

A closer look at consumer borrowing

An analysis of decision-making behaviour and potential interventions in the consumer credit market

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The Dutch Authority for the Financial Markets

The AFM is committed to promoting fair and transparent financial markets.

As an independent market conduct authority, we contribute to a sustainable financial system and prosperity in the Netherlands.

Summary

In this report, we outline possible interventions in the consumer credit market which could promote more appropriate decision-making by consumers. These interventions are based on insights from behavioural science.

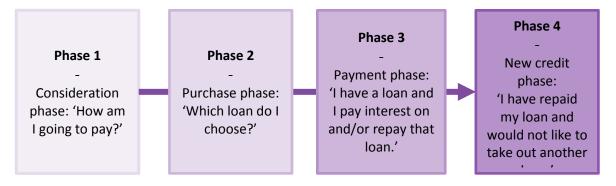
Behavioural science takes people's real behaviours as its starting point, rather than an ideal or theoretical notion of how people should make decisions. Interventions based on behavioural science accept human decision-making behaviour as a given, and are therefore less focused on increasing self-reliance through education and information. Instead, behavioural science interventions focus on changing the context in which people make choices, such as the way in which a particular choice is presented.

In 2016, the AFM published its report entitled 'Watch Out! Borrowing money costs money - An investigation into the effectiveness of warnings in advertisements for credit'. For that study, using an experiment in the online choice environment of a consumer credit provider, the AFM showed that the credit warning has no immediate effect on consumer behaviour. The research revealed that displaying a credit warning does not have a direct effect on consumers' browsing behaviour, their way of viewing the website or their borrowing decisions. The investigation prompted the Ministry of Finance to conduct a critical review of the policy objectives behind the credit warning and to ask the AFM to explore the risks for consumers in the consumer credit market in more detail.

The insights presented in this report will be used by the AFM as a basis for resolving (in part) the issues that it has identified in the consumer credit market. It also provides support for the Ministry of Finance in their work on developing interventions with respect to the policy objectives that they have identified for the consumer credit market. The report also provides a starting point for considering which interventions can be tested in practice. Testing the effectiveness of interventions in advance is an important requirement in evidence-based policy.

In this report, we describe which behavioural characteristics determine decision-making in the consumer credit market. Furthermore, in anticipation of the policy to be developed, we make suggestions for possible interventions in the consumer credit market that take account of these behavioural characteristics, and that can thus encourage consumers to take more appropriate credit decisions. We will base our analysis on a consumer credit customer journey that consists of four different phases, combining the relevant consumer characteristics with the influence of the choice environment to develop possible interventions.

Figure 1: The consumer credit customer journey



1. Consideration phase: 'How am I going to pay?'

Cognitive constraints and characteristics that influence behaviour in this phase, and ways in which the choice environment influences behaviour:

- Present bias Salience
- Self-control Framing
- Mental accounting Defaults

Potential for interventions:

- Do not offer credit as a default option. This will mean that consumers only take out credit if they actively choose this.
- Simplify the choice to encourage the right type of credit. For example, by adapting the product range.
- Increase the salience of information on entering into debt. For example, by requiring the consumer to accept the terms and conditions of the loan, credit or debt.

2. Purchase phase: 'Which loan do I choose?'

Cognitive constraints and characteristics that influence behaviour in this phase, and ways in which the choice environment influences behaviour:

- Present bias Framing
- Belief in own abilities (self-efficacy) Defaults
- Salience Anchoring

Potential for interventions:

- Display the total costs of the loan prominently. For example by comparing it with an alternative form of credit or no credit at all, or by asking consumers a question about the costs of the loan.
- Avoid defaults and anchoring that steer the consumer in a negative way.
- Use warnings that suggest an alternative course of action. For example, show which alternative actions are possible.

3. Payment phase: 'I have a loan and I pay interest on and/or repay that loan.'

Cognitive constraints and characteristics that influence behaviour in this phase, and ways in which the choice environment influences behaviour:

- Status quo bias

- Belief in own abilities (self-efficacy)

- Present bias
- Self-control

Potential for interventions:

- Establish feasible payment arrangements.
- Encourage swift repayment. For example, by providing information on how much interest consumers can save by choosing alternative repayment schedules.

- Framing

• Combine repayment with automatic saving. For example, by enabling consumers with a loan to automatically transfer part of their monthly repayment to a savings account.

4. The new credit phase: 'I have repaid my loan and would not like to take out another loan.'

Cognitive constraints and characteristics that influence behaviour in this phase, and ways in which the choice environment influences behaviour:

- Present bias Mental accounting
- Self-control Salience

Potential for interventions:

- Make saving easier. For example, by automatically earmarking part of salary as savings or by making binding agreements about money to be received in the future.
- Carry out thorough research into innovative teaching methods, such as teaching rules of thumb for effective money management or just-in-time education.

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1. Introduction

In 2017, the AFM has explored developments and risks in the consumer credit market. We identified some of the existing issues in this market and incorporated these into the supervisory strategy, and the AFM has supported the Ministry of Finance in setting policy objectives for the consumer credit market. This wide-ranging AFM study adopted a number of different angles.¹

In this report, we adopt a behavioural scientific approach in order to describe which behavioural characteristics determine decision-making (or its absence) in the consumer credit market. In anticipation of the policy to be developed, we make suggestions for possible interventions that take account of these behavioural characteristics and that can thus encourage more appropriate credit decisions on the part of consumers.

The insights presented in this report will be used by the AFM as a basis for resolving (in part) the issues that it has identified in the consumer credit market. We also provide support for the Ministry of Finance in its work on developing interventions regarding the policy objectives that they have set for the consumer credit market. The report also provides a starting point for considering which interventions can be tested in practice. Testing the effectiveness of interventions in advance is an important requirement in evidence-based policy.

The focus of policymakers has traditionally been on increasing people's self-reliance by means of education and the provision of information. Take, for example, the provision of information about the availability of allowances or the promotion of financial knowledge and skills. However, this approach neglects the characteristics of consumers which play a role in the occurrence of financial problems and that influence the decisions they make.² The report also provides a starting point for considering which interventions need to be tested in practice.

