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Good Consumer Information: the Information Paradigm at its (Dead) End?

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Abstract The traditional information paradigm postulates that increasing the amount of information and establishing full transparency help consumers with their decisions. We challenge this assumption and address criteria that good consumer information needs to fulfil. Based on the findings from research in behavioural economics and finance, necessary conditions for good consumer information include transparency, comprehensibleness, and comparability, whereas quality—in terms of clarity, fit to personal needs, and verifiability—represents the sufficient condition for good consumer information. Information that consumers currently receive hardly fulfils these conditions which, in turn, considerably hampers the trustworthiness and usability of this information. To mitigate consumers' information problem and to recover the idea of the information paradigm, we suggest to extend the information model and to integrate the idea of collective consumers, to establish product testing principles, and to implement controlled minimum standard for (financial) products.

Keywords Consumer information · Information model · Behavioural finance · Consumer research · Household finance · Personal finance · Information paradigm

The traditional information paradigm postulates that increasing the amount of information and establishing full transparency help consumers with their decisions. We challenge this assumption and address criteria that good consumer information needs to fulfil. Although consumer information has been in the focus of marketing and consumer research as well as in the public debate on, e.g.,

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bans on misleading advertisement for decades, no conclusion has been reached on the criteria that good consumer information needs to fulfil from the consumers' point of view. We address this gap in the literature. Our approach does not negate the importance of transparency. Instead, we discuss that a mere increase in the amount of information does not necessarily benefit consumers' decision making. Specifically, we focus on decision making in the context of financial products and services[1] and derive both necessary and sufficient conditions for good consumer information. In this sense, we reshape the information paradigm to better acknowledge consumers' information and decision making process. We base our arguments on findings in behavioural research (behavioural economics and finance), use several examples of information that consumers are currently provided with, and analyse the degree to which this information fulfils the necessary and sufficient conditions. Beyond this, we provide suggestions how to reach the goal of good consumer information.

Miscounselling, incomplete or misleading information, and aggressive selling practices have been identified as one group of reasons that lead to an estimated amount of at least 50 billion euros that German consumers lose annually to the financial industry (Oehler 2012; see also Kaas and Severidt 2002; Oehler et al. 2009; Rouette 2005). Hence, the question arises how to prevent these losses in the first place instead of requiring consumers to enter into long and little promising complaint procedures and court cases. One of the widely discussed approaches to enhance consumers' (financial) decision making deals with the information that consumers receive prior to the actual decision to, e.g., select specific investment products, borrow money, or purchase insurance contracts (e.g., Oehler et al. 2014a). This paper contributes to this discussion with an in-depth analysis of criteria that good consumer information needs to fulfil. While we primarily focus on information related to financial products, most of our findings can also be transferred to other products and decision situations. Consumer needs for financial services can be understood as a prototype for basic consumer needs. Therefore, our results are not limited to financial decisions.

Our contribution to the academic literature and to the public and political debate is threefold. First, we infer requirements that good consumer information needs to fulfil. We base our arguments in particular on findings in behavioural economics and finance. Second, we analyse whether information that consumers currently receive actually fulfils the requirements to good consumer information. Third, we provide suggestions on how to implement and enforce the requirements to good consumer information.

The paper is organized as follows: In the second section, we elaborate on the role of consumer information in the context of neoclassical and (new) institutional economics and in the context of behavioural economics and finance. We derive necessary and sufficient conditions for good consumer information in the third section. We analyse the quality of current consumer information in the fourth section. In the fifth section, we present and discuss suggestions how to implement and enforce requirements to good consumer information. In the last section, we discuss the implications of our findings and conclude.

Consumer Information in the Context of Main Economic Theories

The discussion about consumer information is primarily based on three theoretical approaches: neoclassical economics, (new) institutional economics, and behavioural economics and finance (Oehler 2011, 2013).

[1] Please note that in the following we will use the term financial products to characterize both financial products and services.

Neoclassical and (New) Institutional Economics

Neoclassical economics implies that consumers—and all other economic subjects—act as "clones" based on the theoretical concept of the Homo oeconomicus. This means that they have access to all relevant information at any time, are able to process this information, and decide fully rationally. Consequently, in a neoclassic setting, there is no need for a separate analysis of consumer information. If consumers fulfilled this idealized concept, they would be experts that are specialized in each and every area of life, such as financial decision making, medical treatment, nutrition, energy management, and car repair—to mention only a few of them. Although it is obvious that consumers do and will not fulfil this idealized concept of a fully informed and fully rational decision maker, about two thirds of all legislation are based on the information paradigm which assumes that consumers will make fully rational decisions if they receive enough information (Micklitz 2003, 2004, 2013).

