

## Standardized products and consumer financial decision-making

A behavioural analysis



## ***Autoriteit Financiële Markten***

The AFM promotes fairness and transparency within financial markets. We are the independent supervisory authority for the savings, lending, investment and insurance markets. We promote the fair and conscientious provision of financial services to consumers and private investors, as well as professional and semi-professional parties. We supervise the fair and efficient operation of the capital markets. Our aim is to improve consumers' and companies' confidence in the financial markets, both in the Netherlands and abroad. In performing this task, the AFM contributes to the stability of the financial system, the economy and the reputation and prosperity of the Netherlands.

# Contents

<b>Summary</b>	<b>1</b>
<i>Conclusion</i>	1
<i>More rational decision-makers versus better outcomes</i>	2
<i>Behavioural science and financial decision-making</i>	2
<i>Market sectors warranting further research</i>	4
<b>Introduction</b>	<b>5</b>
<b>Chapter 1. Rational choice theory and financial decision-making behaviour</b>	<b>7</b>
1.1 <i>Rationality</i>	8
1.2 <i>How do rational consumers take financial decisions?</i>	9
<b>Chapter 2. Do rational consumers exist?</b>	<b>12</b>
2.1 <i>Bounded rationality</i>	12
2.2 <i>Maximizing vs. satisficing</i>	12
2.3 <i>Four decision-making styles</i>	13
2.4 <i>Bounded rationality and behavioural science</i>	14
<b>Chapter 3. Behavioural science: how real consumers make choices</b>	<b>15</b>
3.1 <i>Intuitive decision-making behaviour</i>	16
3.2 <i>Biases and heuristics</i>	17
Preferences are not stable	17
More choice is not always better	21
People are overoptimistic	21
Social validation	22
Confirmation bias	22
<b>Chapter 4. Is this a problem?</b>	<b>24</b>
4.1 <i>Problems in the financial context</i>	24
Consumers compare only a limited number of products and providers	25
Consumers buy products having undesirable features	26
Consumers put off financial product purchases because of the stress of choosing	26

4.2 Risks for vulnerable groups	27
<b>Chapter 5. What can (should) we do?</b>	<b>29</b>
5.1 Can people's decision-making behaviour be improved?	29
5.2 Do standardized products turn consumers into more rational decision-makers?	30
5.3 Can better outcomes be achieved?	31
5.4 Can standardized products deliver better outcomes?	32
<b>Conclusion and analytical framework</b>	<b>35</b>
Analytical framework	35
Market sectors warranting further research	37
Disability insurance for self-employed workers	37
Pensions for self-employed workers	38
What next?	40
<b>References</b>	<b>42</b>

## Summary

In this report the Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten*, AFM) addresses the following question: in what way can standardized financial products contribute to good consumer decisions regarding financial products? This research was requested by the Dutch Minister of Finance<sup>1</sup>. ‘Standardized products’ are products for which all terms and conditions except the price are prescribed. If introduced, all providers would be obliged to carry standardized products in addition to their current product offer.

The Minister asked the AFM to analyse standardized products from the broader perspective of consumer decision-making. Insights from behavioural economics and psychology (hereinafter referred to as behavioural science) are at the core of this analysis. Behavioural research consistently shows that people often act on intuition when making decisions, and are influenced by factors that should actually be irrelevant, such as the wording of different choice options. To use more formal scientific terminology: the way people make decisions is boundedly rational. In this report the AFM focuses on behavioural insights that are relevant to the three problems discussed in the letter to the Dutch parliament (and for which standardized products are the proposed solution): **limited product comparison by consumers, the purchase of products having undesirable features, and the underconsumption of certain financial products.**

Given the broad perspective requested, the report begins with a broad-based approach and guides the reader step-by-step to the case of standardized products. In the present summary we have reversed the order: we start with the conclusion and work our way back to the underlying behavioural insights.

## Conclusion

We conclude that in order for standardized financial products to contribute towards good decision-making by consumers, we need to value outcomes (for example, consumers do not purchase undesirable products, or they buy something instead of nothing) more than the decision-making process itself. We believe there is little reason to believe that standardized products will enable consumers to make more thoughtful decisions and choose more suitable products. In other words: standardized products will not turn consumers into (more) rational decision-makers. That is why the AFM holds the opinion that standardized products are not a solution for the first problem discussed in the letter to the Dutch parliament; but they do, in theory, offer a potential solution for the second and third problems.

The difference between the two objectives – a more rational consumer decision-making process versus better outcomes – is explained in the following section.

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<sup>1</sup> Letter to the parliament on standardized financial products (FM/2014/698 M, July 4<sup>th</sup> 2014, in Dutch).

## More rational decision-makers versus better outcomes

The AFM has noticed that in discussions regarding standardized products and related initiatives, both in the Netherlands and abroad, these two objectives are often not clearly separated. Although both originate from the same problem (namely: the adverse consequences of consumers' boundedly rational decision-making behaviour), the proposed solution is substantially different.

The first objective, the desire to turn consumers into more rational decision-makers, can be recognized in the first problem discussed in the Minister's letter to parliament: the observation that consumer comparison of different products is limited. The assumption is that consumers compare few products and providers because of the large diversity and complexity exhibited by the products on offer. The introduction of standardized products would purportedly make it easier for consumers to 'shop around'. This reasoning reveals a desire to turn consumers into more rational decision-makers, not necessarily by increasing the time that consumers spend on making decisions, but by encouraging them to include more products and/or providers in the choice process, resulting in more thoughtful, better decisions.

The second objective is not related to the choice process itself, but to the outcome of that choice process. This objective can be recognized in the second and third problems cited in the Minister's letter to parliament. The idea behind this objective is that the problems caused by boundedly rational decision-making behaviour can be so great that we value better outcomes (at the individual and/or societal level) more highly than we do a rational, thoughtful choice process. For instance, if consumer pension savings are very low, the government might be relieved to see any kind of increase, even if the products chosen by consumers are not the optimal or most suitable solutions; or if policymakers feel strongly about consumers not buying a certain type of product, they might be willing to steer consumers in the choices they make.

On the basis of behavioural insights we believe that standardized products have potential only as an instrument with which to achieve better outcomes, not to improve the choice process itself. We summarize several of the most important of these insights in the following section.

## Behavioural science and financial decision-making

Until quite recently policymakers and supervisors generally thought of consumers as being rational<sup>2</sup> financial decision-makers. However, a rational decision-making

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<sup>2</sup> Rational, in this sense of the word, means that people have preferences and base their choices on these preferences. When several options exist, a rational consumer will make a choice by considering the pros and cons of every option and then choosing the one that best reflects their preferences. Rational, then, in this sense of the word, is a description of the process that people go through in order to make a choice. A

process makes considerable demands on the time, attention, and cognitive abilities of the consumer. In the real world the amount of available information and the number of choice options are well beyond the motivation and cognitive capacities of many, perhaps all, consumers. There are, of course, large differences between individuals; nobody chooses in a perfectly rational way, but some choose much more rationally than others. In this report we conclude that in the Netherlands, the consumers displaying financial decision-making behaviour that resembles that of a theoretically rational consumer are a minority.

Behavioural science yields an increasing understanding of the ways people deviate from the rational choice path; for instance, the fact that our preferences are not stable, but strongly influenced by the way the different options are described, or by the presentation of a given choice as being a profit or a loss. These and other psychological pitfalls help to explain all kinds of human behaviour. For example, house-owners are reluctant to accept a loss resulting from falling house prices, even if the proceeds would cover the outstanding mortgage; and it has proved very difficult to persuade owners of a Dutch *woekerpolis* (a type of investment insurance with excessive charges) to do something about their situation.

Although our intuitive decision-making behaviour does not invariably lead to problems, the outcomes are, indeed, frequently suboptimal. Certainly in the financial context, consumers' limited rational decision-making behaviour can lead to problems that warrant intervention. Although it is a logical (and intuitive!) reaction to want to turn consumers into more rational, thoughtful decision-makers, behavioural scientists agree that this is not a realistic option in the short term.

Moreover, the fact that we deviate from the rational choice path and instead make decisions on the basis of intuition is not, apparently, the result of the absence of a benchmark or standard. And by the same token, the provision of a benchmark will not turn consumers into more rational, thoughtful decision-makers (the first aim).

The second aim does, however, accord with behavioural insights into consumer decision-making. But to lead to better outcomes, standardized products would need to be designed as a default: the choice that applies to consumers unless they make an active choice to deviate from that choice. This requires much more than 'simply' designing and introducing a standardized product, and experiences abroad have shown that success in this area cannot be taken for granted. At the same time, a default implies a high degree of steering that in our view can be justified only by the existence of a serious problem.