Consumers' cognitive constraints and characteristics and the way in which the choice environment responds to these can influence consumer decisions on consumer borrowing. A thorough understanding of this influence will enable providers, policymakers and regulators to promote responsible borrowing decisions.³

Background

In 2016, the AFM completed its study into the operation and effectiveness of credit warnings and published its report entitled '*Watch Out! Borrowing money costs money - An investigation into the effectiveness of warnings in advertisements for credit*'.⁴ For that study, using an experiment in the online choice environment of a consumer credit provider, the AFM showed that the credit warning has no immediate effect on consumer behaviour. The research revealed that displaying a

¹ In addition to the elements of behavioural scientific analysis included in this report, the AFM's wider investigation also consisted of a quantitative analysis of current developments and risks in the consumer credit market and a qualitative analysis of the link between consumer credit and the debt problem in the Netherlands.

² Behavioural Insights Team and Joseph Rowntree Foundation (2016). Poverty and decision-making. How behavioural science can improve opportunity in the UK.

³ AFM (2016). Consumer behaviour in the consumer credit market. https://www.afm.nl/nl-

nl/professionals/nieuws/2016/okt/kbc-keuzeomgeving-consumptief-krediet

⁴ https://www.afm.nl/nl-nl/professionals/nieuws/2016/dec/geld-lenen-geen-effect

credit warning does not have a direct effect on consumers' browsing behaviour, their way of viewing the website or their borrowing decisions. The investigation prompted the Ministry of Finance to conduct a critical review of the policy objectives behind the credit warning and to ask the AFM to explore the risks for consumers in the consumer credit market in more detail.

Structure of the report

After a consideration of which consumers are vulnerable to issues with consumer credit (section 2), the report will describe consumer behaviour in the context of consumer credit and the way in which the choice environment affects this (section 3). Section 4 proceeds to provide a number of examples of interventions that could facilitate the decision-making process with regard to consumer credit in each phase of the consumer credit customer journey. Finally, we will set out the most important insights of our study in Section 5.

2. Consumers who are vulnerable to issues with consumer credit

Consumers can borrow money in various ways. They can make use of revolving credit facilities (such as a bank overdraft), personal loans, credit cards, overdraft facilities or pay for a particular product in instalments (purchase financing). The extent to which the amount borrowed and the other characteristics of the consumer credit are related to the spending objective differs with each type of credit. In the case of purchase financing, for example, there is a direct link. In addition, the amount borrowed depends on the value of the purchase and the repayment period would, ideally, depend on the expected economic lifespan of the product. The latter is not always the case, however, which means that consumers may still be making repayments even after the product purchased can no longer be used. For revolving credit facilities, the relationship is indirect.

A screening of the GfK consumer panel (commissioned by the AFM) shows that 54% of Dutch people have purchased at least one product with consumer credit.⁵ This is probably an underestimate because people do not realise that all credit products are, in fact, loans (including, for example, overdraft facilities). According to the Credit Registration Office Foundation (henceforth: The BKR) a total of 10,250,000 Dutch people were registered in the Central Credit Information System (henceforth: CKI) in July 2017, of whom 7% were in arrears (N.B.: records include mortgage arrears as well as consumer credit).⁶

Payment issues

Not all borrowing poses a problem. In many cases, a loan can be very useful.⁷ If, for example, the amount borrowed is used to renovate the home, cover an unexpected bill that needs to be paid or repair a broken washing machine, and the consumer's savings cannot cover these items.

Problems only arise when a loan, and the associated obligations, place an excessive burden on household finances. In 2017, the AFM identified the risk of over-borrowing as one of its priorities for that year.⁸ The Financial Supervision Act (WFT) defines over-borrowing (Section 4:34) as an irresponsibly high amount of credit in relation to the financial position of the consumer. According to the definition of the Dutch Association of Municipal Money-Lending and Debt Counselling Institutions (NVVK), debt is problematic when it is structural and the consumer cannot reasonably be expected to continue to make payments or has already stopped making repayments.⁹

Due to the obligations they have taken on, a consumer with a loan has less scope to accommodate the consequences of unexpected changes, such as a sudden drop in income. As a

⁶ http://perskamer.bkr.nl/5-minder-nederlanders-met-betalingsachterstand-bij-stichting-bkr/

⁵ https://esb.nu/kort/20026697/vooral-jongeren-bezitten-telefoonkrediet

⁷ Sunstein, C.R. (2005). Boundedly Rational Borrowing: A Consumer's Guide. John M. Olin Program in Law and Economics Working Paper No. 253.

⁸The AFM's Agenda for 2017 states the following: When interest rates are low, it is possible that lending to consumers will increase. When disposable incomes are not growing, or only growing modestly, but interest rates are simultaneously low, the temptation to borrow more than is sensible may increase. Public version: https://www.afm.nl/~/profmedia/files/afm/2017/agenda/publieksversie-agenda-2017.ashx

⁹ NVVK Code of Conduct for Debt Assistance

result, their debts may become excessive during the repayment period of the loan.¹⁰ But even when taking out a loan, major and irresponsible risks may be taken by the consumer, notwithstanding credit standards. Credit providers must consult the BKR's CKI prior to each credit application. Not every type of loan and debt is included, however. Student loans from the Education Executive Agency (DUO) and payment arrears, such as arrears owed to health insurers, the Tax and Customs Administration and housing corporations, are not registered. For consumers with 'invisible' payment obligations of this kind, there is an increased risk that they will not be able to repay the loan (in full).

Vulnerability

Not everyone who has over-borrowed will necessarily end up in difficulty. However, the opposite is also true: someone who borrows according to the definitions set out in the credit standards may still risk ending up with problematic debts. The degree of vulnerability of consumers is therefore difficult to define and depends on several factors. As Statistics Netherlands (CBS) describes, one of the relevant factors is a lack of income from paid work or income from paid work that is below the level of net social assistance benefit for a single person.¹¹ Another factor is how much a consumer has available saved for emergencies. The results of a survey study on saving behaviour (conducted by ING) show that a quarter of people in the Netherlands have no savings at all. A further quarter of people in the Netherlands have a total sum of savings that is less than between one and three times their monthly salary.¹² People who have insufficient savings set aside for contingencies such as unexpected bills, and who regularly have to rely on credit, run the risk of debt problems.

In the subsequent sections, we will discuss which factors influence consumer borrowing and saving decisions, and how these factors can be used to prevent debt problems from occurring.¹³

¹⁰ The credit standards are set out in various codes of conduct, such as the Netherlands Bankers' Association (NVB) and Dutch Finance Houses' Association (VFN): https://www.afm.nl/nl-nl/professionals/doelgroepen/kredietaanbieders/normen

¹¹ https://www.cbs.nl/nl-nl/nieuws/2017/41/drie-miljoen-nederlanders-financieel-kwetsbaar

¹² ING International Survey Saving 2017: https://www.ezonomics.com/ing_international_surveys/savings-2017/

¹³ These concern decisions that are not taken through a financial adviser.