The framework provided by (new) institutional economics (NIE) accounts for potential informational disadvantage of consumers compared to suppliers, e.g., financial advisors or investment managers. Based on asymmetrically distributed information, it also allows for asymmetries in power to design and enforce contracts as well as in the degree to which the parties to the contract are (financially) involved and affected (Kaas 1995; Richter 1998; Oehler and Unser 2002). Following this framework, it implies that consumers need more information and more assistance for learning activities to reduce their disadvantage. Beyond this, regulation needs to encourage the "weak" side of the market, i.e., consumers, through improved competition among, e.g., financial service providers.

However, most financial products are credence goods. Credence goods are characterized by the fact that complete information is basically unavailable both before and after entering into the contract. This is why it is simply impossible to provide consumers with complete information ex ante. Furthermore, division of labour is fundamentally based on the idea that not everyone needs to have full information about everything. Asymmetries are therefore inherent to the economic system. Expecting consumers to deal with more and more information would contradict these ideas. In addition, it would require consumers to realize their own informational needs and to recognize relevant information, but consumers will only know what they want to know, if they knew what they need to know—a condition that cannot be fulfilled for most financial decisions.

Behavioural Economics and Finance

Research in behavioural economics and finance reflects that individuals have limited cognitive capacity when it comes to, e.g., information perception and processing and that they are influenced by emotional and motivational factors (e.g., Kahneman and Tversky 1979; Selten 1990). This means that they cannot act fully rationally even if they wished to. Bounded rationality (Simon 1955, 1956) results in, e.g., consumers' information overload and choice overload (Baron 2000; Malhotra 1984; Miller 1956; Plous 1993). To cope with this situation, individuals will use heuristics to facilitate their decision making. Consumers face the risk not to focus on the information that they should consider to address their needs. Instead, they focus on the information that is, e.g., available most easily and that is presented in the most prominent way. Recent research also focuses on the role of salient features of products (e.g., Bordalo et al. 2013) and identifies that consumers primarily focus on product characteristics that appear to be most outstanding when comparing with other products instead of using all relevant information. Overall, this creates incentives for sellers and service providers to prioritize the presentation of information on some product characteristics, such as benefits and expected returns, and to present other characteristics, such as risks, less transparent, or to even misrepresent information. Furthermore, consumers use information that they feel most familiar with instead of all relevant information, a behaviour that is reflected in, e.g., home-biased investment decisions (e.g., Oehler et al. 2008). They also use information about other people's decisions and replicate these decisions instead of focusing on relevant information about product characteristics, their own needs, and their individual situation, which is typically described as herd behaviour (see, e.g., Oehler et al. 2016).

In this sense, observable patterns in decision making, including the use of heuristics and alleged deviations from fully rational decision making as described above, reflect normal and everyday behaviour instead of irrationalities, anomalies, or biases that could be (fully) cured (Kahneman and Tversky 1973; Oehler and Reisch 2008; Tversky and Kahneman 1974, 1981). Consequently, individuals would not be able to or implicitly or explicitly would not want to base their decisions on full information, even if it were available. This effect is stronger the less the information is understandable and the less individuals are experienced in the specific decision context (Kahneman 2003). In this setting, the quantity of information cannot be the prime criterion for good consumer information.

Educating consumers to enhance their *financial literacy* will only have a limited effect. Although a basic understanding of financial aspects and products is desirable and specific educational approaches that focus on useful rules of thumb have shown to be effective in improving financial decisions (Drexler et al. 2014), the concept of education and learning faces two main challenges. First, quickly changing markets including new financial products and new distribution channels would require that consumers constantly learn to offset the half-life of knowledge. Second, requiring specialized knowledge in one area of life, such as financial knowledge, would lead to the necessity that consumers need to accumulate expertise in each and every area of life. Otherwise, consumers, politicians, or experts in education would need to decide which areas to gather expertise in and which not, because specialising in all areas of life is not achievable due the cognitive limitations discussed above. Even if individuals strive for a holistic educational ideal as developed by Wilhelm von Humboldt, they will not be able to be up to date permanently in each and every area of life (Oehler 2013, 2016). Ranking areas of life according to their importance, however, is highly difficult, because importance will change during life, and different groups of consumers will need different expertise to reflect, e.g., their health and financial status. In addition, leaving the decision about the importance of different areas to others (politicians, educational experts) leads to similar problems as discussed in the following with respect to nudging.

