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## HUMAN NATURE VERSUS FINANCIAL MARKET LAW NORMS – BEHAVIOURAL FACTORS IN THE PROCESS OF ENACTING FINANCIAL MARKET REGULATIONS

### Abstract

This paper is part of the discussion on the scope of application of the findings of behavioural sciences in law-making in order to effectively influence the formation of social relations in accordance with contemporary standards. The discussion focuses on the question of the extent to which the legislator can take into account the behaviour/emotions of clients of financial services institutions when creating financial market law. The subject of the analyses encompasses inter alia the scope and manner of its use of information concerning deviations from the choices assumed for a strictly rational person making a decision on the financial market, which raises questions about the normative and ethical aspects of taking into account behavioural factors in financial market law.

**Key words:** financial market law, behavioural economics

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## 1. Introduction

When initiating reflections on human nature in the context of problems related to financial market law-making, it is necessary to address three issues at the outset. First, the objectives that law-making should pursue; second, the factors that should be taken into account in the law-making process in order to achieve the assumed objectives; and third, in connection with the title of the present study, human nature in this context.

Assuming that the law is supposed to be a means of achieving a certain state of affairs, influencing the behaviour of the addressees of legal norms leading to a certain shape of social relations [Gromski 2018], or, when perceived as a means of protecting values held dear by society, it should take into account the broad aspect of factors influencing acceptance of the law by individuals, as well as mechanisms directing human behaviour. Of course, the final shape of regulations and legal norms is always influenced by existing social relations or ideologies [Ziemiński 1993: 44; Chambliss 1993]. Changes in the adopted paradigms have been visible over the years, and nowadays, for example, the influence of laws of economics on the legal order is growing as a result of the ever-present need to resolve particular social problems. The legislator, therefore, faces the question of what aspects to take into account? Which factors and how will they impact the effectiveness of the norms being established, bearing in mind that any law-making is a cost incurred in order to introduce solutions for the better functioning of society? Also, with the knowledge that, if the enacted provisions prove ineffective or undesirable, the costs incurred will not be recovered [Parisi et al 2004] and, in addition, new ones may arise as a result of unexpected distortions in social relations. Given that the law is supposed to influence behaviour, it is essential that law-making takes into account alongside legal and economic factors those which determine certain attitudes, thus referring to research from other sciences, in particular psychology and sociology. In other words, taking into account the determinants of human nature as defined in this paper is not without importance.

Human nature is the subject of many analyses across a range of scientific disciplines. The determinants of human personality, the knowledge of what guides people's actions, their perception of the world and the resulting social consequences have long been the subject of scientific research. We may recall, for example, research on the problem of people as observers capable of formulating objective judgments, thinking independently, possessing imagination, intellect, reason, but also "passive power", that is, sensuality, conditioning the possibility of cognition of phenomena, relations between rational cognition and experience. These analyses have been and continue to be applied to particular human

behaviours as well as attempts to decipher human nature and people's attitudes towards economic phenomena. The concepts advanced by Adam Smith of people focused on their own interest, or of John Stuart Mill, who developed the model of the rational human (*homo oeconomicus*), were responses to the need to define the relationship between the choices made by individuals and their "disposition", including their perceptual capacity. The flaw in the axiom of the rationality of economic decisions or of optimization of market activities, well-perceived today, provides an impulse to seek the broader context of human behaviour. The contemporary behavioural model seems to take into account diverse relationships in a broader perspective. The problems diagnosed, such as in the area of cognitive bias [Tversky et al 1974], have led to a growing emphasis on the influence of such elements as human emotionality on individual economic decisions. Going further, we may say that nowadays the assumption of human rationality must go hand in hand with the recognition of the existence of decision-making disorders resulting from, for example, our emotionality. This leads to the emergence and development of new concepts like *homo sapiens oeconomicus*, *homo socio-oeconomicus* or the emotional human: *Emo sapiens* [Wach 2010; Dopfer 2004; Lindenberg 1990]. Perceiving and studying the influence of other factors (e.g. emotions) on management, including management of one's own resources, leads naturally to questions about the dependencies they cause in the sphere of the effectiveness of the law, and thus causes us to take a new look at them. Therefore, they should be related to human behaviour when assessing their impact on the effectiveness of implemented legal regulations. Bearing in mind that the postulate of accounting for knowledge on human behaviour in public policy has, in principle, been to some extent fulfilled, and the literature even recognises the emergence of a behavioural model of law (for example, in administrative law [Alemanno et al 2014]), the question arises not so much of whether, but how and to what extent to take into account in the process of law-making deviations from the assumed patterns of behaviour of addressees of legal norms as result from behavioural factors. In particular, this becomes interesting from the perspective of financial market law. This is due to the fact that there are specific dependencies on the financial market between the decisions of individual participants and the situation on the market as a whole; there are specific decision conditions, and the consequences resulting from the individual decisions of a given person regarding personal finances have far-reaching consequences for both that individual and the economy (e.g. pension decisions). Two aspects of the impact of individual decisions on the market should be noted here. Firstly, the collective (social) consequences in the form of the possible destabilisation of the financial market. Secondly, individual consequences of the failure of