3. Behaviour in the consumer credit market and the choice environment

3.1 The effect of cognitive constraints and characteristics

Due to time restrictions, as well as motivational and cognitive factors, people do not always undergo a fully rational choice process for every decision they make.¹⁴ We all rely on our existing biases and heuristics (rules of thumb) in order to make decisions efficiently, especially when not all the information available can be taken into account. However, in some cases limited rationality can result in suboptimal outcomes. In this section, we will discuss which cognitive constraints and characteristics play a role in consumer credit, and how these properties affect borrowing decisions and can increase consumers' vulnerability.

3.1.1 Present bias

When taking out credit, there is a chance that consumers may underestimate or overlook the consequences of their decision. We speak of present bias, when people focus on the short-term rewards of credit (for example, acquiring a new television) instead of on the long-term consequences (the cost of interest and long-term repayments).¹⁵

This focus on the present can be reinforced by sudden major changes in a person's immediate living environment. When people are confronted with major events such as divorce or bereavement, these events are, naturally, their primary focus. As a result, their financial affairs may be neglected for a period, which can create problems or exacerbate existing problems.¹⁶

3.1.2 Scarcity

For people who are experiencing financial problems, it is difficult to monitor all aspects of their financial management. Scarcity can result in a reduced ability to think properly. The focus shifts temporarily to finding short-term solutions (for example, paying a specific bill), while the future consequences of the 'solutions' chosen (such as the obligations associated with the amount borrowed) disappear out of the picture and the long-term perspective is not taken into account.¹⁷

Research from the USA among people on low incomes shows that scarcity reduces the ability to postpone reward. Relatively poor people who made a financial decision just before receiving their wages showed a higher degree of present bias than in people who did so after just having received their wages. When faced with a similar non-financial choice, no such difference was found between the groups. These results suggest that the difference between the groups in the choice exercise could be explained by the liquidity problem, rather than by the commonplace

¹⁴ De Jonge, P. (2017). When good enough is not good enough. Supervision in a world of limited rationality. [Als goed genoeg niet goed genoeg is. Toezicht in een beperkt rationele wereld.]

¹⁵ Behavioural Insights Team and Joseph Rowntree Foundation (2016). Poverty and decision-making. How behavioural science can improve opportunity in the UK.

¹⁶ Tiemeijer, W. (2016). Own fault? A behavioural science perspective on problematic debts [Eigen schuld? Een gedragswetenschappelijk perspectief op problematische schulden]

¹⁷ Mani, A. et al. (2013) Poverty impedes cognitive function. *Science*, 341, 976-980.

assumption that poverty leads to reduced self-control.¹⁸ If people seek credit because they do not have enough money at a particular moment in time, their stretched finances can have an impact on the decision that they make. The short-term reward is weighted more heavily than the long-term consequences.

3.1.3 Status quo bias

Consumers can transfer their consumer credit to another credit provider that offers cheaper credit during the repayment period. It is also relatively easy to take out a loan with another lender compared to with their bank. In practice, however, consumers appear to make limited use of this option, even when a different option would result in them saving money. This tendency to favour the status quo or to opt for a default option is known as the status quo bias.

Consumer inertia or inactivity is also a consequence of procrastination. Procrastination means putting off unpleasant but necessary decisions, even though this can lead to stress or problems in the long term. An example of this kind of procrastination is the postponement of repayments and interest payments. Late payments often result in penalties, which in turn makes people's threshold for taking action even higher.¹⁹

3.1.4 Mental accounting

Mental accounting refers to the tendency of consumers to divide their finances into budgets for different areas. The budget for paying household bills is different from the budget for the weekly groceries, for instance. Although both budgets are funded from the same source (wages, benefits, pension, etc.), there is hardly any transfer between these budgets.²⁰ Mental accounting can explain why people borrow money to pay for a purchase, even though that purchase could also have been made using their savings. The mental allocation of their savings to a different 'budget' makes the decision to borrow feel inevitable.

Mental accounting also influences decisions by decoupling the act of purchasing a product from paying for that product. This decoupling mechanism is particularly strong with credit cards and manifests itself in various ways. Firstly, when using a credit card, payments are delayed for a few weeks, so that the repayment seems separate from the purchase. This reduces the salience of the payment, so that there is more emphasis on the pleasure derived from the purchase than on negative feelings about payment. Secondly, the payment is mixed in with other kinds of payments when the bill arrives. This makes the payment seem smaller than it actually is, because it is hidden as part of a larger bill.²¹

¹⁸ Carvalho, L.S., Meier, S., Wang, S.W. (2016). Poverty and Economic Decision-Making: Evidence from Changes in Financial Resources at Payday. *American Economic Review*, 106, 260–284.

¹⁹ Sunstein, C.R. (2005). Boundedly Rational Borrowing: A Consumer's Guide. John M. Olin Program in Law and Economics Working Paper No. 253.

²⁰ Thaler, R.J. (1985). Mental Accounting and Consumer Choice. *Marketing Science*, 4, 199-214.

²¹ Thaler, R.J. (1999). Mental Accounting Matters. *Journal of Behavioural Decision Making*, 12, 183-206.

3.1.5 Self-control

Self-control is an umbrella construct that brings together various characteristics such as impulsiveness, self-restraint, determination, will power and conscientiousness. In short, self-control includes the ability to postpone reward and control impulses.²² A person's degree of self-control determines whether temptations can be resisted in the shorter term, in exchange for achieving longer-term goals such as staying out of debt or repaying one's debts.²³ A consumer with a low degree of self-control is vulnerable and more susceptible to impulse purchases, whether or not these are financed with credit.

Moffitt et al. (2011) show that people with little self-control as children are less financially skilled as adults than those with more self-control: they saved less in proportion to their earnings, were worse at dealing with money and had more debt problems. Low self-control turned out to be a better predictor of financial problems than social class or IQ.²⁴

3.1.6 Belief in own abilities (self-efficacy)

Belief in one's own abilities (self-efficacy) determines the extent to which people perceive control of their own lives and therefore their personal financial situation. Self-efficacy is a fairly stable factor, which influences how people feel, think and motivate themselves and which decisions they make.²⁵ Those with lower self-efficacy are more likely to put off difficult tasks and be less committed to achieving the goals they have been set. When faced with difficult tasks, they are likely to dwell on their shortcomings and imagine the obstacles that they may encounter, rather than focusing on how to complete the tasks successfully.²⁶

For people with low self-efficacy, it is therefore particularly difficult to solve debt problems. Whenever they fail to perform difficult financial tasks, such as applying for support or arranging a payment, they are more likely to end up in a vicious circle. The less success they experience, the stronger their conviction that they cannot cope and the more likely it is that the problems persist or even get worse.²⁷

3.2 The effect of the choice environment

Decisions are never made in isolation: they are always affected by the choice environment. In section 3.1, we described the cognitive constraints and characteristics that are relevant in the context of consumer credit. When the choice environment is set up in such a way that it exploits the relevant characteristics in people and undermines the customer's interest, these design

²² Moffitt, T. E. et al. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108, 2693-2698.

