Personal loan users' mental integration of payment and consumption

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Abstract Buying a good on a loan entails numerous consumption and payment episodes. Loan users can either mentally integrate or separate these episodes. In order to identify the actual mental structures, we conducted 29 semi-structured interviews with current and prospective loan users. A content analysis revealed that a majority of loan users established a hedonically efficient one-way connection from the loan to the good; i.e., the good was perceived as unrelated to the loan, whereas, concurrently, payments were buffered by thoughts of the good. Furthermore, the analysis revealed that mental structures are less stable than sometimes assumed.

Keywords Mental integration · Hedonic editing · Mental accounting · Consumer credit

As consumer credit use continues to rise in Western societies (e.g., Brown et al., 2005), research on credit use and credit users has increased accordingly. While this research has shed light on some emerging issues, it has also ignored other aspects of credit use. Literature dealing with characteristics of credit users is vast, yet much remains unknown about people's perceptions of credits. In particular, the long-term effects of credit use, their correlates in consumer perception, and its impact on consumer behavior have been largely neglected (Kamleitner and Kirchler, submitted).

This paper aims to elucidate perceptions and evaluations of credit-financed goods and installment rates during the credit process. We focus on personal loans, and analyze (a) if loan users perceive payment and consumption events as a single unit (one integrated mental account) or as separate events (different mental accounts), (b) if

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loan perception remains stable over time and across loan purposes, and (c) if loan perception relates to hedonic experiences. Theoretical considerations based on mental accounting and related ideas of quasi-hedonic editing and double-entry mental accounting are contrasted with the results of an explorative interview study.

1. Mental accounting and segregation versus integration of outcomes

The theory of mental accounting (Thaler, 1980) suggests that people mentally frame and group different outcomes according to certain rules. If outcomes are grouped together, they are assumed to be posted to the same mental account. Keeping mental accounts allows people to track financial activities and regulate spending behaviors. Mental accounting provides a common framework for phenomena like the effect of different framings of one-time purchase decisions (e.g., Read et al., 1999) or the ongoing impact of past financial transactions on consumer behavior (e.g., Arkes and Blumer, 1985). Consumers are thought to put both the sources and uses of money into mental budgets and mental accounts, respectively. Consumers may label mental accounts/budgets either by explicit purposes (i.e., entertainment) or by reasons (i.e., the most defensible option) (Brendl et al., 1998; Kivetz, 1999). Motives for keeping a mental accounting system are twofold and counteracting. Mental accounting enables people to exert self-control by binding themselves to accounting rules (e.g., budget limits; Shefrin and Thaler, 1992). At the same time, mental accounting can be used to frame (financial) outcomes in the most pleasurable way (e.g., Schweitzer, 1999). Prelec and Loewenstein (1998) refer to this trade-off by the notions of decision efficiency (self-control) and hedonic efficiency (pleasure).

Existing research on mental accounting has mainly focused on the impact of mental accounts on a person's behavior, while revealing little about the structure and nature of mental accounts (cf. Soman and Cheema, 2001) or their stability over time. Even less is known when it comes to specific transactions, like personal loans. We seek to understand how people mentally frame personal loans over time, and thus pose the following research query: Are installment rates and loan-financed good(s) perceived as a unit and posted to one mental account, or are loan payments and consumption events posted to separate mental accounts? Before answering this question we ought to deliberate on two aspects.

First, in order to assume integration of consumption pleasures and monetary losses due to installment rates, we need to pinpoint evidence indicating that people are able to combine events expressed in different mental currencies. In the literature, we find considerable proof that people are indeed able to compare and combine different event types. The economic literature often implicitly assumes that the "super currency" utility can be derived from virtually anything (Mellers, 2000), which suggests the allowance for the integration and segregation of different kinds of events and outcomes. Furthermore, this assumption was implicitly made in psychological research and can be upheld in most empirical tests (e.g., Prelec and Loewenstein, 1998). Linville and

¹ Research by Nunes and Park (2003) suggests that there may be "incommensurate" resources or carriers of wealth, meaning that sometimes it is difficult to make conversions into a meaningful common currency or medium (see also Duxbury et al., 2005; Shampan'er and Ariely, 2005).