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*rational choice is one that weighs up the pros and cons of the various options. In this sense rational is not a judgement of the quality of the decision made; a rationally-chosen option does not have to be a 'sensible' or 'good' choice. By the same token, a rational decision-making process can also result in an 'unwise' choice, e.g. an investment decision that goes awry.*

## Market sectors warranting further research

In the view of the AFM, the analysis performed in this report warrants further research into the desirability of default standardized products in two market sectors: disability insurance schemes and pension schemes for the self-employed. Both of these market sectors are characterised by a possible underconsumption of financial products as a result of boundedly rational decision-making behaviour. In both market sectors consumers could also suffer serious negative consequences, which justifies a focus on outcomes ('something is better than nothing') rather than the underlying decision-making process.

In a position paper titled 'Towards a future-proof second-pillar pension' (*Naar een toekomstbestendig tweede-pijlerpensioen*), the AFM indicated that it regards inadequate pension provisions by the self-employed as a significant risk, and endorses the use of compulsory pension schemes in the event that voluntary pension options do not sufficiently induce self-employed people to set funds aside for their old age. The insights presented in this report can be used as for further research into the possibilities of stimulating pension savings amongst the self-employed. To this end standardized products could form part of entirely voluntary solutions, or of scenarios involving compulsory participation. Our analysis shows that the extent to which standardized products influence consumer behaviour depends principally on the positioning of the standardized product within the entire product offer, as well as any additional policy measures.

In our view the pilot discussed in the Minister's letter to parliament should therefore take the form of a follow-up research study focusing on an improved understanding of the behavioural and other causes of the problems identified. The pilot could also incorporate the experimental testing of various interventions in the choice architecture, including the use of standardized products. Both consumers and market parties should play a role in developing and testing interventions.

Finally, there are a number of pressing questions that have little to do with consumer behaviour but which would need to be answered before it is decided to introduce a standardized product. For instance, what effect would the compulsory introduction of a standardized product have on providers' own sense of responsibility? What would be the effects, in terms of legal liability but also with regard to confidence and trust in the sector, if we were to remove this responsibility? And how are we to ensure that the product is maintained and adapted, should this prove necessary? The AFM is of the opinion that these questions have so far received too little attention.



## Introduction

This report was drawn up by the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, AFM) in response to a request by the Dutch Minister of Finance, in a letter to parliament concerning the use of standardized products,<sup>3</sup> to do further research into *how standardized financial products can contribute towards better choices by consumers with regard to financial products*. The letter defines standardized products as products for which all terms and conditions except the price are prescribed. If introduced, all providers would be obliged to carry standardized products in addition to their current product offer.

The Minister asked the AFM to analyse standardized products from the broader perspective of consumer decision-making. Insights from behavioural economics and psychology (hereinafter referred to as behavioural science) are at the core of this analysis. We focus on those insights that are relevant to the three problems discussed in the Minister's letter to parliament (and for which standardized products are the proposed solution): the limited product comparison carried out by consumers, the consumer purchase of products having undesirable features, and the underconsumption of certain financial products.

In recent years, the popularity of insights provided by behavioural science has grown rapidly, both in the Netherlands and abroad, and both inside and outside the scientific community. These insights have had profound consequences for the way policymakers and supervisors regard the choices that consumers make in areas such as health, traffic safety, the environment and financial matters. Time and again consumers have been shown to make less rational choices than had long been thought, often with deleterious consequences for themselves and/or society.

Behavioural insights therefore offer an excellent starting point from which to answer the Minister's question. It also means that this report begins with a broad-based approach and moves step-by-step towards the specific case of standardized products. In the view of the AFM, this approach is required in order to determine for which problems standardized products offer a solution and for which problems they do not. Although standardized products have been a much-debated topic both in the Netherlands and abroad, such an analysis has been absent thus far. The AFM intends the current report to fill this gap. We conclude the report with recommendations for further research into the two market sectors for which standardized products appear to offer the most potential advantages.

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<sup>3</sup> Minister's letter to parliament on standardized financial products (FM/2014/698 M, 4 July 2014, in Dutch).

The report is constructed as follows:

- In the first chapter we look back at rational choice theory – until recently, the dominant theory on consumer choice behaviour – and its implications for the way consumers make financial choices
- In the following chapter we examine the extent to which we encounter this theoretical, rational consumer in the real world
- We then sketch a number of important behavioural insights into people’s choice-making behaviour. We show how and why they diverge from the most rational choice path. Where possible we give examples in financial contexts
- We then address the question: is this a problem? Not necessarily, it turns out, but there are several reasons for supposing that it can cause problems in the financial context
- The fifth chapter then examines the question of what we can, or should, do about these problems, and the extent to which standardized products may provide a solution
- We conclude this report with a summary of the insights described in the previous chapters, brought together in an analytical framework which helps to identify the market sectors in which boundedly rational decision-making causes problems that might be solved by means of standardized products. We conclude that such problems appear to occur in two market sectors, but that further research is needed to determine whether standardized products could solve them

### ***AFM and behavioural science***

*Understanding the behaviour of financial consumers is important to the AFM: firstly in order to ensure that we are investigating the right problems, and secondly in order to improve the effectiveness and efficiency of our interventions. For these reasons, the AFM intensified behavioural science research two years ago.*

*The methodology employed by the AFM is based on a descriptive model of consumer decision-making which originated in the marketing world and describes the process that an idealized, rational consumer goes through in making a financial decision (see section 1.2). By reference to behavioural science research we then examine how and why consumers deviate from this rational path. Where necessary we carry out our own supplementary research. This knowledge then forms the starting point for thinking about supervisory interventions.*

*Behavioural science methodology is knowledge-intensive and time-consuming, but it yields valuable and often surprising insights. The AFM has already used this approach to study the consumer credit market and the behaviour of independent investors (the latter study is still under way). Where relevant, the present report will refer to insights gained in these studies.*

## Chapter 1. Rational choice theory and financial decision-making behaviour

This chapter begins with a brief review of rational choice theory, the theory of consumer decision-making behaviour that predominated until a few years ago. We first examine the concept of rationality (the core of this theory) and then briefly describe how a consumer, according to this theory, makes financial decisions. We illustrate this using a fictional, but rational consumer with a pension problem.

### 1.1 Rationality

Until a few years ago the predominant theory of consumer decision-making behaviour was the so-called 'rational choice theory' (RCT). In its most basic form, RCT simply means that people have preferences and base their choices on these preferences. When several options exist, a rational consumer will make a choice by weighing up the pros and cons of the various options, and choose the one that best accords with his or her own preferences.

It is important to emphasize that 'rational', in this sense of the word, is not a value judgement but *a description of the process that people go through in order to make a choice*. A person makes a rational choice by weighing up the pros and cons of the various options. 'Rational' here is not a judgement of the quality of the choice this person finally makes; a rationally chosen option is not necessarily a 'sensible' or 'good' choice. By the same token, a 'bad' choice, for example an investment decision that goes awry, can also be the result of a rational decision-making process.

RCT has enjoyed long popularity, in part because the theory can be used to predict an individual's decision-making behaviour. This does require the assumption, that people's preferences are 'stable', that is to say, independent of the context within which a choice is made or of the way in which options are presented. We will see in this report that behavioural scientists have raised many objections to this assumption.

Another assumption is that people are motivated to invest time and trouble into collecting and studying information on different options. After all, this is necessary if they are to compare options and make a choice between them. Behavioural scientists also have problems with this assumption.

## 1.2 How do rational consumers take financial decisions?

For a rational financial consumer the decision-making process would look like the diagram below (based on Kotler and Keller, 2011).



**Figure 1** The decision-making process of a rational financial consumer. Based on Kotler and Keller (2011).

A rational consumer is held to: a) pass through every step and omit none, b) pass through these steps in the correct order, and c) devote adequate time and attention to each step in order to arrive at the choice of product or service that is most appropriate to his or her preferences. In the following section we illustrate these five steps by reference to a rational consumer with a pension problem.

### 1. Problem recognition

The rational decision-making process begins at the moment that the consumer acknowledges their own financial need. The way this need arises will vary per product and per consumer. Large differences exist in the attractiveness of different financial products, because financial products are seldom an aim in themselves; they are usually a means to some other end. A mortgage is a way to move into your dream home, a loan is a way to buy a car without having to wait, and travel insurance is a way to secure a carefree holiday. However, while a consumer can be expected to take active steps to arrange a mortgage for their dream home, the attractions of abstract, long-term issues like disability income and pensions are less clear-cut.

*For example: after reading their pension savings statement, a rational consumer realizes that the pension provisions he has built up will not be enough to maintain his current lifestyle when he reaches pension age. In other words, he acknowledges that he has a problem.*

### 2. Information search

A rational consumer who wants to solve a problem will start looking for the information he needs to do so. He will search online, read brochures, papers and books, follow a course, talk with family and friends, visit the offices of various

financial concerns, and look into the possibility of hiring the services of an independent financial advisor.

*For example: the rational consumer searches online for information on the various options for saving, insuring and investing in order to supplement his pension. He looks at a variety of websites, both those of independent parties (e.g. the Dutch consumer advice site [wijzeringeldzaken.nl](http://wijzeringeldzaken.nl)) and those of different financial concerns. He also reads books on the subject and visits relevant seminars.*

### **3. Evaluation of alternatives**

In step 3 of the decision-making process, the consumer processes all the information found, evaluates the different options, and decides their preference.