²³ Hoch, S.J. & Loewenstein, G.F. (1991). Time-Inconsistent Preferences and Consumer Self-Control. *Journal of Consumer Research*, 17, 492-507.

²⁴ Moffitt, T. E. et al. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108, 7, 2693-2698.

²⁵ Bandura, A. (1977). Towards a Unifying Theory of Behavioral Change. *Psychological Review*, 84, 2, 191-215.

²⁶ Bandura, A. (1994). Self-efficacy. Encyclopedia of human behavior, 4, 71-81.

²⁷ Bandura, A. (1977). Towards a Unifying Theory of Behavioral Change. *Psychological Review*, 84, 2, 191-215.

features are sometimes referred to as 'evil nudges'.²⁸ For example, it may be commercially beneficial for a credit provider if consumers borrow more or more frequently, repay less or choose a longer repayment period.

In this section, we discuss the various ways in which the choice environment influences consumer decisions regarding consumer credit.

3.2.1 Salience

People have a limited capacity for attention and this is therefore often directed automatically to the limited number of aspects in the choice environment that are relatively salient. As with other products, advertising for consumer credit often features eye-catching colour contrasts and appealing images.²⁹ The fact that images attract more attention than text may prevent the actual characteristics of the product or its terms and conditions from being read, causing people to miss important information.^{30,, 31} The amount of information displayed also plays a role in this. Providing an excessive amount of information can prevent people from reading it, meaning that consumers are actually less informed than if the extra information had not been provided.³²

The 'banner blindness effect' can also play a role in consumers failing to focus on certain information. This effect encapsulates how people become accustomed to eye-catching advertising banners at the top or side of web pages and thereby unconsciously shift their focus away from them. Important information located in these areas, such as warnings, may therefore not be seen.³³ One example of this is the credit warning '*Watch out!* Borrowing money, costs money '. A field experiment conducted by the AFM in 2016 showed that both the current and the alternative credit warning phrases have no immediate effect on consumer behaviour.³⁴

In addition, it is not always easy for consumers to understand the full costs of borrowing. Many consumers find it difficult to calculate using percentages and total up the cumulative cost of interest when taking out credit.³⁵ Consumers would thus benefit from clear and simple information about costs that is displayed in a way that would catch their attention.

²⁸ Akerlof, G.A., & Shiller, R.J. (2015). Phishing for phools: The economics of manipulation and deception. *Princeton University Press*.

²⁹ FCA (2017). From advert to action: behavioural insights into the advertising of financial products. Occasional Paper 26. https://www.fca.org.uk/publication/occasional-papers/op17-26.pdf

³⁰ Clayton, M., Davidson, G., Leston, J., Lyon, A., & Wells, J. (2013). Consumer responsibility: identifying and closing the gap. *Report prepared for the FCA Practitioner Panel*.

³¹ Lurie, N. H., & Mason, C. H. (2007). Visual representation: implications for decision making. *Journal of Marketing*, 71, 1, 160-177.

³² Ben-Shahar, O., Schneider, C.E. (2014). More Than You Wanted to Know: The Failure of Mandated Disclosure, Princeton University Press; Perry, V.G., Blumenthal, P.M. (2012). Understanding the Fine Print: The Need for Effective Testing of Mandatory Mortgage Loan Disclosures. *Journal of Public Policy & Marketing*

³³ Benway, J. P., & Lane, D.M. (1998). Banner blindness: Web searchers often miss "obvious" links. *Itg Newsletter*, 1, 3, 1-22.

³⁴ https://www.afm.nl/nl-nl/professionals/nieuws/2016/dec/geld-lenen-geen-effect

³⁵ Bertrand, M., & Morse, A. (2011). Information disclosure, cognitive bias and payday borrowing. *Journal of Finance*, 66, 6, 1865-1893.

3.2.2 Framing

The way in which choices are presented can influence the decisions that consumers make. This phenomenon is known as the framing effect.³⁶ For example, credit may be framed more positively by using words like 'balance' or 'available balance', rather than using terms with more negative associations such as 'debt', 'loan' or 'amount owed'. Lenders may also respond to consumers' short-term thinking (present bias) by emphasising the immediate benefits of credit, such as receiving a particular amount or the product that could be purchased with it, while omitting or subordinating the future costs and risks.

Comparing the cost of a loan with the cost of alternative borrowing options could help consumers to make better decisions. Researchers in the USA tested whether an envelope comparing the cost of more expensive consumer credit with the cost of a credit card had any effect on consumer choices. Those consumers who received an envelope showing a comparison of the costs were less likely to take out the more expensive credit than consumers who were not shown any such comparison.³⁷

3.2.3 Defaults

A default option is the choice that applies if a consumer does not actively make any other decision. Consumers can be sensitive to options that are presented as standard. Because of the status quo bias, they often do not deviate from the default and are inclined to regard this option as an implicit recommendation.^{38, 39} Survey studies involving those people with consumer credit (conducted by the AFM) showed the effect of the default on the final decision. Half of the respondents with a telephone credit indicated that they had opted for this because the credit was simply presented as the default, while 80% of these people could have paid for their telephone in one go.⁴⁰

If defaults are used in a choice environment, they should be in the customer's interest. In the Client Interest Dashboard 2016/2017 Consumer Credit module, credit providers are required to substantiate the way in which their choice environment contributes to better lending decisions.⁴¹ More favourable defaults, including the type of credit, the monthly instalment, the interest rate and displaying the total costs and total repayment period, can all play an important role here.

3.2.4 Anchoring

Many consumer credit provider websites use a scale that consumers can use to indicate how much they wish to borrow and how much they wish to repay each month, using a slider. Before

³⁶ Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 4481, 453-458.

³⁷ Bertrand, M., & Morse, A. (2011). Information disclosure, cognitive bias and payday borrowing. *Journal of Finance*, 66, 6, 1865-1893.