Fischer (1991) even found that patterns of preferences for temporally separating or combining events of different domains (e.g., receiving a good grade and loosing a five dollar bill) are largely the same as those for events of the same domain.

Second, we need to understand how loan users frame consumption and payment events. There exist multiple consumption events (e.g., every time the good is used) and payment events (e.g., every single rate), which may be perceived either as separate or compound occurrences. Payments are known to be particularly susceptible to external framings and may be framed both as "some pennies-a-day" or an "overall burden" (cf. Gourville, 2003; Gourville, 1998). Research on the perception of aggregate outcomes (Ariely and Carmon, 2000; Ariely and Zauberman, 2003) suggests that it is easier for people to perceive single events. However, no clear prediction can be made on how loan payments and consumption events are framed.

In summary, we assume that people are able to integrate payment and consumption events. However, we cannot predict whether personal loan users spontaneously focus on single or aggregate events of either kind. As there appears to be no structural barrier for loan users to integrate payment and consumption events within one mental account, the remaining question is why loan users would do so. There are different theoretical explanations on when and why people integrate or segregate events; however some theories, like the "renewable resources model" of Linville and Fischer (1991) or the "loss-sensitivity-principle" of Romanus, Hassing, and Gärling (1996), deal primarily with temporal, not topical integration. Yet, two of the existing theoretical explanations can be applied to the topical integration of consumption and payment events: "quasihedonic editing" (Thaler and Johnson, 1990) and "double-entry mental accounting" (Prelec and Loewenstein, 1998).

2. Quasi-hedonic editing

Thaler (1999, p. 188) assumes "mental accounting to be as hedonically efficient as possible." Accordingly, he proposes the mental accounting rule of "quasi-hedonic editing" (1999; Thaler and Johnson, 1990), which describes how people should combine multiple events in order to maximize their hedonic experiences. Building on characteristics of the value function described in Kahneman and Tversky's (1979) "prospect theory", and in addition to empirical findings, quasi-hedonic editing proposes: (a) segregation of gains, (b) segregation of losses, (c) integration of small losses with large gains, and (d) segregation of small gains from larger losses (silver lining).²

In order to apply this idea to personal loans, we first need to identify whether we have to oppose small gains to large losses, or alternatively, large gains to small losses. In line with quasi-hedonic editing, one might suggest that payment events (losses) are perceived as segregated, while consumption events (gains) are perceived as integrated. Thus, small losses would be opposed to large gains leading to integration. However, as discussed before, people are very susceptible to external framings and do not necessarily focus on single payment and aggregate consumption events. If, for example, a person looks at a single consumption event (small gain) and all payment

² The prediction strongly resembles the prediction of the renewable resource model (Linville and Fischer, 1991).



events—that is, the overall burden associated with the loan (large loss)—the prediction would change. It now makes sense to segregate the comparably small consumption pleasure from the suddenly huge overall burden. Generally, quasi-hedonic editing is able to make clear predictions, but only when we know how people actually frame consumption and payment events.

3. Double-entry mental accounting

Different from the generally applicable idea of quasi-hedonic editing, Prelec and Loewenstein (1998) focus explicitly on the integration of consumption and payment events. They propose a model of "prospective double-entry mental accounting", which depicts interactions of present and future pain of payments with present and future consumption pleasure. These interactions are termed coupling/decoupling, defined as the degree to which thoughts of payment arouse thoughts of consumption and vice versa. Coupling is integrated into the model by introducing two coupling coefficients, α (for the pain of paying attenuating consumption utility) and β (for consumption pleasure buffering payment disutility), which are not exactly symmetric.

The degree of coupling was supposed to depend on individual differences (e.g., Prelec and Loewenstein, 1998) and varies depending on payment methods (e.g., Soman, 2003) and the number of benefits associated with one payment. For example, paying in cash produces much tighter coupling than paying by credit card (e.g., Soman, 2001). Coupling may be driven cognitively but also motivationally (e.g., Soman and Gourville, 2001). Earmarking mental accounts is one way in which people can willingly create tight coupling (Prelec and Loewenstein, 1998). Thus, coupling can be described as a mental accounting tool that influences the balance between decision and hedonic efficiency. In other words, it is easier to regulate one's spending if pain of payment is felt when consuming, and it feels good to see that there is some countervalue to the pain of paying.