Nudging is an approach that addresses individuals' bounded rationality and their cognitive limitations when it comes to dealing with information. Nudging aims at enhancing consumers' decision making by using so-called nudges in the sense of "interventions that steer people in particular directions but that also allow them to go their own way" (Sunstein 2014a, p. 2). Potential nudges make use of the effect of how the information is presented, e.g., traffic light labels and warnings. However, nudges are not limited to the presentation of information. Instead, they aim at influencing the decision making process which is realized by, e.g., presenting the choice that is assumed to be best as default or by sending reminders if individuals have not yet made a decision (for an overview of categories of nudges see, e.g., Sunstein 2014b). Empirical evidence on nudges, however, indicates that they might have ambiguous or even contrary effects (e.g., Drescher et al. 2014; Hyland and Birrell 1979;

Skurnik et al. 2005; Steinhart et al. 2013; Torres et al. 2007). Beyond this, the political and academic discussion has not yet found answers to a number of questions that have been risen in the controversy about nudges. These questions include the following: (1) Who decides whether or not a decision is better than other decisions or even optimal for consumers and when?, (2) Who knows–based on which data–that people wish more help or wish to be nudged and who knows that people perceive a gap to a better decision and that they cannot close this gap on their own?, (3) Do consumers react differently to nudges by the state compared to nudges from the market?, and (4) Do cultural differences exist between countries when it comes to reactions to nudges?

By focussing on the requirements that good consumer information needs to fulfil in the next section, we primarily address the question about the quality of information. The suggestions take into account that individuals are bounded rational in their information gathering and processing and, overall, in decision making. In addition, the suggestions reflect that attempts to educate people can only partly resolve the problem and that nudging attempts to influence decision making to an extent that appears to be highly controversial.

Which Requirements Does Good Consumer Information Need to Fulfil?

Research in behavioural economics and finance as presented above reveals that consumers face cognitive constraints in gathering and processing information. This means that they are only able to perceive and process a limited amount of information at a time. To reflect these limitations, we suggest that requirements to good consumer information be separated into necessary and sufficient conditions. This separation, however, is not identical to the separation between perception and processing of information. Instead, *necessary conditions* represent conditions that need to be fulfilled to allow consumers to make use of the information; this means that they can receive and understand the information and that they can incorporate the information in the decision making process. In this sense, the necessary conditions go beyond requiring access to information. While necessary conditions focus on the aspect that the information can be used and not yet on how the information is used, sufficient conditions exactly address the latter aspect. *Sufficient conditions*, therefore, represent the requirements that need to be fulfilled to allow consumers to make adequate financial decisions.

The necessary conditions comprise transparency, comprehensibleness, and comparability (see also Oehler 2016):

Transparency Information needs to be available and accessible for consumers to allow them to inform themselves about relevant product characteristics. Beyond this, access to information is also essential for other market participants such as financial advisors, regulators, and supervisors. While transparency is given in a neoclassic setting and it is the primary goal in a (new) institutional setting, it can only be one of the prerequisites when assuming that consumers are bounded rational. They will not necessarily use each and every piece of information that is available, but if relevant information is not available, consumers and other stakeholders might miss an important aspect in their decision making and they cannot infer which information is unavailable or even hidden from them and why. The request for transparency therefore also reflects that consumers appear to be not sceptical enough about undisclosed information, this means information that is withheld by the supplier (Jin et al. 2015).

Comprehensibleness Bounded rationality implies that consumers might not be able to understand and interpret information, that different consumers understand the same information in different ways, and/or that the same consumer understands the same information differently at different points in time but otherwise identical situations. To reduce potential misunderstanding, information needs to be comprehensible. This means that the information must be presented in plain language and technical terms should be avoided. Comprehensibleness should, therefore, reflect that consumers without expert knowledge in finance are able to understand the information.

Comparability A decision situation always includes alternatives to choose among (even to do nothing is one of these alternatives). Due to the huge variety of financial products, decision situations in a financial context are particularly complex in this respect. As long as information on alternative financial products is incomparable, it will not support consumers' decision process, because consumers would not be able to compare the alternatives which they choose among. Consequently, information should be presented in a way that allows comparison with similar or closely related products. This means that the same information categories, e.g., regarding the risks associated with a financial product should be provided for all financial products that are offered to retail customers. Information that is not comparable is in itself not appropriate for decision making.