³⁸ McKenzie, C.R.M., Liersch, M.J., Finkelstein, S.R. (2006). Recommendations implicit in policy defaults. *Psychological Science*, 17(5), 414-420.

 ³⁹ Smith, N.C., Goldstein, D.G. & Johnson, E.J. (2013). Choice without awareness: ethical and policy implications of defaults. *Journal of Public Policy and Marketing*, *32*, pp. 159-172.
 ⁴⁰ AFM (2017). Not published.

⁴¹ https://www.afm.nl/nl-nl/nieuws/2016/nov/kbc-dashboard

the customer moves this slider, it is already set at a certain amount. This type of information can serve as a reference point (anchor) for consumers. Such anchors are not always a relevant guide, however, and may lead to suboptimal choices.^{42,, 43} The size of the scale used and the size of the increments on the scale can also influence consumer behaviour.

Anchoring can also play a role when repaying certain forms of credit. For example, if a consumer uses the spread payment facility of a credit card or a revolving credit facility, he or she must repay at least a certain percentage of the outstanding amount each month. Researchers have shown that adding a minimum repayment instalment to a credit card statement resulted in people paying less than when no such information was provided. The minimum amount acts as an anchor and any increase on this minimum amount leads to an increase in the average amount that is repaid.⁴⁴

⁴² Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and Biases. *Science*, 185 (4157), 1124–1131.

⁴³ Jung, M. H., Perfecto, H., & Nelson, L. D. (2016). Anchoring in payment: Evaluating a judgmental heuristic in field experimental settings. *Journal of Marketing Research*, 53(3), 354-368.

⁴⁴ Navarro-Martinez et al. (2011). Minimum required payment and supplemental information disclosure effects on consumer debt repayment decisions. *Journal of Marketing Research*, 48(SPL), S60-77.

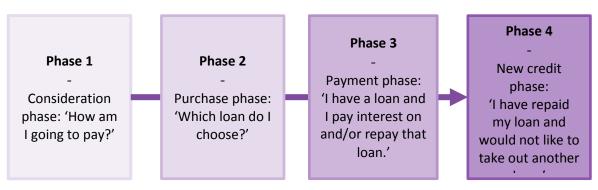
4. Potential interventions

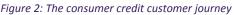
In the previous section, we have described consumer behaviour and the way in which the choice environment can influence borrowing decisions. A better understanding of this influence will enable providers, policymakers and regulators to promote more responsible borrowing decisions.⁴⁵

Existing consumer legislation and regulations regarding credit, such as borrowing standards and transparency requirements, seek to influence the behaviour of consumers and credit providers in various ways. Some measures limit what consumers can do. This includes the mandatory registration of credit with the BKR, which prevents irresponsible risks from being taken by consumers and credit providers in relation to consumers' income and outgoings. Other interventions, such as the provision of information in the form of European standard information on consumer credit (ESIC)⁴⁶ and the credit warning, rely on consumer self-reliance.

The interventions described in this section are different in nature. These are examples of 'nudges' which facilitate better decision making by taking into account people's real-life behaviours. These nudges could prove very effective in practice, although they have not yet been tested. At the same time, we know that nudges (and other interventions) do not always have the intended effect, and can sometimes even be counterproductive. For this reason, it is important to test interventions before they are implemented.

Consumers who need to finance a purchase, and consider using credit for this purpose, undergo a number of different phases⁴⁷:





In the first phase, the consumer considers whether to use credit. This may be absolutely necessary because certain expenses are unavoidable and no alternative is available at that moment in time, but this is not always the case. Sometimes consumers use credit in order to make non-essential purchases (such as a new television) or if they could still cover those costs in some other way (such as by using their savings). If the consumer has decided to opt for credit, he

⁴⁵ AFM (2016). Consumer behaviour in the consumer credit market. https://www.afm.nl/nlnl/professionals/nieuws/2016/okt/kbc-keuzeomgeving-consumptief-krediet

 ⁴⁶ https://www.afm.nl/nl-nl/professionals/doelgroepen/kredietaanbieders/richtlijn-consumentenkrediet
 ⁴⁷ Kamleitner, B., Hoelzl, E., & Kirchler, E. (2012). Credit use: psychological perspectives on a multifaceted phenomenon. *International Journal of Psychology*, 47(1), 1-27.

or she then needs to choose a credit provider and product in the second phase. As soon as the credit has been 'purchased', the consumer enters the repayment period. In this phase, it is important that consumers pay their monthly instalments and repay the loan as agreed. In the fourth and final phase, the consumer has repaid the credit in full and must plan his or her future finances. Income and expenses should be brought into balance, so that the consumer does not become permanently reliant on borrowing.

4.1 Consideration phase: 'How am I going to pay?'

A (temporary) lack of money can reinforce present bias: a solution needs to be found as quickly as possible to remedy the lack of money. The short-term reward is weighted more heavily than the long-term consequences. In this situation, it is unlikely that a consumer will choose the most appropriate option. The number of different providers, different types of loans and associated options is too high to assess them all individually. But even in cases where the loan is not actually necessary, present bias, the degree of self-control and mental accounting all play important roles. Which information is the most salient and how the option of credit is presented in advertisements and other choice environments are all direct factors.

In this section, we will provide ideas for interventions in which the following cognitive and characteristics and ways in which the choice environment influences behaviour play a role:

Table 1 - Relevant cognitive constraints and characteristics and ways in which the choice environment influences	
behaviour in the consideration phase.	

Relevant cognitive constraints and characteristics	Present bias, self-control, mental accounting
Ways in which the choice environment influences behaviour	Salience, framing, defaults

4.1.1 Do not offer credit as default option.

The option of credit should not be presented as the natural choice. Nevertheless, in certain choice environments, consumers are steered towards using credit, rather than direct payment. For example, in the telecommunication sector, the pre-selected default option is taking out a contract including a telephone that will be paid for in instalments. To ensure that consumers only take out credit if they actively wish to choose this, credit should not be offered as the default option. To discourage the use of credit, additional requirements could be built in, such as a cooling-off period.

4.1.2 Simplify the process of choosing the right type of credit.

In order to be able to decide whether credit is an appropriate solution in their particular situation - and if so, what type of credit - consumers need to have a certain degree of understanding of their own financial affairs. It is unlikely that everyone will have this understanding or be fully aware of the utility of the various types of credit. It is in the interests of the customer to ensure that the credit that they choose is appropriate to the purpose of the loan. For example, a revolving credit facility is not appropriate for a product with a limited economic lifespan.

