and investment apps have become more sophisticated and sometimes almost appear game-like.
49. As part of ESMA's commitment to fostering investor protection, the Discussion Paper follows up on investor protection topics linked to digitalisation as presented in the technical advice to the European Commission<sup>9</sup>. The aim of the Discussion Paper (DP) is to gather input from stakeholders on topics such as:
- the layering and accessibility of information.
  - marketing communications and practices.
  - collaborations between firms and affiliates, including with influencers.
  - the use of digital engagement practices by firms.
50. In order to assess the abovementioned topics and draft ESMA recommendations related to them, the DP includes desk-based research including academic review, but also building on experiences and publications by National Competent Authorities. Part of this desk-based research centred on taking into consideration behavioural biases. For instance, on the topic of disclosure the focus was on anchoring and framing biases and taking into account these behavioural insights when proposing possible approaches to divide information into a network of layers (or nodes) to mitigate information overload.
51. Another topic of the DP in which behavioural insights were studied were in the area of digital engagement practices. More specifically, the DP touches upon how the choice architecture is designed by firms, meaning looking at the ways in which choices are presented which can influence what people end up choosing. In addition, the DP included references to nudging techniques, which alter people's behaviours in a predictable manner, so that people are swayed to choose a certain way.
52. The behavioural studies which were assessed on these topics, complement ESMA and NCA observations. In order to further explain how for example digital engagement practices can be used to influence investor behaviours, ESMA included illustrative examples in the DP. An example is for instance the illustrations below depicting the use of possible gamification techniques.

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<sup>9</sup> The European Commission had asked both EIOPA and ESMA to provide a technical advice regarding certain aspects relating to retail investor protection: [Call for advice to EIOPA regarding certain aspects relating to retail investor protection \(europa.eu\)](https://ec.europa.eu/eiopa/eiopa-technical-advice-retail-investor-protection), since it would be a key input to the Commission's work to develop a strategy for retail investments and to make appropriate adjustments to the current legislative framework. ESMA published the technical advice on 29 April 2022: [Final Report on the European Commission mandate on certain aspects relating to retail investor protection](https://www.esma.europa.eu/press-news/esma-news/2022-04-29-final-report-on-the-european-commission-mandate-on-certain-aspects-relating-to-retail-investor-protection). Subsequently, on 24 May 2023 the European Commission has published the Retail Investment Strategy (RIS) proposal.

Figure 2: examples of possible gamification techniques.



Source: Discussion paper on MiFID II investor protection topics linked to digitalisation

53. Based on the practical and academic observations, ESMA formulated recommendations. For example, when firms use gamification techniques, they should focus on the long-term investor outcomes and not merely focus on high-risk investments, short-term outcomes and/or individual transactions since this is not in the best interest of the client. It is therefore important that firms understand the full effects of the techniques they use in their interactions with their (potential) clients.
54. The DP is only one example in which ESMA takes into consideration behavioural insights and underlines both practices in which behavioural biases can be exploited by firms but also includes examples on how firms can guide investors into making better informed and more sensible investment decisions.
55. On 26 January 2024, ESMA launched a complementary EU Survey on Online Investing directed at retail investors. The survey aimed to gather additional insights on retail investors' experience, amongst others, with online investing and the use of investment apps.

## 4. Good practices and lessons learnt from the Organisation for Economic Co-operation and Development

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4.1 Presentation by Organisation for Economic Co-operation and Development (OECD) on recent work carried out focusing also on the area of organizational culture

***Applying behavioural insights to understand and protect consumers - an overview of early OECD work on the application of behavioural economics to financial consumer protection and financial education<sup>10</sup>.***

56. The book ***“Improving financial education effectiveness through behavioural economics”*** (2013) explores how the design of financial education programmes can benefit from the findings of behavioural economists and economic psychologists. In particular, it looks at the application of behavioural economics to the design of financial education programmes, and it provides an in-depth case study of an innovative application of lessons from psychology to a financial education programme in Brazil.
57. The paper ***“Behavioural economics and financial consumer protection”*** (2017), prepared under the aegis of the G20/OECD Task Force, first provides some historical context for the development of the field of behavioural economics and its increased application to policy. It then looks more specifically at the application of behavioural economics in the area of financial consumer protection. Common biases that individuals demonstrate in the context of making financial decisions are identified, and an overview of how numerous governments are testing and implementing the application of behavioural economics for policies promoting financial consumer protection is provided. The paper concludes by highlighting the opportunity for behavioural economics to help provide cost-efficient ways of making policy more effective at promoting positive outcomes for consumers, and stressing the need to continue an open dialogue with policy makers, regulators and supervisors to exchange experiences and good practices.
58. The publication ***“the Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives”*** (2018) reports the results of complementary surveys of members of both the International Organization of Securities Commissions (IOSCO) and the Organisation for Economic Co-operation and Development International Network on Financial