Personal loans resemble credit cards in that payments occur after the purchase. However, there are two major differences between the two payment methods. First, credit card users are often not able to assign single purchases to the credit card bill, while personal loan users usually know what the loan was used for. Second, credit cards are usually used to purchase many consumer products, while personal loans are most often used to purchase one or few consumer durables. Thus, the decoupling found for credit card users may not necessarily apply to personal loan users. Predictions are especially unclear as (de)coupling can increase both hedonic and decision efficiency. From a hedonic perspective, the optimal situation suggests a one-way connection between the pain of paying and pleasure from the good. The good should be entirely decoupled from payment and feel as if it were free, whereas payment should elicit buffering thoughts of the good (see also Prelec and Loewenstein, 1998). However, from a decision quality perspective, the optimal case suggests a two-way connection, as knowing the cost of a good helps to regulate spending.

Finally, there is one implicit assumption shared by both quasi-hedonic editing and double-entry mental accounting. If the nature of the events remains constant, stability of the degree of coupling (integration) is assumed. Therefore, the good and the loan should be coupled to the same extent throughout the duration of the payment process.



4. Measuring integration versus segregation

Mental accounting structures and rules are difficult to analyze empirically. While it is assumed that people are aware of using mental accounts (Heath and Soll, 1996) and integrating consumer events (Prelec and Loewenstein, 1998), most people do not use such terms and may therefore be unable to answer direct questions like "What do you post to your mental loan account?" Consequently, there are two ways to analyze mental accounting structures. First, one might deduct them from choice tasks and other behaviors. Second, one might try to deduct information from the way people talk about the object in question (e.g., loan). Like Ranyard and Craig, (1995), who sought to identify people's mental evaluations of installment credit in order to decide whether or not to accept a credit offer, we too preferred using interviews. This method allowed us to gain an in-depth look at the phenomenon and to learn how people speak about their mental accounts.

5. Method

5.1. Sample

We interviewed 22 people currently holding a personal loan with a duration of at least one year (1 to 20 years, Median = 5 years), and seven prospective loan holders. The sample was heterogeneous in terms of net income (700 to 2000 Euro, M = 1365.52, SD = 342.55), sex (19 men, 10 women), age (23 to 50 years, M = 32.90, SD = 9.89), and repayment period, with an equal number of participants in each of the three repayment periods. In line with previous findings (e.g., Hirst et al., 1994), the loan-financed goods were mostly durable goods with a lifetime that at least matched loan duration (the one exception being vacations). The primary purposes of the loans were to finance the purchase of furniture (n = 12) or a car or motorbike (n = 10).

5.2. Design and procedure

Participants were recruited by word of mouth, through a financial advisor, and by a 20 euro participation incentive. All participants agreed to be interviewed. Interviews were conducted in German, which was the native tongue of all participants. The interviewer was informed about the general study purpose but was not familiar with the literature. Interviewes lasted between half an hour and one hour, and were conducted by one interviewer at either the interviewer's or the interviewee's premises. Participants were informed about the study's purpose and procedures. Interviews were conducted using semi-structured interview guidelines which contained mostly narrative questions relating to different aspects of the personal loan—especially aspects relating to the interviewee's attitudes towards the loan (see Appendix). Questions aimed to elicit spontaneous statements containing information about participants' perceptions of their personal loans. The interviews were conducted in an informal manner to encourage honest disclosure. Paraphrases and repetitions of participants' statements prompted further elaboration or correction. After the interview, participants filled out a short



questionnaire on socio-demographic variables and psychographic self-reports. Each interview was recorded, transcribed verbatim, and coded with the qualitative analysis software atlas.ti.

5.3. Categorization and content analysis

Data were analyzed largely by following the qualitative content analysis suggested by Mayring (2003). Based on theoretical considerations, codes were built deductively, systematically reassessed during the coding process, and adapted inductively. One person, who was responsible for reassessing existing codes, categories, and coding rules, first coded all interviews. This first coder was informed about the study's purpose and well acquainted with literature. Repeatability of the analysis was ensured by a coding guideline that included code definitions, coding rules, and typical examples.