Fulfilling the necessary conditions, however, does not yet make information useful for consumers. Instead, information also needs to fulfil a minimum level of quality as sufficient condition which means that it should enable consumers to use the information to make adequate decisions to use financial services, such as to buy and sell financial products or to decide to keep their position in financial instruments unchanged. In the context of their entire financial portfolio, information should allow consumers to infer the impact of single financial decisions on the overall portfolio and to structure their overall portfolio. The minimum quality level reflects requirements on clarity, fit to personal needs, and verifiability (see also Oehler 2016):

Clarity The essential product characteristics need to be presented in a clear and unambiguous way. This means that the information should not allow for ambiguous interpretation or lead to confusion. Essential product characteristics relate to substantial risks, liquidity/flexibility, net return including all costs and charges, and impact on other financial products (portfolio effects). In situations when the same information could be presented in different ways, the least confusing presentation should be used. In this sense, comprehensibleness as described above is an immediate prerequisite for clarity. Clarity, however, goes one step further because it requires that information about product characteristics be given in a way that allows unambiguous (i.e., clear) inference about the consequences of decisions. In this sense, financial ratios and percentages need to be avoided. Instead, the information on, e.g., risks/potential losses and returns should be presented as amount of money in the respective currency (see also, e.g., Bateman et al. 2014). Presenting a potential financial loss as a percentage, e.g. 50%, might well be comprehensible. As consumers, however, focus on the actual amount of money when making decisions, a clear way of presenting the information would be to present the potential loss as amount of money that does not require further calculation and interpretation on the consumers' side, e.g., stating a potential loss as 5000 euros for an investment of 10,000 euros.

Fit to Personal Needs The information should reflect consumers' financial needs. This means that the information should include an indication of the decision situation and the financial need the product is adequate for. Specifically, this relates to, e.g., the financial products' adequacy to be used as solution to basic financial needs (safety first, low risk) or as solution to additional financial needs (income protection, retirement provisions), or if the financial product should only be used after consumers have taken care of basic and additional financial needs. If consumers are able to easily realize which financial situation the information is adequate for, they will be relieved from the burden to gather enormous amounts of information without knowing whether the information fits their needs.

Verifiability Everyone who wishes to verify the information should be able to do so at any time before the consumer enters into the contract, during the contract period, and even afterwards until the period of limitation as defined by law expires. This does not mean that every single investor, him or herself, needs to be enabled to verify every single piece of information. A requirement in the latter sense would disregard that asymmetries are inherent to the economic system. However, in particular third parties including, e.g., judicial authorities, supervisors, and consumer organization that consumers might contact either for advice during the decision making process or in case of complaints need to have the chance to verify the information.

If and only if the minimum quality level as represented by the sufficient conditions is met, consumers can recognize the information as being trustworthy. Trustworthiness implies that consumers can rely on information that they receive and will be able to make adequate financial decisions when following this information in decision making. They, e.g., do not need to double-check every piece of information on their own which reduces potential information and choice overload. Trustworthiness can, therefore, be regarded as overall criterion based on the sufficient conditions.

Current Consumer Information

Consumers face numerous types of information when choosing financial products to, e.g., fulfil their basic financial needs, such as health insurance or day-to-day payments, or additional financial needs, such as savings for retirement. We use examples of different types of information that are currently given to consumers and analyse the degree to which they fulfil the requirements to good consumer information. Specifically, we focus on mutual fund ratings, key investor information documents, records on financial counselling, and product test results. In the following, we discuss whether these types of information fulfil the requirements derived and explicated in the previous section.

Mutual fund ratings are provided by specialized rating agencies such as Morningstar, Inc. or by consumer organizations such as Stiftung Warentest in Germany. As one type of financial product ratings, they are intended to aggregate relevant information to assist consumers' decision making. This means that consumers who use mutual fund ratings when deciding which funds to invest in, implicitly or explicitly assume that the ratings signal information about future mutual fund performance (Oehler et al. 2014b). At first glance, mutual fund ratings appear to be easy to understand. However, mutual fund ratings seem not to contain relevant and clear information about the essential characteristics of mutual funds. In contrast, Oehler et al. (2014b) show that mutual fund ratings do not discriminate high quality funds in terms of superior risk–return relationship from low quality funds in a sufficient manner. Therefore, these ratings lack in clarity, because they do not provide consumers with unambiguous information about the product characteristics and the consequences of decisions that are based on the ratings. This means that investors, in particular retail investors, barely benefit from using mutual fund ratings in their decision process, because these ratings do not fulfil their informational need. McDonald and Rietz (2014) go one step further and show that ratings even when not providing any information still affect investment decisions and harm performance. They also argue that comparability of ratings between product categories is low. In addition, the details of the rating process are typically neither transparent nor comprehensible for individuals outside of the rating agencies which, in turn, hampers the verifiability of mutual fund ratings.