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<sup>10</sup> The work presented belongs to various OECD and OECD-hosted bodies that include: The G20/OECD Task Force on Financial Consumer Protection established as a subsidiary body of the OECD Committee on Financial Markets that brings together OECD Members, G20 countries and Financial Stability Board jurisdictions, as well as representatives of international organizations and standard-setting bodies; The International Financial Consumer Protection Organisation (FinCoNet) established in 2013, is an international organisation of supervisory authorities which have responsibility for financial consumer protection. FinCoNet’s current membership includes over 30 authorities; The OECD Committee on Consumer Policy which includes senior consumer policy and enforcement officials from OECD governments, addresses a broad range of consumer issues and helps public authorities enhance the development of effective consumer policies.

Education (OECD/INFE). These surveys explored the extent to which behavioural insights are used to guide financial literacy and investor education policies and practice.

59. Work from the Competition Division and the Committee on Consumer Policy includes: The background paper “**Applying Behavioural Insights to Consumer and Competition Policy and Enforcement**” (2023) was prepared for a workshop on applying behavioural insights to consumer and competition policy, held in April 2023 at the OECD.

#### ***Addressing how firms exploit behavioural insights***

60. The **OECD publication on dark commercial patterns** (2022) details how behavioural insights could be exploited to harm consumers.

#### ***Understanding how firms behave - Addressing firm behaviour through a focus on culture***

61. The “**Report on Financial Product Governance and Culture**” (2021) from FinCoNet in conjunction with the G20/OECD Task Force on Financial Consumer Protection presents findings on product governance and culture in relation to banking products. The report and accompanying literature review, published as a companion document (2021), identify a strong link between good organisational culture and product governance. Culture in financial services firms refers to the shared values and norms that drive behaviours and decision making within the organisation. While culture is challenging to measure, product governance frameworks provide for systems, controls and process for consumer-centric decision making and a means to monitor drivers of good culture.

## 5. Good practices and lessons learnt from National Competent Authorities and the Danish Competition and Consumer Authority

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5.1 Overview on the integration of behavioural insights in supervision and challenges thereof - Presentation by Istituto per la vigilanza sulle assicurazioni (IVASS)

#### ***Italians' Insurance Knowledge and Behaviour***

62. IVASS carried out a survey on consumers' knowledge and behaviour and published the results in May 2021.<sup>11</sup> The aim of the survey was to develop a methodology for measuring the level of insurance knowledge of the Italian population as well as to predict - by virtue of the cognitive-

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<sup>11</sup> The survey was funded by the Ministry of Economic Development and conducted by University of Milan - Bicocca and the company DOXA.

behavioural and psychometric approach adopted - insurance behaviour and provide the basis for the identification of the strategies to promote insurance culture. The survey shows that insurance knowledge in the population differs according to the level of education, gender, age and geographical location of the people interviewed.

63. Consumers behaviour is influenced by their perception of their own insurance knowledge. There is a gap between what people think they know and what they actually know, a gap between perception and reality.
64. Those who are more risk-adverse insure themselves more, and there is evidence of greater risk appetite in those who do not have insurance policies. Discrepancy can be observed with regard to the most deeply felt fears for the present or the future: **mismatch between self-representation of one's insurance behaviour in relation to risk aversion and actual insurance choice.**
- **Health and accident:** among the most deeply felt fears (76.7%), however those who take out a health policy account only for 10.6%, and 20.2% for accident. *Behavioural causes: time discounting combined with the optimism bias whereby one thinks that, although health risk is a real concern, it is devalued because it is projected into the distant future and one hopes that it is more of a problem of others than one's own.*
  - **Natural catastrophes:** although the fear of natural disasters is greater in the South and Islands than in the North of Italy, it is in the North that a greater percentage of these policies are taken out. *Behavioural causes: time discounting, optimism bias and gambler's fallacy.*
65. There is a dissatisfaction as regards comprehensibility (i.e. length of text and use of self-referential terminology); decreasing role of trust as a leading factor in insurance choice, in favour of transparency and simplicity of products.
66. Intercepting how consumer' behaviour could be influenced by the ways in which companies present and offer their products (including contractual documentation) is a continuous challenge for supervisors.