*For example: the rational consumer realizes that pensions are a complicated issue. He therefore hires an independent advisor to help him weigh up the costs and benefits of the various options.*

### **4. Transaction**

The fourth step consists of the purchase of the product.

*For example: the consumer purchases an investment product from provider Y.*

### **5. Monitoring and adjustment**

The purchase of certain financial products, e.g. short-term travel insurance, is a one-off event which requires no subsequent monitoring or adjustment. However, for many other financial products it is advisable to keep an eye on how the product is doing post-purchase. Sometimes a provider will advise consumers of relevant developments; for instance, the end of a mortgage's fixed-interest period. In other cases the consumer must keep an independent eye on developments, for instance if he has made private investments to supplement his pension. If necessary (in other words, if a new problem arises) a rational consumer will get into action and go through the decision-making process again.

*For example: after purchasing the product, the rational consumer decides to devote half a day in December every year to examining his financial situation. Three years after purchasing the product, the consumer resigns from his job in order to become self-employed. He realizes that this will have consequences for his pension provision, and takes the necessary action.*

The description above makes it obvious that a rational decision-making process makes considerable demands on a consumer's time, attention and cognitive skills. In

the next chapter we will examine the question of how many consumers actually resemble this rational ideal.

## Chapter 2. Do rational consumers exist?

In the previous chapter we outlined the demanding financial decision-making process of the rational consumer. In this chapter we examine the question of how many real-world consumers actually take decisions in this way.

### 2.1 Bounded rationality

Scientists have long known that in many real-world situations the amount of information and the number of choice options available exceed the motivation levels and cognitive capacities of many, if not all, people.

As early as the 1950s Herbert Simon coined the phrase ‘bounded rationality’ (Simon, 1955). Because there is a limit to the amount of information we can take in (the input), the choices we make (our output) are not always the right ones. Put another way: we do our best, but the results do not always reflect this (Lipman, 1993).

Theories of bounded rationality also acknowledge that different people behave very differently in how they seek information and the thoroughness with which they do so. No-one makes perfectly rational choices, but some people make more rational choices than others (Tiemeijer, 2011). It is therefore important not to assume that all consumers are entirely irrational and make all their financial decisions without thinking.

### 2.2 Maximizing vs. satisficing

In this context, behavioural scientists also speak of the difference between maximizing and satisficing behaviour<sup>4</sup>. Maximizers strive to choose the best option, by continuing to seek information and compare options until they find the option that best meets their preferences. Satisficers do not search for the best, but for what is good enough. They seek until they encounter an option they consider good enough, and then they leave it at that (Gigerenzer and Gaissmaier, 2011; Lipman, 1993; Tiemeijer et al., 2009). Satisficers leave some options and information out of their decision-making process, thereby reducing the time they need to get from acknowledging a problem to choosing a product. Although there is a clear difference in these two decision-making processes, it is unclear which of these two approaches delivers the ‘best’ choices; this is because the costs of searching for more options are not always outweighed by marginal advantages in the final choice.

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<sup>4</sup> The author of the concept of satisficing is the above-mentioned Herbert Simon. Maximizing and satisficing are not two clearly demarcated categories, but rather, the ends of a single scale. People vary in the degree to which they tend towards one or other end of the scale.





**Figure 2 Satisficers shorten the decision-making process by leaving certain information and options out of their considerations.**

As far as we are aware, no research has yet been carried out into how the Dutch population is distributed along the maximizing-satisficing axis. The AFM does, however, possess data from its own research that can tell us something about the number of rational decision-makers in Dutch financial markets.

### 2.3 Four decision-making styles

The AFM distinguishes between four financial decision-making styles: self-controlled, ambitious, advice-dependent, and convenience-seeking. This categorization is based on a 10-question survey that was developed and tested by an external research bureau in 2004. Each question provides two opposed statements about the respondent's financial decision-making style, e.g. 'I put a great deal of time into it' as opposed to 'I do it as quickly as possible.'

The segment that most resembles the 'maximizing' financial decision-maker is the group self-controlled consumers. They score high on questions such as 'I look for lots of information', 'I consider many alternatives', and 'I keep looking until I have found the best product'. In 2004, at the first measurement, 29% of the Dutch population was a self-controlled financial decision-maker; by 2008 this percentage had risen to 35%, and by 2011 it had risen again to 45% (Zijlstra, 2012). Since then the share of self-controlled decision-makers has stabilized. The segment also appears to be the one with the most will-power<sup>5</sup>.

This shift can be explained in part by the fact that information is now much more easily accessible to everyone than it was in 2004. Today's consumers therefore have the perception, at any rate, that they take financial decisions in a more considered way (Zijlstra, 2012). It has not been ascertained whether this actually results in better financial decisions. It seems safe to state, however, that it is a minority of Dutch people who show decision-making behaviour resembling that of the hypothetical, rational financial consumer. This is in line with the limited product comparison described in the Minister's letter to parliament. We will examine this comparison-making behaviour more closely in the chapters to come.

<sup>5</sup>AFM research into consumer credit and decision-making behaviour of consumers, unpublished, 2013.

## **2.4 Bounded rationality and behavioural science**

The fact that Simon observed in 1955, that people diverge from the rational choice path, has since been closely studied and elaborated in behavioural research. Much research in this field has focused on the shortcuts that people use when making decisions, and the reasons they do so (Kahneman, 2003). Unlike the proponents of bounded rationality theories, behavioural scientists conclude that shortcuts are not a shrewd solution to the overwhelming amount of available information and choices, but often lead to suboptimal outcomes. In the next chapter we will discuss a number of important behavioural insights that are relevant to the discussion on standardized products.

### Chapter 3. Behavioural science: how real consumers make choices

Behavioural insights into human decision-making behaviour are not new. Psychologists will stress that many of the influential experiments carried out by the Nobel Prize winner Daniel Kahneman date from the 1970s and 1980s. Depending on their own ideological allegiances, economists will point to Keynes' ideas on 'animal spirits' or the work of Adam Smith (Camerer et al., 2003). And as we noted in the previous chapter, as early as the 1950s Herbert Simon was discussing the 'bounded rationality' of economic actors.

But it is in more recent years that these insights have become increasingly popular. In the financial context this has much to do with the current economic crisis, which has seriously damaged the reputation of neoclassical economic orthodoxy, including its view of economic actors as rational beings. This has created space for the heterodox insights from behavioural science. Supported by growing amounts of empirical evidence, these insights have become so popular that we might almost speak of a new orthodoxy.

Empirical research has shown again and again that in making choices (financial or otherwise), people often depart from the rational choice path – sometimes because we make a conscious choice not to follow that path, but often because psychological factors influence us to stray from this path without realizing it. And sometimes we cannot even find the path. Kahneman (2003) summarized human decision-making behaviour as follows:

*'The central characteristic of agents is not that they reason poorly but that they often act intuitively. And the behaviour of these agents is not guided by what they are able to compute, but by what they happen to see at a given moment.'*

In other words: people behave intuitively, and their choices are influenced by things that should make no difference at all to a rational consumer. The list of 'irrelevant' things that turn out to matter in this way is long and still growing. In this chapter we outline a number of behavioural insights that are relevant to the financial context and to the problems discussed in the Minister's letter to parliament.

All the effects described here have been repeatedly demonstrated in experimental settings. This is not to say that they have also been examined in practice. Given the context-dependency of our decision-making behaviour – one of the core conclusions of behavioural science! – it is very important to be careful when copy-pasting experimental research results to the real world, or from one decision-making context to another. In many cases further research will be needed; we have more to say on this in Chapter 5 and in the conclusion.

### 3.1 Intuitive decision-making behaviour

*A bat and a ball cost €1.10 in total. The bat costs €1 more than the ball. How much does the ball cost?*

There is a good chance that the first figure that came to your mind was ‘10 cents’. Perhaps you immediately realized that that was wrong, and that the right answer is 5 cents. But perhaps you realize only now, while reading this, that there was something wrong with your first, intuitive answer. If so, you are in good company: in an experiment with students attending the prestigious American University of Princeton, 50% of the students gave the same wrong, but intuitively correct, answer<sup>6</sup>.

This little test illustrates the difference between two ways of thinking. Psychologists distinguish between subconscious (type 1) and conscious (type 2) modes of thought. Type 1 thinking is automatic, intuitive, fast, and effortless. Type 1 thinking is the reason that your first answer to the question above probably was “10 cents!”.

Type 2 thinking is slower, more deliberate, and requires a conscious effort. You use type 2 when reading a complex report (at least, if you do so attentively), when formulating a diplomatic answer to a sensitive question, or when calculating why the ball does not cost 10 cents, but 5 cents (Kahneman, 2003).

Another function of type 2 thinking is to monitor whether the output generated by type 1 is correct. Type 2 is not always equally alert, however, and will often be satisfied with a plausible answer. This is why so many students of above-average ability give the wrong answer to the bat/ball question. The conscious activation of type 2, for example to consider your pension provisions or to examine an insurance policy’s conditions, also requires a certain amount of will-power and self-discipline. However, the amount of will-power we can muster in order to complete a difficult or tiresome task is not infinite<sup>7</sup> (Tiemeijer, 2011).