Key investor information documents (KIDs/KIIDs) are supposed and intended by regulators to specify all relevant information of investment products in a concise way. Studies including Oehler et al. (2014a) and Godwin and Ramsay (2015), however, show that real-world KIDs typically fail to grasp the key characteristics of financial products; in particular the presentation of substantial risks is insufficient. This means that at least parts of the product characteristics remain intransparent, i.e., relevant information is missing. Beyond this, some information lacks in comprehensibleness. Although investors would more easily understand information about the size of potential gains and losses in absolute amounts of money in their respective currency, many KIDs contain information in less easy to understand ways such as percentages or frequencies (e.g., Bateman et al. 2014). When it comes to comparability, investors face several obstacles. First, there is no standardized way to present the product characteristics; this means that financial intermediaries (can) design KIDs largely at their own discretion. Second, for different financial products, such as investment products, insurance products, so-called packaged investment products, and state-subsidized private pension products, although often being very similar in their characteristics, different regulation applies; whereas similar regulation for other products, such as current accounts, is inexistent (Oehler 2011, 2016). Beyond this, KIDs typically do not include information on the products' fit to the consumers' financial needs.

Written *records on financial counselling* were introduced into regulation of retail insurance products in 2007, of retail investment products in 2010, and of low regulated investments in 2012 as an attempt to provide consumers with a documentation of the financial advice given and taken. This documentation could be used in legal cases to provide evidence about the topics covered during the consultation and as summary and reminder of the main aspects to be considered in customer's decision process. First and foremost, these records do not necessarily fulfil the necessary condition of comprehensibility and they definitely do not fulfil the sufficient condition regarding verifiability of the information. The financial advisor documents the key aspects of the consultation and provides the consumer with these records. If the records are incorrect, the consumer would need to contradict. To do so, however, the consumer would need appropriate expertise which in itself is paradoxical since the consumer as person with informational disadvantage takes the advice from an advisor with clear informational advantage. This means that the consumer cannot be able to fully understand and verify the information included in the records of financial counselling. Beyond this, the records are practically unverifiable by third parties including, e.g., regulators or judicial authorities, in particular when there are no further witnesses to the consultation, and as long as there is no reversal of the burden of proof. Given these problems, the records can neither fulfil their purpose in legal cases nor as summary or reminder for the customer.

Product tests and comparisons are intended to provide consumers with useful (meta-level) information on both quality and value of goods and services. Since consumers would not have to collect information on all goods and services individually if they use the results provided by testing institutes, product tests and comparisons might considerably alleviate consumers' information problem. However, doubts arise in particular regarding the transparency of the testing procedures, the verifiability of the test results and comparisons, and—in light of the enormous number of labels, testing institutes, and other intermediaries in consumer markets—the comparability of test results (Oehler 2014).

Suggestions to Mitigate the Information Problem

The information paradigm suggests that solely increasing transparency will facilitate consumers' decision making and lead to better decisions. With its focus on the quantity of information, however, the information paradigm disregards that consumers—be they responsible, confident, or vulnerable—might not be willing or capable to be fully informed at any time or that they might not have the opportunity to be fully informed at any time. At first glance, this might lead to the conclusion that the information paradigm leads to a dead end when it comes to the question of good consumer information. Our examination, however, has revealed that the information paradigm needs a revision and, in particular, needs to acknowledge the importance of quality of information. An information paradigm that is revised in this sense will be useful to design good consumer information.

Transparency is one of the necessary conditions that consumer information needs to fulfil. Beyond transparency, necessary conditions include comprehensibleness and comparability. Most important, however, is to recognize that quality of information is the sufficient condition for good consumer information. This means that information needs to be clear, needs to fit to consumers' personal needs, and needs to be verifiable. If these criteria are fulfilled, consumers have the opportunity to trust the information and use it without necessity to double-check. In this sense, consumers do not necessarily need all available pieces of information. Instead, consumers need to receive clear, unambiguous, and verifiable information that is essential for their specific decision situation (Oehler 2011, 2016). The following suggestions explicate how both necessary and sufficient conditions can be fulfilled.