#### ***Integration of behavioural insights in supervision: Clarity in insurance policy wording***

67. In 2022 IVASS commissioned a project to an external provider to assess, through quantitative indicators, the level of readability and clarity of insurance contracts. A sample of 30 accident contracts of 30 insurance companies was analysed to assess the level of readability and clarity of insurance contracts, through quantitative indicators, to be complemented by qualitative analysis.
68. 9 quantitative indexes were used, including the Gulpease index: it indicates the degree of readability of a text, on a scale from 0 to 100, where 100 indicates the highest readability and 0 the lowest readability. A symbolic legal text was taken as benchmark: the quantitative indicators were compared with the Italian Constitution, recognised in Italy as a model of simplicity, clarity and effectiveness in a legal text. The Gulpease index of the Italian Constitution is 54,9.
69. From the research it emerged that:



- the average value of the Gulpease Index is 44.3 - the texts have a level of difficulty that, on average, completely excludes citizens with primary and secondary school education and also poses difficulties for citizens with higher education.
  - critical issues also regard the syntax and the vocabulary used ('perception' of bureaucratic language, unnecessary technical terms and uncommon words).
70. In June 2023 the results were discussed at a Workshop with academia, the market and consumer associations. IVASS sent each insurance company from the sample a letter with the contract analysis sheet, highlighting the main areas of improvement as input for a revision of the contract under analysis and gradually of the other contracts in the portfolio. IVASS is working on the follow up of the analysis.
71. Companies have welcomed the research conducted and the input provided and, as requested by IVASS, are working on the review of their contract texts in order to improve clarity and transparency: most of the companies sought to implement the suggestions on the products analysed by the end of 2023-first half of 2024 and gradually extend the review to other contracts.

### ***PPI and Embedded Insurance***

72. PPI: In general, consumers accept the policy proposed at the point of sale of the mortgage/financial loan. Over the years IVASS has undertaken several actions to protect PPI clients: supervisory actions at national level (letters to the market, legislative and regulatory changes, letters/meetings with industry) and at EU level (EIOPA thematic review and follow up activity at national level).
73. Embedded Insurance: Rapid spread, wide growth potential. Analyses conducted in the past had revealed points of attention, which are also related to consumer behaviour:
- methods for entering into or terminating a contract: silence-consent, opt-out, explicit withdrawal;
  - awareness of the guarantees: e.g. unconscious adherence;
  - clarity of conditions and coverage.

## 5.2 Two reviews conducted by the Bank of Italy on the use of behavioural economics and neuroeconomics by supervisory and consumer protection authorities

74. The Bank of Italy conducted two reviews on the use of behavioral economics and neuroeconomics and neurofinance by supervisory authorities from both the EU and other countries around the world, with a specific application in the consumer protection area. The first study maps out which authorities employ behavioural and neuroeconomics tools detailing their research focuses, methodologies, and outcomes of their analysis. The review highlights that:
- much of the interventions carried out by authorities from both the EU and other countries around the world are based on behavioral economics, while neuroeconomics is still underutilized;

- many authorities have established specialized units in behavioral economics and conduct research activities, often in collaboration with academia, with a strong emphasis on empirical studies;
  - in several cases, research activities frequently precede intervention implementation, the effectiveness of which is tested by the authorities themselves through new analyses.
75. The second study summarizes the history of neuroeconomics, provides an overview of the current state of the debate, describes the most commonly used analytical tools and reviews some relevant examples from the literature on neurofinance. The goal is to contribute to an understanding of neuroeconomics and neurofinance and to an assessment of the potential benefits for customer protection authorities. The study highlights that the contribution of neuroeconomics can be valuable mainly in three respects.
- By introducing new variables and data, neuroeconomics might enrich conventional econometric analyses. This is particularly valuable in situations where other data sources are unavailable or distorted, allowing for a better understanding of consumer decisions.
  - Insights from numerous studies revealing the emotional drivers behind the irrational behavior of financial investors and consumers can inform the design of more effective policies by consumer protection authorities. For example, neuroeconomics can support the design of pre-contractual information and documents and can help to tailor financial education courses, arming consumers with awareness of the biases at play in their decision-making processes, also referring to specific biases arising while using specific products.
  - Neuroeconomic experiments provide a direct method for evaluating consumer protection measures' effectiveness even prior to legal enforcement. Regulators can leverage this evidence to guide individuals towards choices aligned with their best interests, potentially through nudging strategies.
76. The review also highlights that, despite the extensive literature on neurofinance stemming from household finance to business strategies, payment systems, and informational documents, there is still much room to delve into the themes of banking and financial customer protection.