expected financial benefits or losses to materialise. This raises the question of what measures should be applied to be effective? Should the legislator design law while assuming certain deviations from rational decisions (preventative regulation), or correct existing regulations with a view to behavioural factors? In this context, it should also be noted that behavioural factors affect not only the client of financial institutions but also the existence or formation of behavioural prejudices of public policy makers or the regulator [Choi et al 2003; Viscusi et al 2015].

The starting point for these considerations is the question posed in the literature of the behavioural concept of law as a new paradigm of financial market law [Nieborak 2016] and this article is an attempt to find an answer to the question of to what extent the legislator can/does take into account the behaviours/emotions of clients of financial services institutions when developing financial market law? To what extent are behavioural factors invoked? To what extent is it possible and acceptable to take into account the behaviour/emotions of the clients of financial services institutions in the law-making process?

## **2. Behavioural Factors Influencing Financial Market Participants in the Research and the Conception of Rational Consumer**

When engaging in considerations of the behavioural factors influencing the behaviour of market participants, it should be pointed out that they will focus on the customer of the consumer financial institution, but not exclusively. Of greatest interest will be responses to the question of whether the consumer protection model based on the conception of cautious and critical individual choices made based on reasonable cognitive capacity (the rational consumer model) should now be abandoned in favour of the model of the consumer that takes actions which are planned but also burdened with errors due to human nature? What behavioural factors influence consumer choices in the financial services market? Are they generalizable to the financial market as a whole or do that market's segments demonstrate their own specificities? Are there significant differences in behaviour in particular market segments determining the need for a different normative/regulatory approach?

The contemporary literature distinguishes and describes a plethora of examples of deviations from the choices assumed for a strictly rational person. Research indicates that consumers deciding on a given service or good do so not only based on <sup>[OBJ]</sup> rational

premises. Their choices are also determined by, as Thaler put it, economic mental illusions [Thaler 1980: 40]. At present, the literature indicates personal behavioural determinants and recognizes cognitive, motivational, emotional and social prejudices that influence consumer decisions. This is often a mixture of all factors, which makes it difficult to identify the primary determinant of a given choice, but also to qualify errors of decision making based on uniform criteria, which would be systematizing in nature. And although attempts are made in the literature to classify them, there are no universally accepted criteria that would allow each of them to be clearly assigned to a particular category. On the other hand, undoubtedly, the identified prejudices include the tendency to process information in a manner that privileges certain information over other types as a product of the defectiveness of beliefs (whose source may be, for example, in emotions), due to information overload. The diagnosed cognitive biases also include limitations on the scope of admitted information and analysis of problems without taking into account the totality of circumstances (narrow framing); the occurrence of the so-called "endowment effect" when consumers believe that they have already made a decision and are more willing to complete the transaction and make payment [OECD 2012: 5]; quick, intuitive judgments, and thus the use of heuristics in judgment and decision-making, in particular, the anchoring and adjustment heuristic [Brandstätter et al 2006; Zielińska et al 2013; Rachlinski, 2000]. Errors can also result from overconfidence, the illusion of control, problems with self-control, passivity, timidity, conformist behaviour, or misjudgement of the possibility of a low-probability but high-impact event (Lefevre et al 2017; Zielińska et al 2013; OECD 2012; Rizzi 2008). Bias in the consumer's judgement may have emotional or motivational bases. Decisions are possible in which the consumer acts out of aversion to risk for profits, aversion to losses, or overoptimism [Brandstätter et al 2006; Zielińska et al 2013; Lefevre et al 2017; Rachlinski 2000].