The coding procedure consisted of two steps. First, the coder coded multiple segments of an interview and assigned several identical or even mutually exclusive codes to one interview (average length: 2887 words). This step was repeated several times. Second, the coder was advised to count a code only once per interview and to make sure that no mutually exclusive codes remained. If this was impossible without loss of information, it was interpreted as a sign of the need for further adjustments to the category system or the coding guideline. For example, we initially assigned the mutually exclusive codes "thoughts: the good integrated with loan" and "thoughts: the good segregated from loan". However, it happened that both codes were assigned to different segments within an interview. As a consequence, we re-analyzed all text passages that were assigned the codes in question and found that these codes were not specific enough. People seemed to differentiate between the good stimulating thoughts of the loan and the loan stimulating thoughts of the good. As a result, the previous two codes were split up in two pairs of mutually exclusive codes: "the good evokes the loan", "the good does not evoke the loan", and "the loan evokes the good", "the loan does not evoke the good". Our final coding system consisted of 27 relevant codes. In line with the second step of our analysis, the maximum frequency per code was restricted to the number of interviews (N = 29). This multiple-step procedure allowed us to describe perceptual patterns that are unbiased by the talking habits of a single participant. Moreover, it ensures that inter-coder agreements are not restricted to the meaning of single segments, but rather to the meaning of the whole interview.

After the first coder ran and refined the content analysis several times, a second coder used the coding guideline to independently code eight interviews selected at random. The same two-step coding procedure was used. The second coder was only superficially informed about the study's purpose and not acquainted with the literature. Overall, Cohen's (1960) kappa, a chance corrected measure of inter-coder-agreement, amounted to $0.78~(0={\rm chance~level},\,1={\rm perfect~agreement})$. Disagreements between the coders were resolved by subsequent discussion.

The final codes were split into main categories that were again divided into sub-dimensions. Here, we focus on the main category "integration" which contains the two sub-dimensions: "actual integration" and "integration over time". The dimension "actual integration" consists of four pairs of mutually exclusive codes: (1a) the good evokes the loan— (1b) the good does not evoke the loan, (2a) the loan evokes the good—(2b) the loan does not evoke the good, (3a) the loan changes the perception



of the good—(3b) the loan does not change the perception of the good, and (4a) rate earmarked "the good"—(4b) rate earmarked "other". The dimension "integration over time" consists of two pairs of mutually exclusive codes: (1a) integration at the time of purchase—(1b) segregation at the time of purchase, (2a) from integration to segregation—(2b) from segregation to integration.

6. Results and discussion

6.1. Actual integration

The column 'Overall' in Table 1 shows the number of interviews to which each of the codes was assigned. Codes were only assigned to explicit statements, thus if no clear statement was made, no code was assigned. Consequently, the sum of mutually exclusive codes never amounts to the total number of interviews (N=29). The two pairs of codes indicating most directly whether the good and the loan are mentally integrated are the so-called "evoke-codes" (the good does/does not evoke the loan; the loan does/does not evoke the good). These codes were assigned every time an interviewee stated that the good made him/her (not) think of the loan or vice versa. For example, whenever a person stated that thinking about the loan, seeing the rate on the monthly statement, or paying the rate makes her/him think of the good, the code "the loan evokes the good" was assigned. Overall, 19 people explicitly stated whether or not the loan evokes the good. The majority (12 from 19) indicated that the loan does evoke thoughts of the good. Interestingly, most people (14 from 20) also indicated that the opposite is not true; the good does not evoke thoughts of the loan (Table 1). In addition, those who did state that the good evoked the loan qualified their statements by reporting that it would either occur rarely or at least not systematically. For example, one man said that he occasionally thinks about the loan when he sees his loan-financed motorbike, but not when he actually uses it.

Two other pairs of mutually exclusive codes were interpreted as indicators for integration. If people reported that the loan changes their perception of the good, this was interpreted as an indication that the good evokes the loan. If people reported to earmark the rate on the account statement as "the good", this was interpreted as an indication that the loan evokes the good. Table 1 shows that five out of 22 participants said that the loan changed their perception of the good, whereas eight out of 28 said that the rate would be earmarked with the loan-financed good, and the remaining 20 people said that it would be earmarked differently ("fixed costs", or just "the loan").