Collective Consumers An interpretation of the request for transparency as an institutional function allows to regard consumers as a sociological "body." Following this idea of collective consumers, it provides the opportunity that non-governmental organizations that represent consumers (henceforth: consumer NGOs) act as pilots or guides for consumers. Extending the information model, which has so far focused on individual consumers by introducing consumer NGOs as consumer information intermediaries, allows for a much more differentiated view on consumers, their informational needs, and how to satisfy these needs. Although NGOs exist that might be understood as consumer NGOs in the sense of collective consumers, such as *Stiftung Warentest* and *Verbraucherzentralen* in Germany, there is doubt whether they are currently able to fulfil the role as consumer NGOs; *Verbraucherzentralen*, for example, only have less than 100 finance experts for about 80 million citizens. The idea of implementing collective consumers, however, is by no means limited to *Stiftung Warentest* and *Verbraucherzentralen.* Any organization that would follow the idea of collective consumers, however, needs to reach all those who need information. Consumer NGOs would be able to collect information about financial products and services, verify information, overall check the quality of information as described with the necessary and sufficient conditions above, process the information, and present it to consumers in a way that satisfies their informational need. In the presence of strong consumer NGOs, consumers do not need to collect and double-check each and every piece of detailed information on their own. Instead, they only need to know consumer NGOs that they can contact when they face a specific decision situation and need the information. To fulfil their tasks and to secure their trustworthiness, however, consumer NGOs have to be both economically and legally strong which means that they need to be endowed with sufficient financial means and that they need to be able to enter into class action suits to enforce consumer rights. The latter request reflects that single consumers typically refrain from entering into complaint procedures and court cases due to their disadvantage vis-à-vis financial service providers (see the discussion about asymmetries above), costs of litigation, and uncertain outcome.

Testing Principles Testing institutes either as consumer NGOs or as private companies need to ensure the quality of their test results by following testing criteria that can be defined as Generally Accepted Testing Principles (GATP; Oehler 2014). These GATP include (1) identification and transparency of all relationships and networks within the value chain of testing which refers to potential conflicts of interest, and also to sources of information and expertise, (2) verification (and verifiability) of the methods and criteria of the essential testing procedures, and (3) focus on relevant product characteristics as well as clarity of test results and their fit to consumers' informational need. In this sense, test results themselves need to fulfil the criteria of good consumer information.

Controlled Minimum Standard for (Financial) Products To fulfil both necessary and sufficient conditions for consumer information, a minimum standard for (financial) products should be implemented and controlled (Oehler 2011, 2016). This means that each financial product offered to retail customers has to meet the same requirements to product information in the form of a standardized, comprehensible, and comparable short-form disclosure document which includes clear-cut information on substantial risks and liquidity/flexibility, net return including all costs and charges, and the product's fit and adequacy to the consumers' needs. The information needs to be presented in a way that avoids potential confusion and misunderstanding or misinterpretation. This is why the disclosure document should include information in absolute amounts of money in the respective currency, such as information in euros, instead of information that relies on ratios or percentages. To facilitate the process of introducing standardized disclosure documents that focus on the essential information and allow comparison between different financial products, the regulator should provide standardized sample or exemplar texts as legal requirement. While this might at first sight sound like a plea for additional and more regulation, it actually implies quite the contrary, because it allows to declutter current regulation which is highly fragmented into different requirements for, e.g., investment products, insurance products, so-called packaged investment products and state-subsidized private pension products, whereas comparable regulation for other products, such as current accounts, is inexistent. Consumers' direct contractual partner when entering into financial contracts, this typically means suppliers of financial products and of the disclosure documents, need to assume full liability for consequences of inaccurate or incomplete disclosure documents. To further improve the reliability of the information and its quality, the burden of proof needs to be on the supplier's side which would represent a reversal of the burden of proof compared to the current legal situation in main areas in consumer finance. To enforce regulation, the disclosure documents should be controlled both before the issue and afterwards periodically with respect to form and content either by the state or by consumer NGOs as information intermediaries as explicated above. Finally, suppliers have to document that the liability amount is on hand during the whole term of the financial contract.

Discussion and Conclusions

In this paper, we challenge the assumption of the traditional information paradigm that more information in the sense of reaching full transparency helps consumers with their decisions. To do so, we infer criteria that good consumer information needs to fulfil. Beyond this, we analyse whether current consumer information fulfils these criteria and develop suggestions on how to mitigate consumers' information problem. Our approach does not negate the importance of transparency. Instead, we discuss that a mere increase in the quantity of information does not necessarily benefit consumers' decision making, but that quality of information is essential. In this sense, we reshape the information paradigm to better acknowledge consumers' information and decision making process.