The doctrine, based on psychological research, emphasises people's significant limitations in terms of causal reasoning. Of interest are insights indicating that in making choices more important are factors that better fit with predetermined expectations – for example, that we live in a fair world. There is evidence that people are more likely to attribute more importance to human actions than to environmental factors; they attach more importance to simple causes than to more complex ones or to factors that they expect than to those that surprise them [Prentice 2013].

The behaviour of other market participants is not without significance for decisions taken. A group may trigger illogical behaviour among individuals. This is where actions are

diagnosed under the influence of the so-called herd instinct, or based on the so-called cascade communication (successive investors with optimistic expectations decide to invest regardless of a private signal [Tharchen 2012]). Existing research indicates that decisions are influenced by both innate inclinations or traits as well as particular individual experiences. Therefore, it is the system of personal knowledge employed in the process of interpreting experiences and directing behaviour, along with specific preferences, that is responsible for financial decisions. This is a complex system of interdependencies leading to a specific decision. For example, a decision is the result of an educated preference for risk, financial knowledge and evolving socio-economic conditions (e.g., the appearance of previously unknown financial products). The specificity of financial decisions should also be noted. Frequently it is the case certain decisions are made once or only a small number of times in a person's life (the decision to take out a mortgage in order to buy a house, selecting pension insurance), and it is difficult to learn from experience as with other financial decisions [Lunne 2014].

To summarise this part of the discussion, there is a tendency among members of a society to react in a relative manner (depending on various factors [Rachlinski 2000]). People take a decision that is individually optimal, that is, the best in the given conditions, taking into account the costs of searching for information, efforts to understand the product, etc., but not necessarily the best in terms of finances or security. However, global observation of individual choices makes it possible to identify population-specific behaviour patterns that are repetitive, systematic and deeply rooted [Choi et al 2003].

Analysing the behaviour of financial market participants, their typologisation has been performed from the perspective of specific financial services or financial market segments. The subject literature indicates that, for example, in relation to credit services, cognitive errors most often occur in the form of framing effects (the consumer's choice is different depending on how the same information is presented, i.e. whether it is presented from the point of view of loss or the point of view of profit), or endowment effects caused by risk aversion. Further logical errors include hyperbolic discounting, that is, a preference for a faster but smaller profit over a larger profit but in the long term, and choice overload [Beales 2015]. On the capital market, the indicated prejudices leading to deviations from the rational consumer model include aversion to losses (reluctance to sell shares declining in value), overconfidence manifesting itself in excessive confidence in one's own investment strategies (particularly in men) and the representativeness heuristic (the pursuit of trends resulting from belief in their systematic roots). The indicated errors are a result of

prejudices, and they influence decisions regardless of financial knowledge (they are experienced by both financial experts and retail investors) as well as leading to deviations from the rational consumer model [Black 2013].

In the insurance sector, behaviours inconsistent with rational economic models include overoptimistic choices [Kunreuther et al 2006; Baicker et al 2012], as well as assigning greater importance to premiums paid in the short-term than to the predicted level of cost-sharing that is borne later [Abaluck et al 2011] or preferences for the current state of affairs (status quo bias) [Krieger et al 2013].

This leads to the conclusion that it is possible to discern certain patterns of deviations among consumers, or more broadly of financial market participants, from the assumed rational behaviour in the financial market as a whole, and to a small extent to establish systematic deviations specific to particular market segments more frequently occurring in a particular segment (current research poorly identifies sector-specific errors, i.e.. for a given financial market segment). One example is errors in formulating objective judgments based on obtained information. The way in which data is presented triggers a specific pattern of consumer behaviour. This allows for the conclusion that, in the light of many years of contemporary research, the concepts and patterns operating in the legislation of various states regarding consumers, including consumers of financial services, based on the premise that consumers of financial services enjoy the cognitive capacity to act in a prudent, cautious and considered manner in their best interests, have been rendered obsolete<sup>1</sup>. This must lead to the development of new assumptions and concepts of the consumer, in which an important role is played by a factor that can be described as “human nature”. Consumer protection that ignores the findings of behavioural sciences, including cognitive errors, will be illusory and may result in a loss of confidence in the financial market and the state. This should change the approach to existing law and its application.