### 5.3 Presentation by the Danish Competition and Consumer Authority (DCCA) of recent project aimed at increasing comparability of mortgage loan offers

#### ***Consumers benefit from a standardized front page to loan offers***

77. The DCCA integrates behavioural science into both analyses and remedy development through a dedicated team of behavioural insights advisors.
78. These advisors manage a diverse set of projects across the authority and either run or support behavioural analysis across a variety of consumer and competition issues. Their work is tightly aligned with the authority's economic and legal experts.
79. This alignment ensures the necessary balance between more traditional economic and legal approaches to markets and the more experimental and behavioural approach.

80. The project outlined below demonstrates how behavioural science allows for new remedies and empirical approaches, that are integrated into more traditional sectorial competition analysis.
81. The mortgage market is complex and mortgage loan providers are subject to a vast array of mandatory information disclosure requirements.
82. A behavioral experiment conducted by the DCCA in 2018 tested whether a standardized frontpage would improve consumers ability to understand and compare different loan offers. The frontpage included a simple overview of five central financial attributes regarding the loans designed to reflect attributes that consumers find important when deciding upon a loan.
83. The following five figures were included on the front page:
- monthly instalments;
  - loan establishment costs;
  - contribution rates for the first 12 months;
  - total costs of the loan;
  - the annual percentage rate (APR).

Figure 3: Recommended front page for mortgage loan offers

THE BANK

Date 31<sup>st</sup> of March 2017

**Loan offer: 30-year mortgage loan with a fixed 2.00 pct. interest rate**  
This is an overview of what you will pay for the loan you're about to sign up for. When you flip this page you will find how the numbers have been calculated.

Loan needed to purchase the property	DKK	2,000,000
A) Your monthly instalments for the first 12 months, before taxes	DKK/month	8,941
B) To set up the loan, the bank and mortgage institute will initially charge you	DKK	10,511
C) The mortgage institute's contribution rate the first 12 months	DKK	15,164
D) At the current bond market rate of 97.51 plus fees, you will pay in total	DKK	3,013,461
E) At a loan rate of 2.08 pct. and including all fees/expenses, the APRC is	pct.	2.50

Risk classification, Green – The loan has a fixed interest rate for the entire duration of the loan.

→ Fee for fixing the rate: kr. 500

→ Fixing the bond market rate for 90 days will cost you: kr. 15,000

THE BANK

In order to understand how the numbers on the previous page

**for the first 12 months, before taxes** DKK/month **8,941**  
(person related to the loan before taxes and is the fee that will be charged on a interest rate and contribution rate that you can deduct in taxes.)

**Bank and mortgage institute will initially charge you** DKK **10,511**  
We will charge you an administrative fee for to setup your loan. On top of this the institute to trade the bond when you take a mortgage loan.

Bank institute	DKK	3,500
for trading the bond	DKK	7,011

**contribution rate the first 12 months** DKK **15,164**  
0.7575 pct. is a percentage of what you owe for your loan that the mortgage cover risks and administrative costs.

**your property you will need to pay back** DKK **3,013,461**  
mortgage institute needs to sell equivalent bonds. This has a market rate that a bond investor is willing to pay for them. Additionally, you will have to add the loan fee and running costs. Below you can see what this figure consists of:

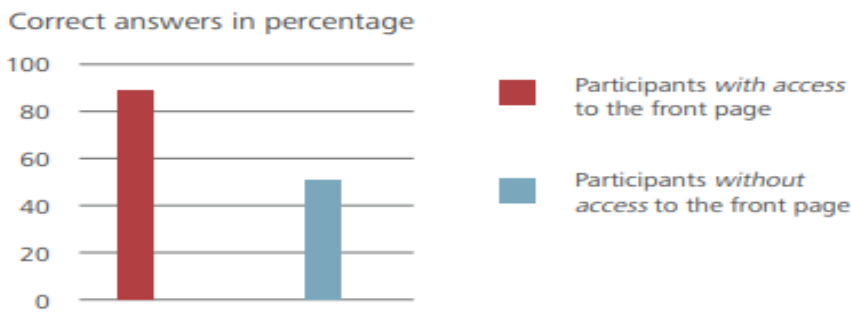
if 97.51	kr.	1,999,398
	kr.	44,503
	kr.	17,760
to mortgage institute (see B)	kr.	10,511

to bond investor  fixed interest rate) kr. 683,938  
to the mortgage institute (see C) kr. 254,280

**rate of charge (APRC) is** pct. **2.50**  
is the same type of loans across lenders. The APRC includes costs related to the fees plus various charges and initial fees for the loan. Please be aware that between lenders can result in major difference in DKK.

**if market rate for the next 90 days, you will pay** DKK **15,000**  
market rate for your loan so you know the rate for which you take up your loan. If on the timing of when you decide to do so. The closer you are to the day you fix the rate. The change here is therefore a guidance for what this measure

Figure 4: The share of respondents that identify the loan with the lowest monthly instalments.



**Results of the study:**

84. Adding a standardized front page to the loans increased consumers' understanding of mortgage loan offers as well as their ability to compare loans across providers. The standardized front page led to:

- 95 pct. of consumers correctly identifying the loan offer with the lowest instalment out of three loans. Without the front page only 50 pct. of consumers correctly identified this.

- significantly less frustration among consumers measured by facial recognition software and less time spent searching for the right information.

85. The front page was introduced into Danish law in 2020 and has contributed to a more transparent banking market for consumers by making it easier for Danish consumers to assess and compare loan offers overall.

## 5.4 Applying Behavioural Insights at the Central Bank of Ireland (CBI)

### ***The use of behavioural insights by the Central Bank of Ireland (CBI)***

86. The CBI uses behavioural economic insights as one element of its broad consumer protection toolkit. The behavioural economics team (the Behavioural Consumer Finance Unit) collaborate extensively with supervisors and policy colleagues across the Central Bank. The team uses a varied toolkit, ranging from providing behaviourally informed economic advice to data analysis and field trials.

87. The Behavioural Consumer Finance Unit have contributed to various Central Bank work programmes, including the challenge of stubbornly low refinancing rates in the Irish mortgage market, the Review of Differential pricing in the private home and motor insurance markets and a major bank account migration arising from the exit of two large retail banks.

### ***Bank account migration***

88. In the case of the bank account migration challenge, the Central Bank provided specific insights from behavioural economics as well as supervisory feedback on planned communications to the exiting banks in an effort to enhance their likely impact. CBI published a report highlighting lessons from behavioural economics about the frictions that can impede customers from moving their bank accounts and what methods can be used by financial institutions to prompt greater consumer engagement as part of their efforts to support affected consumers. This was one element of a broader communication and supervisory campaign, which included a Central Bank FAQ page and the publication of Account Migration statistics among other measures. As of July 2023, just over 96% of relevant current accounts were closed or inactive.

### ***Review of Differential pricing in the private home and motor insurance markets***

89. As part of the Review of Differential pricing in the private home and motor insurance markets, CBI conducted a review of the economics and international evidence around differential pricing, conducted a survey and performed data analysis that were part of the Differential Pricing Review - Final Report and Public Consultation – July 2021 and the Differential Pricing Review - Technical Annex. New home and motor insurance rules were introduced in July 2022 to protect insurance customers.

### ***Mortgage market***

90. CBI published research highlighting that many mortgage holders could benefit from significant savings from refinancing their mortgage in the Irish market. The research included a randomised controlled trial, in partnership with a large retail bank, to test how targeted enhancements to an

existing regulatory disclosure<sup>12</sup> could prompt greater take-up of advantageous refinancing opportunities.

91. The results show the best performing enhancement delivered a 76 per cent increase in the number of refinances completed, when compared against the pre-existing standard disclosure. The research highlights the benefits for consumers of adapting communications to take account of insights from behavioural economics, building upon a strong and rapidly growing international precedent for the application of such insights to remediate stubborn and entrenched issues in the functioning of financial product markets.