In combination with the time and energy demanded by type 2, which is time and energy we would rather devote elsewhere, this explains why most of our decisions are made intuitively (Kahneman, 2011).

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<sup>6</sup> Test question developed and tested by Frederick, cited in Kahneman (2003).

<sup>7</sup> Will-power is often compared to a muscle that tires if it is over-used but which can also be strengthened by training. There is a lively debate on this characterization of will-power, and the extent to which motivation, for instance, plays a role (Hagger et al., 2010).

## 3.2 Biases and heuristics

The intuitive, or subconscious, nature of many of our decisions explains why people behave in ways that are very different from what RCT would predict. Behavioural scientists often speak of biases and heuristics to describe the deviations from the rational choice path (Tversky and Kahneman, 1974). Heuristics are the mental rules of thumb we use to make quick decisions, as for instance in: “If everyone else is investing, it must be a good idea.” If heuristics systematically lead to incorrect appraisals or non-rational decisions, we speak of a bias; for instance, people will over-estimate the likelihood of event X if they saw an instance of event X in the recent past, irrespective of the statistical likelihood of event X actually occurring.

In the following sections we will discuss a number of the biases and heuristics that play a role in the financial context. Many of these biases and heuristics are relevant to the problems mentioned in the Minister's letter to parliament: limited product comparison by consumers, the purchase of products having undesirable features, and the underconsumption of certain financial products. We will explicitly refer to these problems when relevant.

### ***Preferences are not stable***

As we mentioned earlier, an important assumption of RCT is that people's preferences are stable; in other words, that the choices people make are independent of the context in which they make these choices (e.g. whether a choice is being made on one issue alone, or in combination with other choices) or the way in which the various choice options are presented. In reality, however, preferences are anything but stable (Camerer et al., 2003). We will illustrate this by way of three examples.

#### *Example 1: loss aversion*

One example of unstable preferences is that people are sensitive to the presentation of a choice as being a profit or a loss. The fact that people find loss unpleasant is no surprise. But people find losses so unpleasant that a loss hurts twice as much as a corresponding profit causes pleasure: a €100 loss causes as much pain as a €200 profit causes pleasure. People are therefore prepared to run the risk of a €50 loss only if the potential profit is €100 (Kahneman and Tversky, 1984).

Behavioural scientists call this effect loss aversion. In the financial context, loss aversion helps to explain why house-owners are not keen to accept their losses when house prices are falling, even if the sale fully covers any outstanding mortgage (Camerer et al., 2003). In the investment context, loss aversion is known because of the so-called disposition effect: people's tendency to sell profitable shares too quickly and retain loss-making ones in the portfolio too long, in the hope of later making good the loss (Barber and Odean, 2013).

Loss aversion also helps to explain why people are often passive when it comes to switching to another insurer, and why it is often difficult to get them to do anything about a *woekerpolis* (an insurance policy with very high charges). In assessing alternatives to the product we already possess (the status quo), we regard alternatives either as a loss (a worse product) or as a profit (a better product). Because the potential losses weigh more heavily on our minds than do the potential advantages, we are inclined to simply do nothing and to stick to what we already have. Behavioural scientists call this the status quo bias (Kahneman, 2003).

#### *Example 2: framing*

Another example of unstable preferences is that people making decisions are susceptible to the wording or the way that options and alternatives are described. A different presentation or framing can lead to a different choice, even if the content of that choice was not altered (Kahneman, 2003).

An important way in which framing influences decision-making behaviour is the effect of defaults: people turn out to be very susceptible to options that are presented as the default, and will often stick to these (Kahneman, 2003). A default here is a choice or setting that applies to you unless you take action to modify it (Johnson et al., 2012). A well-known example of a default is the way organ donorship is often arranged (e.g. in the Netherlands): you are not a donor unless you register yourself as one. On a website form, a pre-ticked box or a pre-filled field are also examples of defaults. The amount of trouble you have to go to to change a default can vary considerably: unticking a box on a web-form is obviously a lot less work than registering as an organ donor.

We now know that defaults have a strong influence on real-world choices, even with regard to issues having so much impact that you would expect people to act on their own initiative (Johnson et al., 2012). A famous piece of American research showed that participation levels in a pension plan are significantly higher when participation is the default and action is required to *not* participate. For the same reason, many people stick to default contribution levels and stockholding choices (Madrian and Shea, 2001).

In car insurance it turns out that if comprehensive cover is the default, people will seldom deviate from that, and they will want a steep discount on the premium in return for more limited cover. However, if limited cover is the default people stick to that, and they are then much less willing to pay a higher premium in exchange for comprehensive cover (Johnson et al., 1993). Here we see the effects of both defaults and the status quo bias at work!

There are several different explanations for the strong influence of defaults. People are often inert, they may perceive the default as an implicit recommendation,

and the above-mentioned status quo bias may also be at work (Soll et al., 2014; Smith et al., 2009; Madrian and Shea, 2001). But people do not always stick to the default. When the introduction of a new pension system in Sweden was accompanied by enormous media attention and exhortations to make active choices, the majority deviated from the default. When these marketing efforts relaxed after the first year, however, more than 90% of new customers stayed with the default (Cronqvist and Thaler, 2004). Businesses, too, can have an interest in dissuading people from adopting the default, and if they deploy their considerable marketing skills to this end, it can be very difficult for policymakers to make the default a success (Willis, 2013).

***Intermezzo: is a standardized product a default?***

*In the Minister's letter to parliament a standardized product is defined as a product for which all conditions, except the price, are prescribed. On the one hand the letter speaks of standardized products as a benchmark, something that helps consumers to compare products; on the other hand standardized products are seen as a means of 'steering' people towards more socially desirable products.*

*The word 'steering' implies a link with the concept of defaults. A standardized product might sound like the option that people would automatically select, but simply introducing a standardized product is not enough to make it the default. Whether or not an option is seen as the default depends largely on the presentation of the various options. This is examined further in Chapter 5.*

Another way in which the presentation of an option can influence the final choice is the effect of so-called anchors. In making a choice the decider seeks a reference point, but the reference point used may be entirely irrelevant to the choice itself. In a famous experiment, Tversky and Kahneman (1974) manipulated a wheel of fortune, numbered from 0 to 100, so that it only ever stopped at 10 or at 65. Groups of students first watched the wheel come to a stop, wrote down the result (either 10 or 65), and were then asked a question: *What is your best estimate of the percentage of African countries in the United Nations?*

Naturally, the number that a wheel of fortune happens to stop at is entirely irrelevant to an estimation of the number of African countries in the UN. The students should therefore have ignored this information. But they did not: those students who saw the wheel stop at 10 estimated the percentage of African countries in the UN as 25%, while the students who saw the wheel stop at 65 estimated this percentage as 45%. In other words, the students' answers were significantly influenced by a totally irrelevant anchor.

In 2013 the AFM carried out research into the effect of anchors on consumers' preparedness to take out consumer credit.



**Figure 3** Screen shots of anchors used in AFM research into consumer credit ('Gewenst leenbedrag' means 'Desired loan amount')

In an experimental setting, consumers were shown two types of anchor. The first anchor was a scale; the low variant gave a low amount as the scale maximum, and the high variant gave a high amount. The second anchor used a slider with a little knob indicating an amount. In the low variant this amount was set low, and in the high variant it was set high. The test subjects were randomly allocated to the high or the low variant of an anchor. See Figure 3 for depictions of the anchors used.

The hypothesis was that consumers who saw the higher anchor would be prepared to borrow a larger amount for a hypothetical purpose. This was indeed the case: consumers who were shown the higher anchor indicated a willingness to borrow significantly larger amounts – in some cases thousands more Euros.

Interestingly, it was unimportant whether a person was a maximizer or a satisficer: all the test subjects were influenced by the anchors. Other research has even shown that in precise people, who one would expect to take decisions in a more rational way, the effects of anchors can actually be greater (Eroglu and Croxton, 2010). People having a given expertise turn out to be less susceptible to the anchor effect, but only in their own professional area (Soll et al., 2014; Eroglu and Croxton, 2010).



### *Example 3: hyperbolic discounting / present bias*

People generally prefer short-term rewards. Given the choice between receiving €10 now or €12 in a week's time, most people will choose to take €10 now. This is because they over-discount the value of future rewards (more than the delay would justify on rational grounds). The same phenomenon means that most people underestimate future costs. Even when they know what the most sensible choice would be, and intend to do the most sensible thing, the preference for a short-term reward can gain the upper hand (Laibson, 1997).

This makes it harder, for instance, for self-employed people to set aside enough for their old age pensions. Or people arrange no disability insurance, because they find the premiums too high. The present bias also helps to explain why mortgages with high risks but low monthly costs were popular for so long. Present bias plays an important role in the problems identified in the Minister's letter to parliament, namely that consumers sometimes buy products having undesirable features or that they buy nothing at all, even though it is in their own interests to do so.