### **3. Regulations Incorporating Behavioural Factors**

In seeking to determine the extent to which the legislator takes into account the behaviour/emotions of clients of financial services institutions, it is necessary to analyse existing EU and national legislation. Legal solutions in this area can be divided into two

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<sup>1</sup> The model of the “reasonably circumspect consumer” is in effect in the EU (see e.g., judgment of Court of Justice in case C-470/93 (European Court Reports 1995 I-01923) in the USA, the notion of the “reasonable investor” plays a significant role in case law (see e.g., [Black 2013]).

groups: those aimed at systemic solutions in the field of public law and in the sphere of contacts of financial institutions with service recipients, although it should be stressed that these solutions are mutually complementary. Systemic solutions in respect of the financial market also serve to protect individual clients, while protection in the sphere of private law fosters a sense of trust and affects market stability.

The first group includes, for example, deposit guarantee regulations. They are designed to evoke emotions of reliability, security and a kind of predictability (in accordance with recital 7 of the Directive 2014/49/EU the adopted solutions are supposed to improve “consumer confidence in financial stability”) of the existence of the system; short payment times are supposed to boost consumer trust; the solution itself is designed to prevent losses that would come about as a result of the mass withdrawal of deposits in both institutions experiencing liquidity issues and those without such problems “following a loss of depositor confidence in the soundness of the banking system” [Directive 94/19/EC], what is known as a “bank run.”

The second group includes regulations preventing impulse action and preventing cognitive and perceptual disturbances when presenting information to customers. The EU legal acts taking into account behavioural factors in financial regulations (implemented in EEA States) include Directive 2008/48/EC and Directive 2002/65/EC defining the right of withdrawal from the credit agreement [Article 14] and the right of withdrawal in the case of distance financial services [Article 6]. The fourteen-day withdrawal period is intended to prevent impulse purchases.

The prevention of cognitive and perceptual distortions in the presentation of information to financial market clients is to be achieved by regulations imposing an obligation to assess the individual characteristics of the recipient of the service, in order to adjust the financial service to the client's needs or to determine the manner of presenting information on the services offered. The former can be found in MiFID II and national regulations. An example of regulation at the national level is the Protection of Competition and Consumers Act of 15 February 2007 (Polish), which requires that when offering financial services to a consumer, characteristics of the consumer relevant to the type of service being offered must be taken into account, in order to prevent so-called “misselling” [Art. 24, para. 2 subpara. 4]. A professional operating on the financial services market must therefore assess the needs of consumers as well as their characteristics which may condition cognitive errors, such as from the point of view of the consumer's ability to assess risk [Nieborak 2017].



Another example is EU legislation that requires investment firms to ensure that certain information contains elements that are appropriate to the character of the client/potential client. When assessing their knowledge and experience, they are required to analyse such aspects as their risk tolerance and ability to bear losses [Article 25 para. 2 of MiFID II and Article 55 of the Commission Delegated Regulation [EU] 2017/565]. Taking into consideration ESMA's guidance, this concerns in particular accounting for behavioural biases when drawing up a general questionnaire and the mode in which information is presented to clients in order to avoid cognitive and perceptual distortions [ESMA 2018]. This is to protect investors from "behavioural exploitation" [Brenncke 2018].

A further example of regulation to prevent the exploitation of cognitive errors in the presentation of information about services is Commission Implementing Regulation (EU) 2018/34, which prohibits the provision of information to consumers in a way that would distract them from the information provided using various data display techniques (layering, pop-ups) [Article 13 of the Regulation]. It is worth adding here that, at the same time, the legislator also applies other findings of cognitive science, for example, concerning the standardisation of information, in order to reduce narrow framing.

A separate group is comprised of regulations using techniques based on the so-called "nudging" theory, in which an important element is indirect influence on people's behaviour. This may be the use of default rules in order to employ the model of deviations resulting from timidity and the resulting lack of action, aversion to change or to recognition of the authority of choice. For example, research on employee participation in employer pension investment plans has shown that automatic enrolling in a scheme increases their participation, and thus their pension savings [Madrian et al 2001; Baicker et al 2012]. Such registration makes it necessary to choose another option and take action, so that, among others, passive individuals remain in the programme. Such an option was employed in the Polish Act on Employee Capital Plans of 4 October 2018, whose provisions stipulate that participation in employee capital plans (ECP) is voluntary; however, assignment to the programme is automatic and the participant (employed person) must submit a declaration of application. Contributions are automatically renewed every four years, unless the participant resigns.