In sum, there are strong indications that the good and the loan are somehow integrated. However, this integration seems to be asymmetric. Although the loan often evokes the good, the good rarely evokes the loan, and the perception of the good is unbiased by the loan. We interpret this integration pattern as a one-way connection. Loan payments seem to be buffered by thoughts of the good, whereas the good does not seem to be attenuated by thoughts of the loan. This one-way connection was supported by the frequencies of the codes "the loan evokes the good", "the loan does not evoke the good", "the good evokes the loan", "the good does not evoke the loan", "the loan changes the perception of the good", and "the loan does not change the perception of the good". The only pair of codes not supporting the assumption of a



Sprin	À	osition in pa	Position in payback period	q	Purl	Purpose of loan use	ıse		Loan duration	on	llorer of
	Before $n = 7$	Start $n = 7$	Middle $n = 7$	End $n=8$	Furniture $n = 12$	Vehicle $n = 10$	Other* $n = 7$	$\le 5 \text{ yr.}$ $n = 11$	>5 yr. $n=7$	No info* $n = 11$	N = 29
The loan evokes the good The loan does not evoke	4	4	2	2	9	2	4	4	4	4	12
the good The good evokes the	0	0	2	5	-	4	2	8	1	3	7
loan The good does not evoke the	1	2	2	1	1	3	2	8	2	1	9
loan The loan changes the	4	4	4	2	7	7	1	'n	2	7	14
perception of the good The loan does not change	1	-	1	2	-	2	2	8	1	-	3
the perception of the good	3	4	4	9	9	8	4	5	5	7	17
Rate earmarked "good"	_	3	2	2	4	4	0	3	2	3	8
Rate earmarked "other"	9	4	4	9	7	9	7	∞	5	∞	20
Integration at time of purchase	4	4	0	2	9	2	2	2	8	5	10
Segregation at time of purchase	1	0	3	4	1	5	2	5	1	2	∞
From integration to segregation	4	2	_	3	3	4	3	4	2	4	10
From segregation to integration	0	0	0	0	0	0	0	_	0	_	<

Note: * Either no or no unequivocal information was given.



one-way connection from the loan to the good is that related to earmarking. The code "rate earmarked the good" was less frequently assigned than would be expected if the rate automatically evokes the good. However, this does not necessarily contradict our previous interpretation. Earmarking the rate is more permanent than single thoughts indicated by the other codes. Thus, the nature of this code is different. This difference may make it impossible to maintain a one-way connection from the loan to the good, and instead force people to establish a two-way connection, thereby diminishing consumption pleasures by payment pains.

6.2. Integration over time

Codes for reported changes in mental integration over time were also assigned. Ten people indicated that they experienced or expected a change from integration to segregation, but nobody indicated the reverse (Table 1). For example, one woman said that early in the payback period, she always thought of the loan upon seeing the good, but such thoughts ceased as time passed. In addition, people near the end of the payback period thought less often of the loan than those at the beginning. A shift from integration to segregation is also shown for the codes "the loan evokes the good" and "the loan does not evoke the good". Prospective loan users and people at the beginning of the repayment period indicated that the loan would evoke thoughts of the good more often than did people at the end of the repayment period. Surprisingly, this shift also becomes evident for the code pair "integration at the time of purchase" versus "segregation at the time of purchase". We asked people to remember/imagine the time of purchasing the good and to indicate what they were thinking at that time. Individuals before or at the beginning of the payback period reported that they thought of the loan associated to the good at the time of purchase more often than did those at the end of the payback period (Table 1). While this change may be restricted to our sample, it may also be that the memories of participants towards the end of the repayment period were distorted by current integration patterns.

In our sample current loan users at the beginning of the repayment period were more similar to prospective loan users than to current loan users in the middle or end of the payback period. While the position in the payback period does not seem to impact whether or not the good evokes the loan, it does seem to impact if the loan evokes the good, as well as the experience of integration at the time of purchase. Overall, it appears that during the payback period, people increasingly block the connection between the loan and the good, and may even rebuild their memories accordingly.