### ***More choice is not always better***

People attach great value to freedom of choice. But research has also shown that having a great many choice options actually makes it harder to make a good choice. Consumers faced with too many alternatives suffer from so-called choice overload; they may make suboptimal choices, or they may give up altogether and make no choice at all (Iyengar and Lepper, 2000).

With regard to investment decisions, for instance, many people turned out to feel overwhelmed if they had a great many options. This applied only to people with above-average financial knowledge; people with little financial knowledge *always* felt overwhelmed, no matter how many options were available (Agnew and Szykman, 2005). Another study showed that a large number of fund choices reduced the likelihood of participation in a pension scheme; every 10 extra funds lowered the participation rate by 1.5 to 2% (Sethi-Iyengar et al., 2004). Although this might seem counter-intuitive, too many options might also be a cause of the underconsumption of financial products noted in the Minister's letter to parliament, for instance in market sectors where a great many different products are available (e.g. the many options for setting aside supplementary savings or investing for a pension) or in market products within which a great many choices still have to be made (e.g. disability insurance).

### ***People are overoptimistic***

Research has shown that in a medical context people underestimate the chances that something unpleasant will happen to them and overestimate the likelihood of

positive life events (Weinstein, 1980). In research into investors, overconfidence (a concept related to overoptimism) has been linked to disappointing investment results (Barber and Odean, 2013).

Overoptimism can also play a role in the problems noted in the Minister's letter to parliament. If people tend to underestimate the possibility that something unpleasant will happen to them (e.g. damage to their house, or disability), they will naturally be less inclined to insure themselves against the possibility. And if you are convinced that as an investor you can beat the market, it makes sense that you would ignore passive investment strategies and options for receiving investment advice.

Unfortunately, those whose skills are the most limited are also the most susceptible to self-overestimation. Not only do they make bad decisions, they also lack the metacognitive abilities to realize it (Kruger and Dunning, 1999).

### ***Social validation***

The decisions we take are regularly influenced by the choices that *others* around us make. People compare their own situation with that of others in their social environment. If many of those around us have already purchased a certain product, we implicitly assume that it must be a good product (Cialdini, 1993).

The effect of this social validation can be clearly seen in the investment context, in which herd behaviour is a familiar phenomenon. Social validation can also play a role in product underconsumption: if no-one in your environment is saving up for their old age, you may well come to the erroneous conclusion that you do not need to either. And even when deciding which type of mortgage we should arrange, or which insurer we should use, we are probably influenced by other people's choices more strongly than we realize.

### ***Confirmation bias***

People have a preference for information that confirms their existing inclinations and expectations; this is known as the confirmation bias. Confirmation bias plays a role in seeking, assessing and remembering information. In collecting information we look automatically for that which confirms our expectations. The same applies to our assessment of this information: we need little evidence to feel that our existing preferences and expectations have been confirmed, but we need a lot of evidence before we are willing to change our minds about something. The stronger one's preferences or expectations, the greater the strength of confirmation bias (Nickerson, 1998).

Confirmation bias can therefore also play a role in product underconsumption: if we are convinced that our pension provisions are in order, it will be difficult to convince us that we need to take steps to fill a pension gap.

Confirmation bias also helps to explain why people do not shop around as much as they might: if we are convinced of the correctness of our choice for a certain provider, we may well be inclined to choose the same provider for our next product purchase.

## Chapter 4. Is this a problem?

The fact that people do not arrive at decisions in a rational way need not necessarily be a problem. For consumers, a boundedly rational decision-making process can lead to decisions that are good enough, and in some cases a boundedly rational decision-making process will actually yield a *better* outcome than a rational one (Wilson and Schooler, 1991; Gigerenzer and Gaissmaier, 2011). In this chapter we outline a number of reasons why departing from the rational course in the financial context can, however, lead to problems that warrant intervention. What these interventions might look like, and whether a standardized product is a potential solution, is examined in the next chapter.

### 4.1 Problems in the financial context

There are several reasons for supposing that the intuitive way in which people often decide might cause more problems in the financial context than in other contexts. This varies per financial market sector, partly because of the amounts of money involved, but also because the effects of certain decisions are related to the future (e.g. disability insurance and pension) while those of others are more direct (e.g. a personal loan).

However, in many financial markets the products involved are complex and difficult to understand for many consumers. For instance, the estimation of opportunity and risk often play a significant role, and we know that many people are bad at this estimation (Kahneman and Tversky, 1973). People also underestimate the effect of cumulative interest on their debts and savings (Madrian and Shea, 2001). Occasionally financial decisions concern subjects that many people would rather not think about at all, like disability and old age.

The intertemporal aspect of many financial decisions is a complicating factor: people are being asked to do something now that costs money, and to accept that the benefits will come later, if at all.<sup>8</sup> As we saw in the previous chapter, people have a limited ability to resist the temptation to consume *now*, even if this is at the expense of their comfort in old age, for instance.

Lastly, with regard to financial products the ability to learn from past mistakes is often limited. Most people sign a mortgage contract once or perhaps twice in their lives. The same applies to many other financial products, such as the decision to save or invest extra money towards a pension (Llewellyn, 1999). This is despite the fact that a bad choice can have serious consequences, not only for the consumer but also, if things go badly on a larger scale, for the whole of society.

In the previous chapter we gave a number of examples showing how bounded rationality can lead to problems, not just in theory but also in practice. These problems substantially overlap with the problems described in the Minister's

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<sup>8</sup> Think, for instance, of insurance against a risk that never occurs.

letter to parliament, and which – to a greater or lesser extent – can all be traced back to boundedly rational decision-making behaviour of consumers. In the following section we briefly discuss each of the three problems and the role played by biases and/or heuristics.

### ***Consumers compare only a limited number of products and providers***

The perception that consumers compare few alternatives when taking financial decisions is confirmed by research carried out by the AFM and others:

- Research into the decision-making process in consumer credit shows that a sizeable group of consumers considers only one provider (GfK, 2013).
- AFM-commissioned qualitative research amongst independent investors shows that many investors make *no* comparisons between different services and providers before making a choice (TNS, 2014). These results are in line with large-scale quantitative EU research showing that investors hardly ever ‘shop around’ (Chater et al., 2010).
- Research into recent mortgage customers shows that a majority of those signing a mortgage contract consulted with only one advisor. The average consumer devoted less than six hours to seeking mortgage information (GfK, 2014).

There are several reasons why consumers make such a limited number of product and service comparisons, and the complexity of the supply is just one. In the last chapter we showed how numerous biases also play a role in situations where consumers take a financial decision. If you are convinced – rightly or wrongly – that you are as able an investor as the professionals, then it is understandable that you will not be so interested in services which require that you take advice or hand over your investment decisions to someone else. Meanwhile, the status quo bias makes people reluctant to make any changes at all. With regard to mortgages, this can mean that consumers stay with their existing mortgage lender for a new fixed-interest period, without making a conscious choice in the matter. The same effect can clearly be seen in health insurance, where recent research carried out for the Netherlands Authority for Consumers and Markets (*Autoriteit Consument en Markt*) shows that not even substantial cost savings are enough to motivate people to switch to another provider. Asked for the reason for this inertia, only 10% of the respondents cited the overcomplexity of supply (Marketresponse, 2014).

It cannot be said, however, that consumers in general are inadequately price-conscious. AFM-commissioned interviews with independent investors, for instance, revealed that in choosing an investment service provider they were so focused on the costs that they lost sight of the advantages and disadvantages of given forms of service. Present bias (Chapter 3) also helps to explain this phenomenon. At the same time, however, this price awareness was much lower in the choice of investment products. A necessary condition for price awareness is naturally that the costs of

services and products are transparent. The AFM strives to make these costs transparent where they are insufficiently so<sup>9</sup>.

The clear difference in price awareness between the health insurance market and the investment services market indicates that the biases we have described have different effects in different market sectors. Without further research it is impossible to say which bias applies to which market sector and to what extent this may lead to problems. It is, at any rate, good to realize that not every bias necessarily applies to every decision a consumer takes.

### ***Consumers buy products having undesirable features***

The Minister's letter to parliament states that a standardized product can steer consumers towards products with socially desirable characteristics, such as safety, sustainability, or less superfluous functionality. Behavioural insights into phenomena such as the present bias help to explain why consumers sometimes choose products having socially *undesirable* characteristics; for instance, risky mortgage products with attractively low monthly costs. For the same reason consumers may have little interest in sustainability: they are principally occupied with the present, and have little concern for the long-term consequences of their decisions.

Of course, consumers are not always to blame for the sale of products having undesirable features. Think for example of the case of investment insurance, where products with very high associated costs were sold by advisors who, under the influence of perverse payment incentives, were not always acting in their clients' interests. For this and other reasons, since 1 January 2013 the AFM supervises the product development processes of financial enterprises. Customers must be able to trust that the products they are offered are demonstrably the result of product development processes in which balanced account has been taken of their interests. The AFM's objective is a financial sector which guarantees the quality of its own products.