#### **4. Normative and Ethical Aspects of Incorporating Behavioural Factors into Financial Market Law**

The need to ensure the effectiveness of law makes the behavioural concept of law (understood here as shaping the norms of law based on the conscious consideration of behaviours resulting from human nature) one of the paradigms of the multi-paradigmatic science of law. Its adoption also raises the question of to what extent behavioural factors should be incorporated into financial market law-making? And further on, to what extent should only the consumer/customer of the institution be protected, and to what extent may this, for example, limit the consumer's capacity for choice? Should the legislator decide what is best for the consumer? The question of the extent to which the legislator can incorporate the behaviour/emotions of customers of financial services institutions when drafting law undoubtedly has its dark side. It cannot be overlooked that the use of behavioural sciences creates, at least hypothetically, the danger of manipulation leading to the exploitation of weaknesses of human nature (mistakes, timidity, etc.) in a way that violates the standards of a democratic law-governed state. There is no doubt that the increasing awareness of legislators and regulators of the possibility of influencing through the use of behavioural factors rather than bans and coercion gives new normative possibilities, but also creates dangers.

It must be observed that in this case only the instruments of power change, which may be of a non-coercive nature, but not the legally prescribed possibility for interference in citizens' lives. This gives rise to questions about the possibility for abuse in this sphere and the introduction of legal guarantees to protect against it. As has been demonstrated in recent times, financial market legislators are using knowledge about human nature, individual behaviour and deviations in the assumed models derived from e.g. cognitive errors; this makes it all the more necessary to consider the acceptable limits of actions by public authorities. When analysing the problem of normative and ethical aspects of financial market law-making using the findings of behavioural sciences, it should be noted that so far, legislative intervention (see examples presented in the previous section) has served to neutralise detrimental choices (actions or omissions) of market participants in order to protect certain values or to deliberately influence their choices (nudging), promoting those which, in the legislator's view, are beneficial to the financial market participant and in the interest of society as a whole. However, while neutralizing measures aimed at balancing the lost capacity to decide about consumption (e.g. the right of withdrawal in the case of distance financial services) or the introduction of mandatory

deposit guarantee schemes to reduce the risk of runs on banks are not controversial, nudging as a tool to manipulate choices raises legitimate concerns. The doctrine indicates that nudging is characterised by the use of different modes of influencing people's predicted behaviour without prohibiting the choice of other alternatives and without causing a significant increase in the cost of choosing other options [Hausmann et al 2010: 123–136; Thaler et al 2008]. Defined in this way, it does not have to be contrary to democratic ideals, including the right of consumer choice, active participation of citizens and their consent (public dialogue), because as long as it is transparent, leaves real freedom of choice, is a "technical" form of exerting influence rather than psychological manipulation and is used in the name of promoting certain values and achieving social goals, it can be considered to fulfil the requirements of a democratic state<sup>2</sup>. However, the positions expressed by scholars of administrative sciences should undoubtedly be welcomed, as it is essential to ensure proper oversight and balance in the use of instruments based on behavioural information [Alemanno et al 2014].

A second important issue is defining the scope of permissible interference in the freedom of choice of the consumer of financial services. Questions in the subject literature as to whether it is acceptable to decide at the legislative stage what is in the interest of consumers [Lefevre et al 2017] are relevant and need to be answered. Some scholars argue that the assumption of rationality in the light of scientific findings is mistaken, as behavioural factors cause people fail to make estimates that would help them take decisions in their best interest, and this leads to the conclusion that they must be protected from their own decisions [McDonald 2009]. However, it should be remembered that there are legally defined limits to this protection. EU law defines the fundamental rights of the consumer, which include the right to information and the right to choose. The consumer, in the concept of the EU legislator and the adopted model, "is properly informed and able to evaluate their own interests." The question then arises as to how to define facilitating a rational or prudent choice? When addressing the limits of consumer freedom, reference should again be made to the findings of behavioural sciences, since the right to reliable information is linked to the adoption of certain model characteristics of consumers and their nature. The case-law of the CJEU offers a "reasonably observant and circumspect" consumer model. The consumer is to be "well informed and reasonably observant and circumspect" following market developments, and therefore able to learn (although the case law also recognises that certain characteristics of consumers or their