Based on the findings from research in behavioural economics and finance, necessary conditions for good consumer information include transparency, comprehensibleness, and comparability, whereas quality—in terms of clarity, fit to personal needs, and verifiability—represents the sufficient condition for good consumer information. Information that consumers currently receive hardly fulfils these conditions which, in turn, considerably hampers the trustworthiness and usability of this information. To mitigate consumers' information problem and to recover the idea of the information paradigm, we suggest to extend the information model and to integrate the idea of collective consumers, to establish product testing principles, and to implement controlled minimum standard for (financial) products.

These suggestions reflect that individual consumers do not gather and process information and do not make decisions as expected when assuming the idealized concept of a Homo oeconomicus. However, consumer policy and regulation that take behavioural aspects into account can lead to product information that reaches a minimum quality level and gives consumers a chance to reduce information and choice overload. The process of implementing good consumer information across all financial product categories, obviously, needs to be accompanied by repeated empirical testing of how consumers understand, interpret, and use the information in a changing environment, as given by the ongoing digitization of financial services, and to safeguard the effectiveness of measures taken.

Notwithstanding the suggestions developed in this paper, improving consumers' (economic and financial) literacy should be regarded as additional component to enhance the effectiveness of (good) consumer information. Lifelong learning activities, however, should focus on meta-knowledge about, e.g., whom to contact to get trustworthy information instead of trying to flood consumers with information that is characterized by short half-life. Instead of trying to make consumers experts in every area of life, these activities should enable consumers to find expertise when they need it. To help consumers to realize necessity to contact consumer NGOs, it is essential to encourage their understanding of risk and their self-control. Approaches to influence the choice architecture via nudging will need further discussion both in the academic arena regarding, e.g., the effects that nudging has and in the political arena regarding, e.g., the democratic legitimacy of interventions. However, even if specific nudges are implemented, they cannot offset the need for good consumer information. Instead, good consumer information would be a prerequisite for nudging as well.

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References

Baron, J. (2000). *Thinking and deciding* (3rd ed.). New York: Cambridge University Press.

Bateman, H., Eckert, C., Geweke, J., Louviere, J., Satchell, S., & Thorp, S. (2014). Financial competence, risk presentation and retirement portfolio preferences. *Journal of Pension Economics and Finance, 13*, 27–61.

Bordalo, P., Gennaioli, N., & Shleifer, A. (2013). Salience and consumer choice. *Journal of Political Economy, 121*, 803–843.

Drescher, L. S., Roosen, J., & Marette, S. (2014). The effects of traffic light labels and involvement on consumer choices for food and financial products. *International Journal of Consumer Studies, 38*, 217–227.

Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: Financial literacy and rules of thumb. *American Economic Journal: Applied Economics, 6*, 1–31.

Godwin, A., & Ramsay, I. (2015). Financial products and short-form disclosure documents: A comparative analysis of six jurisdictions. *Capital Markets Law Journal, 10*, 212–238.

Hyland, M., & Birrell, J. (1979). Government health warnings and the "boomerang" effect. *Psychological Reports, 44*, 643–647.

Jin, G., Luca, M., & Martin, D. (2015). Is no news (perceived as) bad news? An experimental investigation of information disclosure. Working paper.

Kaas, K. P. (1995). Einführung: Marketing und Neue Institutionenökonomik. *Zeitschrift für betriebswirtschaftliche Forschung zfbf, Special Issue, 35*, 1–17.

Kaas, K. P., & Severidt, K. (2002). Neue Preismodelle in der Kapitalanlageberatung der Banken? *Journal of Business Economics, 72*, 619–640.

Kahneman, D. (2003). A perspective on judgement and choice. *American Psychologist, 58*, 697–720.

Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review, 80*, 237–251.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*, 263–291.

Malhotra, N. K. (1984). Reflections on the information overload paradigm in consumer decision making. *Journal of Consumer Research, 10*, 436–440.

McDonald, R. L., & Rietz, T. A. (2014). Ratings and asset allocation: An experimental analysis. Working paper, Northwestern University and University of Iowa.

Micklitz, H.-W. (2003). The necessity of a new concept for the further development of the consumer law in the EU. *German Law Journal, 4*, 1043–1064.

Micklitz, H.-W. (2004). The principles of European contract law and the protection of the weaker party. *Journal of Consumer Policy, 27*, 339–356.

Micklitz, H.-W. (2013). *Jenseits des Informationsparadigmas – ein Plädoyer für ein soziales Verbraucherrecht*. Friedrichshafen: Invited Talk.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits to our capacity for processing information. *Psychological Review, 63*, 81–97.