### ***Consumers put off financial product purchases because of the stress of choosing***

The third problem described in the Minister's letter to parliament is the avoidance of the stress of choosing and the resulting procrastination. In certain cases, procrastination can result in avoidance: the choice is simply not made. Putting choices off, or avoiding them altogether, can present people with financial setbacks and problems; this is the case if people wait too long with supplementary pension savings, or if a self-employed person keeps putting off arranging disability insurance. If this kind of behaviour is widespread, it may also harm society as a whole.

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<sup>9</sup> <http://www.afm.nl/nl/jaarverslag/jaarverslagen/jaarverslag-2013/themas-2013/thema-2013/vermogensopbouw/verbetering-producten-advies-vermogensopbouw/kosten.aspx> (in Dutch)

The reasons why people buy a financial product too late, or not at all, are many and varied. As we described in the previous chapter, choice overload can indeed lead to putting off a purchase or abandoning it altogether. But other factors are also at play. These include overoptimism: for instance, we may underestimate the chances that we will fall seriously ill, or overestimate the period we can bridge using our savings. Consumers may not trust providers, or they may be (rightly or wrongly) dissatisfied with the conditions set by the product. Confirmation bias will make it all the more difficult to dissuade them of such convictions. Consumers may also see that few people in their own circles have bought a given product, and draw the erroneous conclusion that they have no need for it themselves. Lastly, it may of course simply be a matter of not having enough disposable income.

The AFM recently distributed a questionnaire amongst 500 self-employed workers on the question of disability insurance (Veldkamp, 2014). 75% of those in this group turned out to have no disability insurance whatsoever. When they were questioned on the principal reasons for this, their answers made reference to many of the points above.

#### **4.2 Risks for vulnerable groups**

In order to determine whether boundedly rational decision-making behaviour in consumers leads to problems, it is also useful to look at the impact on different consumer groups. The observation that vulnerable groups are the worst affected may justify for an intervention; after all, when making financial decisions certain groups of consumers run greater risks than others. They are less able to take well-considered decisions, or limited financial buffers might mean that a wrong choice has more serious consequences.

Although everyone ‘suffers’ to some degree from biases and heuristics, there is some evidence that in certain vulnerable groups of consumers these more often lead to problems. For instance, research has shown that people with weaker arithmetical abilities are more susceptible to framing effects (see section 3.2) (Peters et al., 2006). Research has also shown that poverty has a negative effect on cognitive function, because poverty and the problems it brings demand considerable mental capacity (Mani et al., 2013). Age, too, can have a negative effect on the quality of financial decisions; older investors tend to take more unwise investment decisions (Korniotis and Kumar, 2008).

A crucial and complicating factor is that those who need the most support are often unable to find and use it. Research carried out in Germany in which investors were offered free, qualitatively good advice showed that the investors who needed this advice most were the ones who made least use of it (Bhattacharya et al., 2012). Disappointingly for the standardized products case, British research showed that high-income consumers with more experience of financial products were more positive about the idea of government-set minimum requirements than were

members of the intended target group, namely, lower-income groups with less experience of financial products (Devlin, 2010).



## Chapter 5. What can (should) we do?

If we observe that consumers' boundedly rational decision-making leads them to make financial decisions that cause problems for themselves or society, it is logical to want to try to make these consumers more rational; in other words, to try to ensure that consumers follow a more rational choice path.

Another solution is to try to ensure that people achieve better outcomes, or at any rate acceptable outcomes, despite their boundedly rational behaviour. In this case it is not the decision-making behaviour and choice path that are the focus of attention, but the outcome of that process.

It has struck the AFM that in discussions on this subject both in the Netherlands and elsewhere (e.g. the UK), standardized products have been regarded as an instrument for improving both decision-making behaviour and its outcomes. In this chapter we elucidate on this insight, and we defend the view that standardized products are principally a solution for problems for which the outcome, rather than the underlying decision-making process, is key.

In the following chapter we summarize all the information in this report within an analytical framework. On the basis of this analytical framework we conclude that in the deployment of standardized products as a means to achieve better outcomes, two market sectors deserve further research: disability insurance and pensions for the self-employed.

### 5.1 Can people's decision-making behaviour be improved?

A recent report by the Netherlands Scientific Council for Government Policy (WRR), *Met kennis van gedrag beleid maken* ('Behaviour-conscious policymaking', 2014), reviews research into interventions aimed at creating more rational decision-makers. The authors draw a distinction between those interventions directed towards 'de-biasing' consumers and those directed towards strengthening their own will-power and self-control.

'De-biasing' is concerned with the neutralization or counterbalancing of human psychological pitfalls, for instance by educating people on the existence and operation of biases and heuristics. The authors conclude that not enough is known yet about the effect of education on biases and heuristics. They also point out a serious obstacle to other, demonstrably effective interventions – those that aim, for instance, to think up counterarguments to one's own standpoint or choice. The problem is that the same biases and heuristics that make these techniques so valuable also make us less inclined to acknowledge or admit that we might need a little help. In the previous chapter we saw that those who need this help most are often those least willing to seek it.

It should also be pointed out that attempts to ‘de-bias’ people can backfire. In Chapter 3 we briefly discussed the introduction of a new pension scheme in Sweden, in which media attention had ensured that many people made an active choice. The campaigns were a success, in the sense that they helped people overcome their own inertia; but the outcome itself was less positive. It eventually transpired that those who had made active choices in their pension investments ended up with a more poorly-performing portfolio than those who had passively stayed with the default (Cronqvist and Thaler, 2004).

The WRR report mentions a number of successful initiatives for strengthening consumers’ own willpower. While these initiatives certainly deserve closer attention, the authors also conclude that there are limits to the extent to which willpower can be strengthened. This approach does not, therefore, offer a solution for large and/or urgent problems.

Lastly, the authors state that much is still unclear about which forms of financial education work and which do not. One of the main uncertainties is whether it is possible to teach people skills they can use in more than one context. In Chapter 3 we mentioned the fact that people are less susceptible to the effect of anchors in their own area of expertise, but that they are vulnerable to the same pitfalls as everyone else outside this area of expertise.

## **5.2 Do standardized products turn consumers into more rational decision-makers?**

We may recognize the desire to turn consumers into more rational decision-makers in the first problem mentioned in the Minister’s letter to parliament: consumers’ limited comparison-making behaviour. The thinking behind this aim is that the comparison of products and providers is made difficult by their great diversity. According to this line of reasoning, the introduction of standardized products would make comparison easier because providers would then be competing simply on price and service, and this would make it easier for consumers to ‘shop around’. The presence of a ‘benchmark’ standardized product might also make comparisons with other products more straightforward. The desire to promote ‘shopping around’ behaviour and the possible use of standardized products as a means to bring this about is also found in the discussion in the UK (Sergeant review of simple financial products: Final report, 2013).

This line of thought expresses the hope that standardized products would turn consumers into more rational decision-makers; perhaps not in the sense of devoting more time to the choice process, but at any rate in the sense of taking more providers and/or product variants into consideration and thereby making a better, more well-founded choice. However, on the basis of what we have shown above, it is very doubtful whether standardized products would actually achieve this. The fact that humans deviate from the rational choice path and instead take decisions in an

intuitive way would not appear to be the result of the lack of a benchmark. And by the same token, providing a benchmark would not turn consumers into rational, conscious decision-makers who make perfectly appropriate product choices.

If a concrete behavioural aim can be set – for instance, comparing a greater number of providers, comparing more product variants, or focusing on other product features – then it is certainly interesting to examine the influence that the presentation of various options has on consumers’ comparison-making behaviour. In this regard, a recent initiative by the Dutch Association of Insurers (*Verbond van Verzekeraars*) to create standardized insurance information cards is interesting. As we have already indicated, the AFM is not of the opinion that the promotion of price awareness is a justifiable aim in all market sectors.

### 5.3 Can better outcomes be achieved?

We can therefore conclude that it does not seem to be possible, at any rate in the short term, to turn people into more conscious, rational decision-makers. It then becomes relevant to examine whether the outcomes for consumers, at least, can be improved. In this context behavioural scientists speak of ‘modifying the choice architecture’: of changing not the decision-maker, but the environment within which decision-makers make their choices. In Chapter 3 we discussed the fact that it is possible to present choices in different ways, and that people’s choices are significantly influenced by this presentation (Johnson et al., 2012).

There are a variety of ways in which people’s choices can be influenced, with large differences in the extent to which they can steer consumers in a given direction. For instance, one can oblige consumers to make a choice but without ‘presorting’ any given outcome. This is the case, for instance, in legally obliging consumers to arrange health insurance cover but giving them freedom to choose the provider that suits them best. In complex choices, an active choice is sometimes combined with a partial default. For instance, US research has shown that people build up more capital if they do not have to choose contribution levels and asset allocations but only have to decide whether they want to take part in a savings scheme at all (Madrian, 2014).