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<sup>2</sup> Broadly on the nature of nudging and the rules that should be applied when manipulating choice in democratic state: [Hansen et al 2013].

predispositions can lead to deviations from the consumer model). However, it should be borne in mind that in the financial market, the ability to learn is limited for many services. This is due to a number of reasons that have been pointed out (complexity of services, low repeatability for some financial services). It therefore seems appropriate that legislative intervention should go further in these cases. On the other hand, in the majority of cases it is sufficient to shape properly the obligations of enterprises, in particular as regards information obligations. As indicated, the information is to be accurate, and therefore correct. However, it should be noted in this context that the findings of behavioural sciences indicate that there is no such thing as neutral choice architecture, and that the mode in which information is presented will always have some effect on the decision-maker [Thaler et al 2008]. Information may therefore be true, but it addresses the problem from a different angle in a way that exploits cognitive errors in favour of the financial service provider, for example, bias in terms of aversion to losses. It should, therefore, be permissible at the law-making stage to interfere with the presentation of the information so as to neutralise the impact of an unfavourable choice architecture. Transparency in the context of information prepared for the consumer should be understood as being as neutral as possible and adapted to his cognitive abilities. Legislators' decisions in the law-making process which do not restrict choice but eliminate from the financial market services and behaviours that take advantage of human frailty should be considered acceptable.

## **5. Conclusions**

The rationale behind the need to include in financial market law the accomplishments of behavioural sciences in identifying deviations from the choices assumed a strictly rational person will make is the fact that the consumer on the financial market is particularly vulnerable to mistakes, and opportunities to gather experience are limited. There are several reasons for this. First of all, financial services should be classified as goods whose quality is difficult to assess (most often it is beyond the consumer's reach to determine the essential characteristics distinguishing one service from others at the time of purchase, and most often even afterwards [Nieborak 2017]). Secondly, consumers often make certain decisions quite unfrequently, or even only once in their lifetime, and their consequences are long-term in nature.

In order to set the boundaries for incorporating human nature into financial market law, it is doubtlessly important to account for the fact that the decisions of individual consumers concerning personal finances affect both them and the financial market as a whole (in particular its stability), as well as the economy of the country. A tangible example of the destabilising impact of unreasonable individual economic decisions by customers of institutions providing banking services experienced by economies is the phenomenon of bank runs. The literature also highlights other aspects of the impact of individual behaviour on the market. Analysing the psychological factors of investment selection, doctrine indicates the influence of emotions and misconceptions on the formation of financial market prices. As far as insurance is concerned, we may point to inadequacy of choice or its absence, resulting in the necessity of state intervention in the case of people who have been deprived of their livelihoods.

Contemporary research and findings in behavioural sciences lead to the development of scientific theories that provide specific models of human behaviour on the market, including those applicable to the financial market. Although it is not always possible to identify the source of, for example, prejudices, research results allow for the creation of patterns of deviation from rational behaviour which are becoming useful for law-making that implements socially relevant values. The considerations in the present work indicate that it is reasonable to incorporate the findings of behavioural sciences in the construction of a new consumer model and instruments for consumer protection, as well as the protection of other financial market participants.

Finally, it should be noted that the concept of the rational consumer in the light of findings in the doctrine is inadequate for the needs of effective protection. Particularly in the financial market, where it is not so much the problem of self-awareness and applying logic in meeting needs that is important, but taking into account an entire complex system of dependence between the ability to know, the impulses to a certain behaviour and the final decision by the consumer, it is important to have support from the legislator. It should seek to neutralise the effects of actions taken under the influence of errors and be based on a reasonable consumer model. The requirement to consider prudence, that is, to think before acting instead of rationality in assessing consumer behaviour will not eliminate deviations resulting from prejudice because, as doctrine has indicated, behavioural factors mean that people do not estimate which option is economically in their best interest. However, it seems that in many cases the consumer is currently unable to meet the high standard of expectations of financial literacy, and the far-reaching effects of decisions and actions. This

means that while the prudent consumer paradigm may be helpful in some individual decisions, the idea of a prudent purchaser of financial services will not be useful when legislating for financial market stability.

In light of the considerations herein, it should be recognised that the findings of behavioural sciences ought to be employed in creating effective legal solutions; however, this requires a cautious, responsible approach and the application of transparent rules in law-making which would regulate the processes of incorporation of instruments based on determinations about flaws in human nature, particularly in the sphere of administrative law.