## 5.5 Presentation by the Dutch Authority for the Financial Markets (AFM) on how they integrate behavioural insights in their policy and supervisory work

92. The AFM's consumer behaviour team promotes the financial well-being of consumers by applying behavioural insights from various perspectives. To this end, the aim is to identify risks, encourage the financial sector and policymakers to take behavioural insights into account, and provide tools for supervision.
93. AFM uses multiple methods to gain insights on consumer behaviour. Behaviour is observed by doing experiments or by using micro level administrative data. AFM uses also questionnaires addressed to consumers in annual and ad hoc surveys or interviews. AFM analyses choice environments in which consumers make decisions, makes use of evidence from academic literature and consults with experts.

### ***Microdata: comparing wealth effects of saving and index investment***

94. The AFM has researched for which types of Dutch households it may be suitable – under particular circumstances – to invest part of their savings. Micro level administrative data was used from Statistics Netherlands to explore the risks and opportunities presented by passive investment in a global index fund for Dutch households that do not independently invest in the stock market but do have sufficient wealth buffer to invest.
95. For households that don't invest, an 'alternative universe' was created, in which they invested their savings in excess of the buffer. An analysis was made on how much households would approximately gain or lose by investing in a passive index fund consisting of shares, compared to putting this money in a savings account. To this end, a simulation was made that households bought positions in the index fund when their income situation allowed it and sold them when necessary to pay for household expenses. Both good and bad stock market years are included in simulations.
96. From the analysis it emerged that almost half of the Dutch households have sufficient buffers to invest in the stock market but do not do that. In more than three-quarters of the simulations,

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<sup>12</sup> In particular, in relation to a mortgage with a variable interest rate (excluding a tracker interest rate) a regulated entity must, at least annually, provide to a personal consumer a statement of the account which includes a summary of other mortgage products provided by the regulated entity that could provide savings for the personal consumer at that point in time.

investing yields higher returns than saving. Hence this study highlights opportunities for retail investments using a passive strategy. However, investors might take on other strategies. To gain more insight in this, a follow-up study on investment behaviour was performed.

### ***Survey: investment behaviour of execution-only investors***

97. The AFM annual Consumer Monitor Investors was used to gain insight in investment behaviour of execution-only investors. In recent years, the self-reported number of investing households has increased. Due to technological developments, barriers to purchase investment services have decreased and convenience has increased. However, despite these changes, most regulation to protect independent investors stems from more than 15 years ago. As a result, we wondered whether investors using the execution-only channel are still adequately protected. The first step in answering this question is to obtain good insight into the market.
98. To this end, questions were included on, amongst others, portfolio composition and trading behaviour in our annual Consumer Monitor Investors, which was conducted among 850 execution-only investors. The results show that almost one third of the investors report suboptimal trading behaviour, by trading excessively, not diversifying the portfolio well across regions, sectors and instruments, and/or investing in risky products. This implies that investors incur more risk than necessary or are likely to achieve lower returns than possible.
99. This finding led to a new question: Why does approximately one third of the independent investors display suboptimal behaviour? Does it stem from human tendencies like overconfidence or fear of missing out, or are investors affected by external factors such as the design of the platform? The design of the choice environment – the context in which people are presented with choices – influences how investors consider options and which choices they ultimately make. The choice environment can promote sensible investment decisions, but it can also exacerbate human tendencies which may lead to unwise decisions. To gain more insight in this, a follow-up study on the online choice environment of investment platforms was performed.

### ***Observing choice environments: guidance of investor behaviour***

100. For this project, AFM opened trading accounts at 9 investment firms. Based on the academic literature, AFM constructed a structured observation form, including a wide variety of topics: design of the choice environment, flow, banners, choice set, defaults, costs, (historical) returns, information, push notifications and messages, social proof, social interaction, rewards, and scarcity. The observations were enriched with insights from the academic literature to get an idea of whether and how the design of the platform is guiding investor behaviour.
101. Various elements that might influence investor behaviour were noticed. For example, the use of defaults for depositing money into the trading account. Some platforms offer an instant bank transfer as the preset way of depositing money, which encourages investors to trade with money they really have. Whereas other platforms offer a credit card payment as default option, which encourages investors to trade with borrowed money. Another example is the way historical returns are presented. Depicted default timeframes range from one hour to “max.” or “since inception”.