Another option is to show a pre-selection of products, with or without the option of clicking through to the complete list (Madrian, 2014), or to make recommendations on the basis of personal characteristics or expressed preferences (Häubl and Trifts, 2000). This appears to aid consumers not so much in comparing *more* products, but in comparing them *better*<sup>10</sup>. So-called ‘commitment’ mechanisms, in which consumers commit themselves to a certain behaviour, also appear to be effective. For instance, people may commit to saving more if, when opening an

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<sup>10</sup> For instance, after having made a choice consumers were less inclined to switch to another product when they were offered the opportunity.

account, they commit to not withdrawing money until a certain balance or certain date has been reached (Soll et al., 2014).

The best-known example of the modification of a decision-making environment was described in Chapter 3; namely, defaults. The proven effect of defaults in all kinds of practical contexts has made them one of the most powerful ways in which decision architecture can be modified (Johnson et al., 2012; Soll et al., 2014; Smith, Goldstein and Johnson, 2009; Madrian, 2014).

Although a default does not, in theory, restrict a consumer's freedom of choice (since it is always possible to deviate from the default), in practice it has considerable steering power (Soll et al., 2014). At the same time, behavioural scientists emphasize that since there is no truly neutral way to present a choice, a certain degree of steering is always present. They therefore also regard the *absence* of a default as a form of steering, because consumers then base their choices on other factors that may be less important or altogether irrelevant (Johnson et al., 2012).

Another objection to defaults is the fact that it can be difficult to decide what the default option should be. The more diverse consumer preferences are, the harder it is to design a default (Soll et al., 2014). If consumers' preferences are diverse, but they are steered towards a default, this also raises the risk that they end up with a product that is less appropriate, or even entirely inappropriate, to their personal situation. And how, in fact, are these preferences to be determined? In the context of Dutch pensions, for instance, it is hard to know what people actually want (van Dalen and Henkens, 2014). Should one question people, or observe their preferences by obliging them to make choices in an experimental setting? One solution put forward by behavioural scientists is smart defaults: providing not one, but several defaults, chosen on the basis of a consumer's personal characteristics. Think of asset allocation based on your age, or a disability insurance based on your occupational group (Smith et al., 2013; Soll et al., 2014).

#### **5.4 Can standardized products deliver better outcomes?**

The desire for better outcomes (rather than more rational decision-making behaviour) reappears in the second and third problems noted in the Minister's letter to parliament. The second problem has to do with the purchase of products with undesirable features; the third has to do with the underconsumption of certain financial products.

The use of the word 'steering' in the context of the second problem implies that in this case there is less (or no) question of a desire to help consumers to make more conscious choices. In underconsumption it could be argued that the potential problems are so serious that here, too, the emphasis is on a rapid/simple solution for people who are unable, or unwilling, to choose. Here, too, one is not creating more

rational consumers but simply ensuring better outcomes. For both problems it is also true to say that a ‘perfect fit’ appears to be of secondary importance: the emphasis is on the desire for consumers to either not purchase products having certain undesirable features (problem 2), or to buy something rather than nothing (problem 3). The aim of a ‘reasonable deal’ is an explicit part of earlier initiatives in the UK (Devlin, 2010).

The idea of a standardized product as a way of achieving these aims is in line with behavioural insights into the effect of defaults. To steer consumers towards better products and to prevent their underconsumption, consumers do, after all, have to take the product off the shelf.

However, experiences abroad have taught us that it is by no means self-evident that consumers will indeed purchase the standardized product. In the UK, so-called ‘Stakeholder’ products never became very popular, partly because market parties had little incentive to sell these products (whose price was also regulated) and therefore did little in the way of marketing. Despite their low popularity Stakeholder products did, however, have an effect on the market, because advisors were obliged to justify to consumers why they were recommending anything other than a Stakeholder product. This had a behavioural effect on the part of the providers, who brought the cost of their products more into line with the cost of Stakeholder pensions (Devlin, 2010).

In Germany, Riester pensions came onto the market in 2001, a private solution for falling rates of participation in public pension schemes. The ‘Riester’ label was a form of certification and the products were subsidised through a complex system of fiscal incentives. Only after the subsidy system had been simplified and supplementary policies had been implemented (including a standardized calculation method, to simplify comparison with other products) did sales rise strongly. However, it has turned out to be hard to reach lower-income families, although the proportion of low-income families in the Riester pension scheme is still larger than it is in second-pillar pensions or unsubsidized third pillar pension products (Börsch-Supan et al., 2012).

Simply introducing a standardized product is not enough to make it the default. Whether a given choice option is perceived as the default depends mainly on the way the different options are being presented<sup>11</sup>. This means that we also have to look at the position that the standardized product occupies within the whole of the product supply. Is the standardized product always the first product shown during a comparison? And are the other products then described as a departure from the standard? Do consumers perceive the standardized product as an implicit or explicit recommendation? Is an advisor obliged to explain why he is recommending not the

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<sup>11</sup> See ‘Preferences are not stable’ in section 3.2 for more on the influence of presentation on consumers’ decision-making behaviour.

standard product, but another? Or are consumers obliged to buy a product, and do they get the standardized product unless they actively choose another?

By contrast, a default can also be created without it having to be a standardized product, because all the methods described above to create a default can also be applied to existing products.

To summarize, default standardized products can ensure that consumers make better financial choices, provided that the underlying problem is one for which we regard the outcome – e.g. consumers do not buy worse products, or they buy something rather than nothing – as being more important than a conscious decision-making process and perfect product appropriateness.

With regard to the question of whether standardized products are the best means to achieve the desired outcomes, no general answer can be given. It will depend on the context in which a given problem exists. For instance, if product underconsumption is being caused by consumer overoptimism and risk underestimation, then a default (with no obligation to choose) will not help. Or perhaps consumers would like to purchase a product, but lack the financial means. Maybe the desired effect can be achieved by means of other, less intrusive interventions in the choice architecture. On the other hand, more traditional supervisory interventions or public solutions may be justified if the acknowledged problem is very large and has little to do with boundedly rational decision-making behaviour. In the next chapter we provide an analytical framework that can help to determine whether standardized products might be a solution to a specific problem.

Lastly, there remain a number of important questions which have little to do with consumer behaviour but which will need to be answered before deciding to introduce a standardized product. What would the compulsory introduction of a standardized product mean, for instance, to providers' own sense of responsibility? What would be the effects, in terms of legal liability but also with regard to confidence and trust in the sector, if we were to remove this responsibility? And how are we to ensure that the product is maintained and adapted, should this prove necessary? The AFM is of the opinion that these questions have so far received too little attention.

## Conclusion and analytical framework

In this report we have answered the question of how financial standardized products could contribute towards better consumer choices with regard to financial products. We have located these standardized products within a broader analysis of consumer decision-making behaviour, as was requested by the Minister of Finance. This analysis focused on insights from behavioural science.

On the basis of these insights we came to the conclusion that there is little reason to believe that standardized products turn consumers into more conscious, rational decision-makers. However, standardized products can bring about better financial choices by consumers in problem situations where the outcomes – i.e., consumers do not buy worse products, or they buy something rather than nothing – are more important than a conscious decision-making process and perfect product appropriateness. In this case standardized products need to be designed as a default, and we have shown that this demands considerably more than ‘simply’ designing and introducing a standardized product. Experiences abroad have taught that success is not self-evident.

At the same time, a default is a powerful steering tool. In our view the use of such a tool is justified only when the problem is grave. There is also the question of identifying the cases for which default standardized products are the best means to achieve the desired effect. In this conclusion we outline an analytical framework, an instrument with which to identify those market sectors in which boundedly rational decision-making behaviour causes problems for which standardized products might provide a solution. The analytical framework brings together all the insights described in the previous chapters of this report.

### Analytical framework

#### Step 1: Identify the problem

- Is the product or the market sector complex, e.g. because it concerns exponential costs or benefits or because it involves estimating risk?
- Does it concern an intertemporal decision (the costs come now, the benefits come later)?
- Is there a limited opportunity to learn from one’s mistakes?
- Does it concern a subject we would rather not think about?
- Is the market sector or product relevant to vulnerable groups in society?

*The more of these questions are answered with a yes, the greater the likelihood that consumers’ boundedly rational decision-making behaviour will lead to problems.*

## **Step 2: Determine the impact and nature of the problem**

- Is there harm to individuals? If so, how serious is this harm?
- Is there harm to society? If so, how serious is this harm?

*In the event of harm, intervention may be deemed necessary or desirable. If there is considerable harm, it may be justified to focus on outcomes rather than on the decision-making process. If there are very serious levels of harm, then the solution should probably not be sought in modifications of the choice architecture, but in more traditional supervisory interventions or public solutions.*

## **Step 3: Determine the causes of the problem**

Are behavioural factors playing a role? Check, at any rate, for:

- Present bias
- Over-optimism
- Social comparison
- Choice stress
- Loss aversion
- Confirmation bias

What other causes are there for the problem? For instance, there may be an impediment to the functioning of free markets, or consumers may simply lack financial means.