Oehler, A. (2011). Behavioral Economics und Verbraucherpolitik: Grundsätzliche Überlegungen und Praxisbeispiele aus dem Bereich Verbraucherfinanzen. *Journal of Banking and Financial Research/BankArchiv. Zeitschrift für das gesamte Bank- und Börsenwesen, 59*, 707–727.

Oehler, A. (2012). Die Verbraucherwirklichkeit: Mehr als 50 Milliarden Euro Schäden jährlich bei Altersvorsorge und Verbraucherfinanzen. Befunde, Handlungsempfehlungen und Lösungsmöglichkeiten. Study for Bündnis 90 Die Grünen, Berlin/Bamberg, December 2012.

Oehler, A. (2013). Neue alte Verbraucherleitbilder: Basis für die Verbraucherbildung? *Haushalt in Bildung und Forschung HiBiFo, 2*, 44–60.

Oehler, A. (2014). Testen der Tester? Grundsätze ordnungsgemäßen Testens! *Wirtschaftsdienst. Zeitschrift für Wirtschaftspolitik, 94*, 444–447.

Oehler, A. (2015). Good consumer information: The information paradigm at its (dead) end? Invited Talk, Workshop "Where is law going if it is not going behavioral?", Florence, Italy: European University Institute, EUI.

Oehler, A. (2016). Verbraucherinformation und Verbraucherbildung. In P. Kenning, A. Oehler, L. Reisch, & C. Grugel (Eds.), *Verbraucherwissenschaften – Rahmenbedingungen, Forschungsfelder und Institutionen (forthcoming)*. Wiesbaden: Springer Gabler.

Oehler, A., & Reisch, L. (2008). *Behavioral Economics – Eine neue Grundlage für die Verbraucherpolitik?* Berlin: A study for Verbraucherzentrale Bundesverband (vzbv).

Oehler, A., & Unser, M. (2002). *Finanzwirtschaftliches Risikomanagement* (2nd ed.). Berlin: Springer.

Oehler, A., Rummer, M., & Wendt, S. (2008). Portfolio selection of German investors: On the causes of home-biased investment decisions. *Journal of Behavioral Finance, 9*, 149–162.

Oehler, A., Kohlert, D., & Jungermann, H. (2009). *The quality of financial investment advice for private investors: problems in the advice process and potential solutions*. Berlin: Statement by the scientific advisory council on consumer and food policy at the Federal Ministry for Food, Agriculture and Consumer Protection (BMELV).

Oehler, A., Höfer, A., & Wendt, S. (2014a). Do key investor information documents enhance retail investors' understanding of financial products? Empirical evidence. *Journal of Financial Regulation and Compliance, 22*, 115–127.

Oehler, A., Höfer, A., Horn, M., & Wendt, S. (2014b). Do mutual fund ratings provide valuable information for retail investors? Empirical evidence on ratings non-persistence and the risk of mutual fund closure. Bamberg: Working Paper.

Oehler, A., Horn, M., & Wendt, S. (2016). Benefits from social trading? Empirical evidence for certificates on Wikifolios. *International Review of Financial Analysis, 46*, 202–210.

Plous, S. (1993). *The psychology of judgement and decision making*. New York: McGraw-Hill.

Richter, R. (1998). Neue Institutionenökonomik: Ideen und Möglichkeiten. *Zeitschrift für Wirtschafts- und Sozialwissenschaften, Special Issue, 6*, 323–355.

Rouette, C. P. (2005). *Die Asset Allokationsentscheidung deutscher Privatinvestoren – Empirie und Konsequenzen für die Anlageberatung*. Lohmar: EUL.

Selten, R. (1990). Bounded rationality. *Journal of Institutional and Theoretical Economics, 146*, 649–658.

Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics, 69*, 99–118.

Simon, H. A. (1956). Rational choice and the structure of environments. *Psychological Review, 63*, 129–138.

Skurnik, I., Yoon, C., Park, D. C., & Schwarz, N. (2005). How warnings about false claims become recommendations. *Journal of Consumer Research, 31*, 713–724.

Steinhart, Y., Carmon, Z., & Trope, Y. (2013). Warnings of adverse side effects can backfire over time. *Psychological Science, 24*, 1842–1847.

Sunstein, C. R. (2014a). *The ethics of nudging*. Boston, MA: Working Paper, Harvard University.

Sunstein, C. R. (2014b). Nudging: A very short guide. *Journal of Consumer Policy, 37*, 583–588.

Torres, I. M., Sierra, J. J., & Heiser, R. S. (2007). The effects of warning-label placement in print ads: A social contract perspective. *Journal of Advertising, 36*(2), 49–62.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*, 1124–1131.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science, 211*, 453–458.