Providers can support consumers by using smart defaults. Another possibility is requiring providers (legally) to modify their product range, so that unsuitable products may no longer be offered.

4.1.3 Make information on entering into debt more salient.

As part of its study of the effectiveness of existing credit warnings, the AFM interviewed a number of stakeholders. Some indicated in advance that they had doubts in advance about the effectiveness of the warning with regard to consumer behaviour. However, others, including Nibud, thought it plausible that the warning makes it clear to consumers that the product they are purchasing is or includes a form of credit.⁴⁸ Increasing the salience of entering into a debt, for example by requiring the inclusion of the terms 'credit' or 'loan' in the information shown, could reduce the risk of misunderstandings. No research has yet been done into this labelling effect.

Salience when entering into a loan is also important when the consumer is not making an active choice for credit, such as when they are already 'in the red'. Smart and timely notification can help consumers to opt out of credit. Research by the English Financial Conduct Authority (FCA), for example, has shown that a text message reminding consumers of a low balance on their payment account can reduce unplanned usage of their overdraft facility.⁴⁹

4.2 Purchase phase: 'Which loan do I choose?'

Once a consumer has chosen a specific form of credit, he or she must then choose a provider. In many cases, the default will be the easiest choice: credit for consumer goods is usually arranged with the vendor and an overdraft is, by definition, linked to an existing bank account. In other cases, it's possible to choose from other providers as well. Particularly for consumers with little faith in their own abilities, it is important not to be overwhelmed by the large number of providers and types of credit available. Comparison sites can help consumers to compare the available range quickly.

The consumer will then proceed to apply for and take out a loan, whereby the choice environment (such as the design of the website of a credit provider) will influence that decision. It is important that the terms and conditions of the loan are appropriate to the situation of the consumer and that the consumer realises the consequences of his or her choice.

In this section, we will provide ideas for interventions in which the following cognitive constraints and characteristics and ways in which the choice environment influences behaviour play a role:

Table 2 - Relevant cognitive constraints and characteristics and ways in which the choice environment influencesbehaviour in the purchase phase.

Relevant cognitive constraints and	Present bias, self-efficacy
characteristics	

⁴⁸ https://www.afm.nl/nl-nl/professionals/nieuws/2016/dec/geld-lenen-geen-effect

⁴⁹ FCA (2015). Message received? The impact of annual summaries, text alerts and mobile apps on consumer banking behaviour. Occasional Paper No.10.

Ways in which the choice	Salience, framing, anchoring
environment influences behaviour	

4.2.1 Display the total costs of the loan prominently.

It is not always easy for consumers to understand the full costs of borrowing.⁵⁰ Interest rates are conceptually complex and, partly due to present bias, people underestimate the future costs. In addition, the monthly repayment amount is often given more salience than the total costs, while information about the total cost of a loan would be more helpful to consumers in order to make a better choice. Research from the USA has shown that a clear overview of the absolute costs and a comparison with the costs of alternative types of credit makes people less likely to choose more expensive forms of credit.⁵¹

In addition to a clear overview of the costs, providers could make the costs of credit clearer and more salient by asking consumers a question about this. That question could be: 'You wish to take out a loan of $\leq 12,000$ for 24 months. This loan costs ≤ 618 . So you will have to repay a total of $\leq 12,618$ to us. Are you sure you want to take out this loan?" The effect of such questions in practice has not yet been investigated.

Research from Ireland shows that consumers make better choices, and ultimately pay less, when the total cost of credit instead of the monthly amount is used as the starting point and is given a more prominent place in advertisements.⁵² Research by the AFM shows that when consumers are asked about the desired total duration of the loan instead of the desired monthly amount, they opt for higher monthly repayments and a shorter repayment period. These two studies were carried out in a laboratory setting.⁵³ Additional research is needed to determine whether these effects are also present in real-life situations.

4.2.2 Avoid defaults and anchoring that are detrimental to the interests of the consumer

The design of the choice environment influences the borrowing decisions that consumers make. Smarter defaults and anchors, for example the type of loan offered, the (minimum) monthly repayment, the interest rate and an overview of the total costs and total repayment period, could play an important role here. In 2017 and 2018, the AFM investigated how anchoring and other elements in the consumer credit provider's choice environment influence lending decisions.

⁵⁰ Carlin, B.I. (2009). Strategic price complexity in retail financial markets. *Journal of Financial Economics*, 91, 3, 278-287.

⁵¹ Bertrand, M., & Morse, A. (2011). Information Disclosure, Cognitive Biases, and Payday Borrowing. *The Journal of Finance*, 66, 1865-1893.

⁵² Lunn, P., Bohacek, M. & Rybicki, A. (2016). PRICE Lab: An Experimental Investigation of Personal Loan Choices. Dublin: Central Bank of

Ireland/CCPC/CER/ComReg/ESRI.https://www.esri.ie/pubs/BKMNEXT314.pdf

⁵³ It is important to emphasise that not all studies have the same degree of explanatory power (for a more detailed explanation, see Annex II: Hierarchy of research methods).

4.2.3 Use warnings that suggest an alternative course of action

When taking out credit, it is important that consumers understand the terms and conditions of the loan and are made aware of the risks of borrowing. Various studies have shown that existing warnings do not always have the desired effect. For example, it is important that a warning includes an alternative course of action.⁵⁴ For warnings regarding financial products, such as the existing credit warning ('*Watch out! Borrowing money costs money*'), it is not immediately clear what alternative course of action might be expected from consumers. Indicating what else the consumer could do in these warnings could make them more effective.

4.3 Payment phase: 'I have a loan and I pay interest on and/or repay that loan.'

Consumers can also be influenced by various biases during this phase. The status quo bias, for example, may lead consumers to repay less than the amount that they could repay or that it is in their financial interest to repay. Or people may stay with a credit provider that offers unfavourable conditions. In addition, consumers with low self-control may be tempted to make new purchases instead of paying the agreed instalments. Present bias also plays a role here, with the short-term reward of the new purchase outweighing the longer-term issue of payment arrears. In cases of consumers with low self-efficacy, it is more difficult for them to meet the repayment targets and more difficult for them to resolve any issues with payment arrears. Providers also play a role in the extent to which the repayment period goes smoothly. The way in which the remaining balance of the loan, the monthly instalment and the repayment period are presented to consumers (framing) can influence repayment behaviour.