*If problems other than behaviour appear to be the most important, the solution should not be sought in modifying consumer choice architecture.*

**Verification question 1: is achieving better outcomes more important than turning consumers into more conscious, rational decision-makers?**

*If so, carry out experimental studies into the effectiveness of different interventions in consumer choice architecture, including the provision of default standardized products. What is the least far-reaching intervention that is effective?*

**Verification question 2: does this intervention not lead to (excessively) harmful consequences in other areas?**

For example: how are individual autonomy, free market operation, providers' sense of responsibility and legal liability affected?



## Market sectors warranting further research

On the basis of this analytical framework the AFM holds the view that two market sectors warrant further research into the desirability of a default standardized product: namely, disability insurance and pensions for the self-employed.

In the following sections we explain why the market sectors of disability insurance and pensions for the self-employed warrant further research on the basis of the analytical framework above. Since both cases concern self-employed people, we look forward to the publication of the results of the Ministerial working group's ongoing 'Interdepartmental Policy Research into Self-employed Workers without Employees' (*Interdepartementaal Beleidsonderzoek Zelfstandigen Zonder Personeel*).

### ***Disability insurance for self-employed workers***

In recent research carried out by the AFM into 500 self-employed workers, three-quarters of the subjects had no disability insurance at all. The reason most of them gave for this was that disability insurance was too expensive for self-employed people. It is unclear whether this judgement was based on cost-benefit analysis, or whether it is difficult for self-employed workers to estimate the risks and costs of being unable to work. Since it seems unlikely that all such uninsured self-employed workers possess adequate financial buffers, this is a possible instance of financial product underconsumption. The number of self-employed workers underconsuming in this way cannot be assessed on the basis of this research (a point explored further below).

It is very likely that several of the biases we have described play a role in this underconsumption. Firstly, the decision to arrange disability insurance is typically one in which present bias plays a role. There are clear short-term disadvantages (money, time, and effort), and it is uncertain whether the long-term advantages will ever exist. In the best-case scenario, self-employed workers pay a monthly premium for disability insurance but never become unable to work. Moreover it is hard to estimate the likelihood of disability, and even harder to estimate your financial needs at that moment.

There also exist a variety of options (individual disability insurance, *Broedfonds* mutual insurance systems, bank savings, etc.) within each of which choices have to be made between different options. What is the appropriate waiting period, for instance? And what monthly amount should a self-employed worker insure themselves for? This complicates the choice of disability insurance product, which raises the likelihood of procrastination.

Another important feature of the decision whether or not to arrange disability insurance is that there is very little opportunity to learn from one's mistakes. The moment a self-employed worker discovers that they made a bad

choice, it is already too late. Finally, another risk in the decision to arrange disability insurance is that people are unrealistically optimistic about their own health and therefore tend to underestimate the chances of their becoming unable to work. They will then regard disability insurance as a ‘good idea’, but not for themselves, because ‘they’ll be alright.’

The small proportion of self-employed workers currently possessing disability insurance, combined with the possible effects of the biases described above, make disability insurance a possible candidate for follow-up research into the desirability of a standardized product. The AFM would, however, add the following remarks.

Firstly, it cannot be said with any certainty how large a problem the underconsumption of financial products actually is. It is possible that a great many self-employed workers without disability insurance have covered themselves against the risk of such disability in other ways, or that they can depend on a partner’s income. It is also relevant to consider the extent to which individuals who have freely chosen to work independently should be ‘steered’ in the degree to which they safeguard themselves against financial risk. To answer this question it is important to establish whether there is a detriment to society.

Secondly, assuming that underconsumption exists, we do not actually know its cause. It is quite possible that many self-employed workers simply cannot afford the cost of disability insurance premiums, and a standardized product would not alter this fact. It is also possible that certain groups of self-employed workers do not need or want to arrange disability insurance, because they can fall back on a partner’s income, for instance, or because they have some other (financial) safety net. If we assume that possible underconsumption is caused by one or more biases, working separately or in combination, then it is unclear whether a standardized product would offer an effective solution.

Thirdly, the complexity of the product and the possible underlying heterogeneity of consumer preferences may make it extremely problematic to design a default. Smart defaults (see section 5.3) may offer a solution, however.

Taken together these uncertainties underline the need for further research.

### ***Pensions for self-employed workers***

A 2013 report by the Dutch Ministry of Social Affairs and Employment revealed that about half of the country’s 400,000 self-employed workers were not making pension contributions in 2009 and 2010. The report also estimated that for almost a quarter of these self-employed workers, pension provisions (including the Dutch national pension scheme, the AOW) will provide less than 50% of their gross working income. This, too, seems to be a case of underconsumption.

In its position paper ‘Towards a future-proof second-pillar pension’ (*Naar een toekomstbestendig tweede-pijlerpensioen*), the AFM endorses mandatory pension contributions in the event that voluntary pension options do not sufficiently induce self-employed people to set funds aside for their old age. The insights presented in this report can be used as a starting point for further research into the possibilities for (and obstacles to) stimulating pension savings in self-employed workers<sup>12</sup>.

Standardized products could be a component part of either entirely voluntary solutions or of scenarios involving compulsion. As we discussed in section 5.3, there are a variety of ways to influence consumer choice behaviour, with large differences in the degree of ‘steering’ obtained. For instance, a default standardized product, or the consumer obligation to make one choice or another (as in health insurance), is considerably more forceful than ‘simply’ making a standardized product available.

The position paper also briefly mentioned the role of short-term thinking. As in disability insurance, present bias may be influencing self-employed workers to not buy pension products. There are short-term costs (time, money, and effort), and even though most people get to enjoy the benefits – most people, after all, retire at some point – it is difficult to make a good estimate of future needs and preferences. There are also a great many other alternatives to take into consideration – annuities, bank savings products, independent investment, etc. – all of which have their own pros and cons. This makes the choice complex, and the likelihood of procrastination correspondingly greater. As with disability insurance, when arranging a pension people have no opportunity to learn from their mistakes. Lastly, as we have described, when a given behaviour is displayed by many others it is regarded as normative. The fact that many self-employed workers have built up no pension provision whatsoever may give other self-employed workers the idea that there is no need to do so.

Only a small number of self-employed workers have built up an adequate pension; the gross incomes of a large number will fall drastically when they retire. A number of biases are also probably at work, which means that self-employed worker pensions are a candidate for further research into the desirability of a standardized product. The AFM would, however, add the following remarks.

Firstly, there is the question of the degree of heterogeneity of self-employed workers’ needs, and accordingly, the likelihood of being able to design a default (smart or otherwise) that is appropriate for most self-employed workers. Some self-employed workers choose to build up capital in their own company, and rely on being able to finance their pension by selling the company. Self-employed workers

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<sup>12</sup> In that paper the AFM describes how not saving up for a pension is a risk for all working people, not only self-employed workers. The recommendations made by the present report apply both to self-employed workers and to employees that do not accrue a pension.

who supply services, and can therefore build up little capital in this way, have a greater need for a pension product.

Secondly, as in disability insurance there exists the possibility that self-employed workers' earnings are insufficient to be able to put money aside for their pension. A standardized product would not alter this fact.

Lastly there is a question here, too, about why product underconsumption is present and which biases have contributed towards it. Before going on to test a standardized product, it has to be clearly determined what the problem is and how a proposed standardized product would provide a solution to it.

### **What next?**

Firstly, it is important to state clearly that in the view of the AFM it would be premature to introduce a standardized product at this time. For the two market sectors described above, many of the questions in Step 1 of the analytical framework can be answered with a 'yes' and therefore warrant further research. At the same time, it has become evident that many of the questions in the analytical framework still need to be answered in order to determine whether the problems are those for which standardized products would provide a solution. In our view, a pilot project should take the form of follow-up research aimed at answering the remaining questions set by the analytical framework.

In the first instance this means determining whether there is, indeed, underconsumption of these financial products, and identifying the underlying behaviour-related and other causes. To determine the most effective intervention, we recommend that various intervention forms are tested in an experimental setting (Soll et al., 2014; WRR, 2014). It is also important to look not only at standardized products, but also at other possible interventions in the decision architecture: partial standardization, for instance, or 'tooling' in order to simplify consumers' decision-making processes. Both market parties and consumers should play a role in developing and testing interventions; market parties because of their experience and expertise in developing and marketing products, and consumers because it is important that any interventions meet their actual needs.

The AFM is also of the opinion that it might well be worth setting up a possible pilot in a broader way than simply focusing on standardized products. Since 1 January 2013 the AFM supervises the product development processes of financial enterprises. Customers must be able to trust that the products on offer are demonstrably the result of product development processes in which balanced account is taken of their interests. On the basis of this supervisory authority, in recent years the AFM has carried out analyses of a number of market sectors, and in a number of cases these analyses have identified suboptimal outcomes for

consumers. The AFM has not, so far, identified any serious problems justifying full product standardization; but this does not mean that nothing could be improved. If this is desired, the AFM would be most willing to discuss subsequent investigations with the Ministry.

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**Netherlands Authority for the Financial Markets**

**T +31-(0)20-7972000 | F +31-(0)20-7973800**

**Postbus 11723 | 1001 GS Amsterdam**

**[www.afm.nl](http://www.afm.nl)**

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