102. The information on historical returns is most relevant when the preset timeframe aligns with the expected holding period. For instance, if an investment firm offers investment services to experienced day traders, it makes sense to present short-term timeframes in historical returns. However, the preset time frames observed in this study do not always align with the expected holding period of the investors that the investment firms serve.

### ***Academic literature and consulting experts: digital skills***

103. AFM made use of literature and consulted experts in a project on digital skills. Our society becomes more and more digitalised. To keep up with this development, people need certain skills that enable them to use the internet for their benefit and mitigate the risks of their internet use – and to continue to do so in future. Not everyone possesses these skills (sufficiently) or is able to acquire them. In an exploratory study, the AFM has investigated to what extent limited digital skills are a barrier to accessing financial services.

104. Although it is hard to put a number on it, the literature suggests that 1 to 2 out of ten people in the Netherlands do not possess basic digital skills. This number is expected to increase in the future due to rapid changes which require more advanced skills. Besides, fragmented skill levels – the ability to deal with only certain elements of digitalisation – are occurring more frequently. Furthermore, we found that the percentage of people who use the internet safely is probably quite a bit lower than the percentage with basic skills.

105. Interviews with financial companies revealed that they find it difficult to assess the scale of the group of people with limited digital skills, who as a result have difficulty in arranging or using financial products. It is not easy to assess a person's level of digital skills on the basis of customer data. For example, people who do not log in, or who only do so rarely, may either have little or no need for their financial product or might not be able to do it.

106. For customers with limited digital skills, it is first of all important that financial companies are accessible through other channels as well as the digital channel, either by telephone or at service points. AFM encourages financial companies to enter into dialogue with people, to listen to them and to find out what is going on. It is important to look for unexpected people who are not on customer panels and find out what they need.



## 6. Conclusions

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1. Behavioural insights could be used in many areas of intervention when it comes to financial services, for example, they play an important role in the context of the digitalisation of financial services. The design of the online choice architecture, the context in which people are presented with choices, influences how investors consider options and which choices they ultimately make.
2. The choice environment could create new opportunities for streamlining and adapting information while promoting sensible investment decisions, but can also present higher risks for exploiting people tendencies and behavioural biases which may lead to unwise decisions.
3. There are various elements and nudging techniques that could alter people's behaviours in a predictable manner, so that people are swayed to choose a certain way. For example, the use of defaults options for depositing money into the trading account. Some platforms offer an instant bank transfer as the preset way of depositing money, which encourages investors to trade with money they really have. Whereas other platforms offer a credit card payment as default option, which encourages investors to trade with borrowed money.
4. As the digitalization progresses, some consumers could take advantage of the opportunities it brings, while consumers with less digital skills and who are less engaged, might end up cross subsidizing the savvier consumers and those who are more prone to switching financial services providers.
5. More focus should be placed on the effectiveness of behavioural insights in changing the behaviour of organisations such as organizational culture, as many complex policy and supervisory problems involve addressing the actions of organisations. They could be used to determine whether certain firms may be more 'prone to mis-conduct' because of their corporate culture.
6. When it comes to consumer research, there is a wide range of robust and cost-effective tools that are available and could be used for policymaking as well as for supervision, such as randomised controlled trials (RCTs), surveys, focus groups, laboratory testing, eye tracking, etc. that could be used directly by NCAs or outsourced to external contactors.
7. However, special attention needs to be paid to ethical considerations at all stages of the research and policy-making process, in particular when performing certain experiments, like for example those linked to neuroeconomics, which could use medical diagnostic instruments to analyse what happens in the brain while a person performs a task.
8. Looking at the way forward, participants welcome the organisation of further workshops on the topic to share lessons learned, to facilitate exchange and advice amongst NCAs in order to raise more awareness and knowledge on the topic. Other suggestions include regular exchanges in the form of newsletter, regular calls, etc.