In this section, we will provide ideas for interventions in which the following cognitive constraints and characteristics and ways in which the choice environment influences behaviour play a role:

Table 3 - Relevant cognitive constraints and characteristics and ways in which the choice environment influences
behaviour in the payment phase.

Relevant cognitive constraints and characteristics	Status quo bias, present bias, self-control, self-efficacy
Ways in which the choice environment influences behaviour	Framing

4.3.1 Agree achievable payment terms

The AFM has previously provided clarity about the approach favoured by the AFM to consumer credit payment arrears in its document entitled Guidelines for Consumers and Debt Collection Processes.⁵⁵ In that document, the AFM emphasised the importance of discovering the cause(s) of payment arrears in order to find an appropriate solution, and also underlined the importance of

⁵⁴ https://www.afm.nl/nl-nl/professionals/nieuws/2016/dec/geld-lenen-geen-effect

⁵⁵ https://www.afm.nl/~/profmedia/files/wet-regelgeving/beleidsuitingen/leidraden/consumentenincassotrajecten.pdf

simply administering the collection of the outstanding amount. When a repayment agreement is made, it is important to ensure that this is realistic.

Consumers who have little confidence in their own ability to deal with repayment problems may gain or regain confidence by achieving small successes, such as managing to pay the agreed - and achievable - instalment amounts. These successes could also be made more tangible by presenting them in a visual form. The impact of this type of visual feedback has not yet been researched in the context of consumer credit, but it has been investigated in the context of the energy market, for example. A field experiment showed that consumers who use less than an average amount of energy continue to do so when they see a 'smiley' on their energy bill, in addition to information about their usage in comparative terms. Without this visual feedback, however, they will generally use more energy.⁵⁶

4.3.2 Encourage swift repayment of debt

Providers can promote the speed at which consumers repay their debt by including certain information in their communications regarding the outstanding debt. Research in a laboratory setting shows that information on credit card statements regarding the duration of the repayment period and the associated cost of interest does not lead consumers to repay more than the minimum monthly instalment. However, if, in addition to this information, there is information about the savings on the cost of interest that the consumer could make through an alternative repayment arrangement, consumers will repay their debt more quickly.⁵⁷

4.3.3 Combine repayment with automatic saving

In the UK, credit unions use an automatic savings system called 'Save as you borrow', whereby consumers with debts have a portion of their monthly repayment deposited automatically into a savings account. This system enables them to acquire the 'habit' of saving and, once the loan is fully repaid, the savings accrued are released. Although the long-term effect of 'Save as you borrow' has not yet been tested in a field experiment, survey research has been conducted among more than 1,000 participants in the programme. More than half of the respondents who had previously been unable to save indicated that they intended to continue saving after paying off their loan.⁵⁸To find out whether these intentions correspond to their actual behaviour, further research would need to be done.

4.4 New credit phase: 'I have repaid my loan and would not like to take out another loan.'

Once people have repaid their credit in full, it is important that they are not forced to take on more debt, but are able to fund their expenses from their own financial resources if they prefer

⁵⁶ Schultz, P.W., Nolan, J.M., Cialdini, R.B., Goldstein, N.J., & Griskevicius, V. (2007). The constructive, destructive and reconstructive power of social norms. *Psychological science*, 18, 5, 429-434.

⁵⁷ Salisbury, L. C. (2014). Minimum Payment Warnings and Information Disclosure Effects on Consumer Debt Repayment Decisions. *Journal of Public Policy & Marketing*, 33, 49–64.

⁵⁸ The Fairbanking Foundation (2017). Save as you borrow – credit unions creating good habits. http://fairbanking.org.uk/wp-content/uploads/2017/02/Save-While-You-Borrow-web-1540217.pdf

not to borrow. Interventions that circumvent present bias and low self-control can ensure that consumers save more and are less likely to take on more debt.

In this section, we will provide ideas for interventions in which the following cognitive constraints and characteristics and ways in which the choice environment influences behaviour play a role:

Table 4 - Relevant cognitive constraints and characteristics and ways in which the choice environment influencesbehaviour in the new credit phase.

Relevant cognitive constraints and characteristics	Present bias, self-control, mental accounting
Ways in which the choice environment influences behaviour	Salience

4.4.1 Make saving easier

Starting to save and maintaining this habit could be facilitated in various ways. Laboratory experiments have shown that consumers save more and maintain the habit of saving if a part of their salary is automatically earmarked as savings. This supports the consumer's mental accounting process. In addition, sending simple reminders (for example a text message) can help consumers to achieve to the savings goal that they have set.⁵⁹

A field experiment in the Philippines showed that consumers who committed to a savings goal in advance, and who had no access to their money until that goal had been achieved or some other agreed date, ultimately saved more money.⁶⁰ Another successful intervention (in the context of pensions) is the 'Save More Tomorrow' programme in the United States. Participants make an agreement with their employer that in the event of a future salary increase, a certain percentage of the extra salary will automatically be added to their pension pot each month.⁶¹ Present bias is avoided by making this agreement before the extra money actually becomes available. Such an intervention could also work in the context of savings, but further research would be needed for this.

4.4.2 Research methods of education that result in effective money management

To prevent debts, policymakers often focus on increasing people's financial literacy. Studies into the influence of these types of programmes on financial behaviour are scarce and the available results are not promising.⁶² The more thorough the research design, the smaller the effect on behaviour that researchers have found: only 0.1% of behaviour can be explained by education.⁶³

 ⁵⁹ Karlan, D., McConnell, M., & Mullainathan, S. (2014). Getting to the Top of Mind: How Reminders Increase Saving. *Management Science*. http://karlan.yale.edu/sites/default/files/top-of-mind-oct2014.pdf
 ⁶⁰ Ashraf, N., Karlan, D.S., Yin, W. (2004). Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines, http://eml.berkeley.edu/~webfac/emiguel/e271_s04/SEED.pdf
 ⁶¹ Thaler, R. & Benartzi, S. (2004). Save More TomorrowTM: Using Behavioral Economics to Increase

Employee Saving. The Journal of Political Economy, 112(S1), S164–S187.

⁶² Hastings, J.S., Madrian, B.C., & Skimmyhorn, W.L. (2013). Financial literacy, financial education and economic outcomes. *Annual Review of Economics*, 5, 347-373.

⁶³ Fernandes, D., Lynch Jr., J.G., Netemeyer, R.G. (2013). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60, 8, 1861-1883.