#### References:

- Abaluck, J. et al: Choice Inconsistencies among the Eldery: Evidence from Plan Choice in the Medicare Part D Program, *American Economic Review* no. 4, 2011.
- Alemanno, A. et al: Nudging legally: On the checks and balances of behavioural regulation, *International Journal of Constitutional Law*, no. 2, 2014.
- Baicker, K. Et al: Health Insurance Coverage and Take-Up: Lessons from Behavioral Economics, *The Milbank Quarterly* no. 1, 2012. Available at: <https://doi.org/10.1111/j.1468-0009.2011.00656.x>, accessed: 20<sup>th</sup> May 2020.
- Beales J. H. III.: Behavioral Economics and Credit Regulation, *Journal of Law, Economics & Policy* no. 3, 2015.
- Black, B.: Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets, *Loyola University Chicago Law Journal* no. 5, 2013.
- Brandstätter, E. et al: The priority heuristic: making choices without trade-offs, *Psychological review* no. 2, 2006.
- Brenncke M.: The Legal Framework for Financial Advertising: Curbing Behavioural Exploitation, *Eur Bus Org Law Rev*, no. 19, 2018. Available at: <https://doi.org/10.1007/s40804-018-0111-9>, accessed: 20<sup>th</sup> May 2020.
- Chambliss, W. J.: On Law-making, in: Chambliss W. J., Zatz M. S. (eds.): *Making Law: The State, the Law, and Structural Contradictions*, Bloomington and Indianapolis: Indiana University Press, 1993.
- Choi, S. J. et al: Behavioral Economics and the SEC, *Stanford Law Review* no. 1, 2003.
- Dopfer, K.: The economic agent as a rule maker and rule user: Homo Sapiens Oeconomicus, *Journal of Evolutionary Economics* no. 2, 2004.
- ESMA, Final Report Guidelines on certain aspects of the MiFID II suitability requirements, 28 May 2018, ESMA35-43-869, Available at: [https://www.esma.europa.eu/sites/default/files/library/esma35-43-869-fr\\_on\\_guidelines\\_on\\_suitability.pdf](https://www.esma.europa.eu/sites/default/files/library/esma35-43-869-fr_on_guidelines_on_suitability.pdf), accessed: 20<sup>th</sup> May 2020.
- Gromski, W.: Akty instrumentalizacji prawa i ich granice [Acts of the Instrumentalization of Law], *Acta Universitatis Wratislaviensis, Przegląd Prawa i Administracji [Acta Universitatis Wratislaviensis, Law and Administration Review]* no. 3833, 2018.
- Hansen P. et al: Nudge and the Manipulation of Choice: A Framework for Responsible Use of the Nudge Approach to Behaviour Change in Public Policy, *European Journal of Risk Regulation* no. 1, 2013.