## 7. Annex: Catalogue of studies

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### 7.1 Addressing consumers' biases

1. [Applying Behavioural Insights to Consumer and Competition Policy and Enforcement – Workshop issues paper, 14 April 2023, OECD](#)
2. [Interrupting inertia: evidence from a mortgage refinancing field trial](#), CBI
3. [Room to improve: A review of switching activity in the Irish mortgage market](#), CBI
4. [Birds of a feather indebted together: Peer-effects on mortgage decisions](#), Central Bank of Hungary
5. [Financial personality types and attitudes that affect financial indebtedness](#)<sup>13</sup>
6. [Del homo economicus al homo humanus. Breve aproximación a la economía conductual](#), quarterly bulletin, CNMV (ES)
7. [Nadie es perfecto: psicología económica para gente corriente](#), press article, CNMV (ES)
8. [La suma de todo. Economía conductual y decisiones financieras](#), press article, CNMV (ES)

### 7.2 Behavioural insights in insurance and pension supervision

9. [Behavioural insights in insurance and pensions supervision](#), EIOPA

### 7.3 MiFID II assessment of suitability in the light of behavioural finance findings

10. [Consultation Paper on the Guidelines on certain aspects of the MiFID II suitability requirements](#), ESMA
11. [Final Report on the Guidelines on certain aspects of the MiFID II suitability requirements](#), ESMA

### 7.4 Choice environment and dark patterns

12. [Observing choice environments: guidance of investor behaviour](#), AFM
13. [Dark commercial patterns](#), OECD
14. [Dark patterns in insurance: practices that exploit consumer biases](#), EIOPA

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<sup>13</sup> International Journal of Social Science & Economic Research, 2(9): 4687–4704.

15. [Discussion Paper on MiFID II investor protection topics linked to digitalisation](#), ESMA

16. [New opportunities and challenges for consumers in digital markets](#), DCCA

## 7.5 Differential pricing

17. [Differential Pricing: The Economics and International Evidence](#), CBI

18. [Review of Differential Pricing in the Private Car and Home Insurance Markets](#), CBI and [Annex](#)

19. [Home and Motor Insurance Rules](#), CBI

20. [2023 Consumer Trends Report](#), EIOPA

21. [Supervisory Statement on Differential Pricing Practices](#), EIOPA

## 7.6 Disclosure and targeted communication

22. [Clarity in insurance policy wording](#), IVASS

23. [Consumers benefit from simplified mandatory information in consumer credit advertisements](#), DCCA

24. [Targeted communications with mortgage borrowers can help to improve uptake of refinancing opportunities](#), CBI

25. [Consumers benefit from a standardised front page to loan offers](#), DCCA

26. [The Great Account Migration: Lessons from Behavioural Economics](#), CBI

27. [Communication and supervisory campaign on the KBC Bank and Ulster Bank withdrawal from the Irish market](#), CBI

28. [Account Migration Statistics](#), CBI

29. [EIOPA 2022 Eurobarometer Survey](#), EIOPA

30. [EIOPA 2023 Eurobarometer Survey](#), EIOPA

## 7.7 Financial education and digital skills

31. [Improving financial education effectiveness through behavioural economics](#), OECD

32. [The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives](#), OECD

33. [IVASS' Survey: Italians' Insurance Knowledge and Behaviour](#), IVASS

34. [Academic literature and consulting experts: digital skills](#), AFM
35. [Personality, Attitude and Behavioural Components of Financial Literacy: A Comparative Analysis](#). *Journal Of Economics And Behavioral Studies*, Central Bank of Hungary

## 7.8 Governance and culture

36. [Financial Product Governance and Culture](#), OECD
37. [Financial Product Governance and Culture, Annex C Literature review](#), OECD
38. [EIOPA's Approach to the Supervision of Product Oversight and Governance](#), EIOPA

## 7.9 Investors' behaviour

39. [Microdata: comparing wealth effects of saving and index investment](#), AFM
40. [Survey: investment behaviour of execution-only investors](#), AFM
41. [Psicología económica para inversores](#), Guide, CNMV (ES)
42. [Principales sesgos del inversor](#), Guide, CNMV (ES)
43. [Sesgos cognitivos en las decisiones de inversion](#), training, CNMV (ES)
44. [Economía conductual para la protección del inversor](#), Working document CNMV (ES)
45. [Estimación de probabilidades representativas del mundo real: importancia de los sesgos conductuales](#), Working document CNMV (ES)

## 7.10 Reviews on the use of behavioural economics and neuroeconomics

46. The role of behavioural economics and neurofinance for financial consumer protection policy, Banca d'Italia, Occasional Paper (Questioni di Economia e Finanza)<sup>14</sup>
47. The case for mindful customer protection: A review and some thoughts on neuroeconomics and neurofinance, Banca d'Italia, Occasional Paper (Questioni di Economia e Finanza)<sup>15</sup>

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<sup>14</sup> Forthcoming.

<sup>15</sup> Forthcoming.