There are, however, various elements of these programmes that require further, more detailed research. Innovative programmes in which the participants learned rules of thumb that make it easy to remember certain actions had a more positive influence on financial behaviour than programmes without such rules of thumb.⁶⁴ Timing can also play a role: a shorter learning programme which focuses on specific behaviour just before making a decision ('just-in-time education') is probably more effective than a more general learning programme that takes place well in advance of the decision.

⁶⁴ Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping It Simple: Financial Literacy and Rules of Thumb. American Economic Journal. *Applied Economics*, 6, 2, 1–31.

5. Conclusion

In this report, we have described cognitive constraints and characteristics and various elements in the choice environment that can influence consumers' decision-making behaviour. These insights can be used to promote more appropriate consumer credit decisions: for example action could be taken by the AFM to address problems in the consumer credit choice environment, by the Ministry of Finance and other policy makers to develop evidence-based policies, and by financial institutions to improve their product development and review processes.

In anticipation of a future policy on the consumer credit market, we have provided examples of interventions that have worked successfully in other contexts, or that have achieved successful preliminary research results. These contain elements that could be applied in the context of consumer credit. They are examples of interventions that could make it easier for consumers to take the right decision at the right time.

We have categorised these interventions according to the four phases of the consumer credit customer journey:

- 1. Consideration phase: 'How am I going to pay?'
- 2. Purchase phase: 'Which loan do I choose?'
- 3. Payment phase: 'I have a loan and I pay interest on and/or repay that loan.'
- 4. New credit phase: 'I have repaid my loan and would not like to take out another loan.'

In each of these phases, different cognitive constraints and characteristics play a role and the choice environment will influence consumer behaviour in a different way. Below, we summarise the possible solutions for interventions in relation to each phase.

- 1. Interventions in the consideration phase:
 - Do not offer credit as a default option. This will mean that consumers only take out credit if they actively choose this.
 - Simplify the choice to encourage the right type of credit. For example, by adapting the product range.
 - Increase the salience of information on entering into debt. For example, by requiring the consumer to accept the terms and conditions of the loan, credit or debt.
- 2. Interventions in the purchase phase:
 - Display the total costs of the loan prominently. For example by comparing it with an alternative form of credit or no credit at all, or by asking consumers a question about the costs of the loan.
 - Avoid defaults and anchoring that steer the consumer in a negative way.
 - Use warnings that suggest an alternative course of action. For example, show which alternative actions are possible.
- 3. Interventions in the payment phase:
 - Establish feasible payment arrangements.
 - Encourage swift repayment. For example, by providing information on how much interest consumers can save by choosing alternative repayment schedules.

- Combine repayment with automatic saving. For example, by enabling consumers with a loan to automatically transfer part of their monthly repayment to a savings account.
- 4. Interventions in the new credit phase:
 - Make saving easier. For example, by automatically earmarking part of salary as savings or by making binding agreements about money to be received in the future.
 - Carry out thorough research into innovative teaching methods, such as teaching rules of thumb for effective money management or just-in-time education.

The AFM, policymakers and financial institutions can test these solutions in practice in order to ascertain their effect in specific contexts.

Annex I: Table of potential interventions

	Cognitive constraints and characteristics that influence behaviour
	- Present bias, self-control, mental accounting
	Ways in which the choice environment influences behaviour
Phase 1	- Salience, framing, defaults
Consideration	Potential interventions
phase: 'How am I going to pay?'	 Do not offer credit as a default option. This will mean that consumers only take out credit if they actively choose this. Simplify the choice to encourage the right type of credit. For example, by adapting the product range. Increase the salience of information on entering into debt. For example, by requiring the consumer to accept the terms and conditions of the loan, credit or debt.

	Cognitive constraints and characteristics that influence behaviour
	- Present bias, self-efficacy
	Ways in which the choice environment influences behaviour
Phase 2	- Salience, framing, defaults, anchoring
- Purchase	Potential interventions
phase: 'Which Ioan do I choose?'	 Display the total costs of the loan prominently. For example by comparing it with an alternative form of credit or no credit at all, or by asking consumers a question about the costs of the loan. Avoid defaults and anchoring that steer the consumer in a negative way. Use warnings that suggest an alternative course of action. For example, show which alternative actions are possible.

Phase 3	Cognitive constraints and characteristics that influence behaviour
- Payment	- Status quo bias, present bias, self-control, self-efficacy
phase:	Ways in which the choice environment influences behaviour
'I have a loan and I pay	- Framing
interest on	Potential interventions
and/or repay that loan.'	- Establish feasible payment arrangements.

	 Encourage swift repayment. For example, by providing information on how much interest consumers can save by choosing alternative repayment schedules. Combine repayment with automatic saving. For example, by enabling consumers with a loan to automatically transfer part of their monthly repayment to a savings account.
Phase 4 - New credit phase: 'I have repaid	Cognitive constraints and characteristics that influence behaviour-Present bias, self-control, mental accountingWays in which the choice environment influences behaviour-SaliencePotential interventions
my loan and would not like to take out another loan.'	 Make saving easier. For example, by automatically earmarking part of salary as savings or by making binding agreements about money to be received in the future. Carry out thorough research into innovative teaching methods, such as teaching rules of thumb for effective money management or just- in-time education.

Annex II: Hierarchy of research methods

In this behavioural-scientific analysis, we refer to various research methods in the passages on ideas for interventions. These research methods can be arranged according to internal validity: the extent to which the results of the research are able to account for the effect of a certain intervention. The following research methods are discussed, ranked from low to high internal validity:

Survey research: the target group is studied, compared or asked questions based on their existing situation. It is not possible to demonstrate causal relationships using this method, and various alternative explanations are possible.

Laboratory experiment: the researcher intervenes in the existing situation. One aspect of this situation is changed to demonstrate the effect of that particular change. To understand the causal effect of this change, the experiment is set up as a controlled randomised study. A control group is used (to measure what happens when no change is made) as well as random allocation (to prevent bias in the allocation). The generalisability of the results can be an issue because behaviour in a laboratory setting can differ from behaviour in the real world.

Field experiment: this type of research is carried out in the field to measure how the results of a laboratory experiment translate into reality. A single study can be informative, but to be able to draw conclusions with more certainty it is important that the results of the field experiment are replicable: if another researcher carries out the same procedure, the research results should be the same.

Systematic review: Multiple studies are assessed systematically on the basis of objective assessment criteria. This makes it possible to say with greater certainty whether the results are replicable. It is important to note that a systematic review does not, by definition, include only controlled randomised trials or field experiments. The quality of the review depends on the quality of the studies assessed.

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