- Hausmann D. et al: Debate: To Nudge or Not to Nudge, *Journal of Political Philosophy* no. 18, 2010.
- Krieger, M. Et al: Can decision biases improve insurance outcomes? An experiment on status quo bias in health insurance choice, *International journal of environmental research and public health* no. 6, 2013. Available at: <https://doi.org/10.3390/ijerph10062560>, accessed: 20<sup>th</sup> May 2020.
- Kunreuther, H. et al: Insurance Decision-Making and Market Behavior, *Foundations and Trends® in Microeconomics*, no. 2, 2006. Available at: <http://dx.doi.org/10.1561/0700000002>, Accessed: 20<sup>th</sup> May 2020.
- Lefevre, A. et al: Behavioural economics and financial consumer protection. *OECD Working Papers on Finance, Insurance and Private Pensions*, no. 42, 2017.
- Lindenberg, S.: Homo Socio-oeconomicus: The Emergence of a General Model of Man in the Social Sciences, *Journal of Institutional and Theoretical Economics*, no. 4, 1990.
- Lunne, P.: Regulatory Policy and Behavioural Economics, OECD, DOI, 2014. Available at: <http://dx.doi.org/10.1787/9789264207851-en>, accessed: 20<sup>th</sup> May 2020.
- Madrian, B.C. et al: The Power of Suggestion: Inertia in 402 (k) Participation and Savings Behaviour, *Quarterly Journal of Economics* no. 4, 2001.
- McDonald, I. M.: The Global Financial Crisis and Behavioural Economics, *Economic Paper* no. 3, 2009.
- Moradi, M. et al: A study on investors' personality characteristics and behavioral biases: Conservatism bias and availability bias in the Tehran Stock Exchange, *Management Science Letters* no. 4, 2013.
- Nieborak, T.: The behavioural concept of law as a new paradigm of financial market law? in: *Creation and enforcement of financial market law in the light of the economisation of law*, Poznań: Wydawnictwo Naukowe UAM [UAM Scientific Publishing House], 2016.
- Nieborak, T.: Zakaz missellingu jako przykład zastosowania behawioralnej koncepcji prawa? [Prohibition of misselling as an example of the application of behavioural conception of law?], *Studia Prawa Publicznego [Public Law Studies]* no. 3, 2017. Available at: <https://pressto.amu.edu.pl/index.php/spp/article/view/14497/14173>, accessed: 21<sup>st</sup> May 2020.
- OECD: Summary Record of the Discussion on Behavioural Economics, Organisation for Economic Co-operation and Development, 2012. Available at: [https://one.oecd.org/document/DAF/COMP/M\(2012\)2/ANN5/FINAL/en/pdf](https://one.oecd.org/document/DAF/COMP/M(2012)2/ANN5/FINAL/en/pdf), accessed: 21<sup>st</sup> May 2020.
- Parisi, F., et al: The Value of Waiting in Law-making, *European Journal of Law and Economics*, no. 2 2004.
- Prentice, R. A.: Behavioral economics applied: Loss causation, *Loyola University Chicago Law Journal* no. 5, 2013.
- Rachlinski, J. J.: The "New" Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters, *Cornell L. Rev.* no. 85, 2000.
- Rizzi, J. W.: Behavioral Basis of the Financial Crisis, *Journal of Applied Finance* no. 2, 2008.
- Thaler, R.: Toward a positive theory of consumer choice. *Journal of Economic Behavior and Organization* no. 1, 1980.
- Thaler, R.: *Nudge – Improving Decisions about Health, Wealth and Happiness*, New Haven, CT: Yale University Press, 2008.
- Tharchen, T.: How can behavioural finance help us in better understanding the recent global financial crisis? *European Journal of Business and Management* no. 5, 2012.
- Tversky, A. et al: Judgment under Uncertainty: Heuristics and Biases. *Science*, no. 4157, 1974.
- Viscusi W. K. et al: Behavioral Public Choice: The Behavioral Paradox of Government Policy, *Harvard Journal of Law & Public Policy* no. 3, 2015.
- Wach, K.: Od człowieka racjonalnego do emocjonalnego. Zmiana paradygmatu nauk ekonomicznych [From rational to emotional man. The paradigm shift in the economic sciences], *Horyzonty Wychowania [Upbringing Horizons]* no. 17, 2010.
- Zielińska, E. et al: Uwarunkowania behawioralne decyzji inwestycyjnych [Behavioural Conditioning of the Investment Decisions]. *Zarządzanie i Finanse [Management and Finance]* no. 2, 2013.
- Ziemiński Z.: Tworzenie a stanowienie i stosowanie prawa [Formation of Law vs. law-making and the application of law], *Ruch Prawniczy, Ekonomiczny i Socjologiczny [The Legal, Economic and Sociological Movement]* no. 4, 1993.

**Legal Acts:**

- Act of 15 February 2007 Ustawa o ochronie konkurencji i konsumentów (The Protection of Competition and Consumers Act), consolidated text: Dziennik Ustaw of 2019, item 369.
- Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards organisational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive, Official Journal of The European Union L 87, 31.3.2017.
- Commission Implementing Regulation (EU) 2018/34 of 28 September 2017 laying down implementing technical standards with regard to the standardised presentation format of the fee information document and its common symbol according to Directive 2014/92/EU of the European Parliament and of the Council, Official Journal of The European Union L 6, 11.1.2018.
- Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes, Official Journal of The European Union L 173, 12.6.2014.
- Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC, Official Journal of The European Union L 133, 22.5.2008.
- Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002 on the distance marketing of consumer financial services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC, Official Journal of The European Union L 271, 9.10.2002.
- Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes, OJ L 135, 31.05.194, p. 5.
- MiFID II, Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, Official Journal of The European Union L 173, 12.6.2014.