6.3. Differences in terms of purpose and duration

Besides revealing a general trend towards a ceasing one-way integration from the loan to the good, the code frequencies in Table 1 also show that this trend does not apply to all credit users. In order to identify possible forces behind these differences, Table 1 depicts code frequencies by purpose of loan use and loan duration. Participants were split into three groups depending on the loan's purpose: furniture, vehicles (cars and motorbikes), and other (e.g., vacation). A comparison of these groups shows differences in at least two pairs of codes. First, while the majority of those using the loan for furniture (6 out of 7) reports that the loan evokes the good, the majority of



those using the loan for vehicles (4 out of 6) reports that this does not happen. Second, while the majority of those using the loan for furniture (6 out of 7) were assigned the code "integration at time of purchase", the majority of those using the loan for vehicles (5 out of 7) were assigned the opposed code "segregation at time of purchase".

Participants were again split into three groups based on loan duration: up to five years, more than five years, and no unequivocal information on loan duration. Differences between these groups are less pronounced than they were between groups of loan purpose. However, two differences in the code frequencies seem noteworthy. First, the codes "the loan evokes the good" and "the loan does not evoke the good" were assigned nearly equally to people with a loan duration of five years or less. In contrast, the frequencies of these codes were not balanced within the group of participants with longer loan durations, but rather the majority (4 out of 5) was assigned the code "the loan evokes the good". Second, while the majority of those with a short loan duration (5 out of 7) reported integration at time of purchase, those with a long loan duration reported segregation.

To conclude, it seems that purpose and duration matter. People using the loan to purchase furniture and people with longer loan durations seem more likely to integrate at loan take up and during the payback period.³ When reading the interviews, we frequently had the impression that justification was an important topic for most credit users. This may possibly be of explanatory value here. Shorter loans are often taken for goods that are difficult to justify (e.g., vacation, TV) because they are hedonic (e.g., Okada, 2005) and it would be possible to postpone the purchase until the money was saved. In addition, vehicles are often bought before it is absolutely necessary and are often more hedonic than furniture. It seems reasonable to completely segregate loan and good when the good is difficult to justify.

7. General discussion

Integration of multiple outcomes is a well-investigated topic when it comes to temporally separated events. Much less is known when it comes to the integration of topically related events in a specific context. Consequently, the present study dealt with integration of consumption and payment events related to a personal loan. As a loan is usually a long-term project, this study also sheds light on the stability of mental integration patterns over time. Results of a content analysis run over 29 interviews with current and prospective personal loan users indicate that it may be too simplistic to talk of integration and segregation of payment and consumption as two opposing ends of a continuum. A majority of personal loan users buffers payment disutility by thoughts of consumption utility, whereas concurrently, the majority does not attenuate consumption utility by painful thoughts of the payment. However, there is considerable variation across loan purpose and loan duration. Furthermore, mental integration of the loan and the good seems to weaken or disappear in the course of the payback period. Thus, the good and the loan seem to be integrated, but the connection between them appears to be a one-way street that deteriorates as time goes by.

³ Note that loan duration and loan purpose frequently depend on each other, thus there may be the same underlying reasons for similar integration patterns.



Both quasi-hedonic editing (Thaler and Johnson, 1990) as well as double-entry mental accounting (Prelec and Loewenstein, 1998) partly predict our findings. Concerning quasi-hedonic editing, segregating the small "gains" of single consumption events from the larger "losses" of the overall loan is as efficient as integrating the small "losses" of single installment rates with the overall "gain" of consumption.⁴ Concerning double-entry mental accounting, many people seem to experience the optimal case from a hedonic point of view. The good is decoupled from payment, while payment elicits buffering thoughts of the good.⁵ However, both theoretical accounts fall short of explaining the change from (one-way) integration to complete segregation, a phenomenon probably due to one's quick adaptation to the new financial situation. Moreover, this change also seems to be hedonically efficient. All but one of the people who explicitly stated that they perceived a change from integration to segregation also reported a perceived decrease in payment disutility. One explanation for this shortcoming in both theoretical accounts may be, to some extent, that integration seems to happen with (dis)utilities apart from actual payment and consumption.⁶ For example, when analyzing participants' statements we found that vivid consumptions like vacations may create rewarding memories that can provide utility for a long period of time (cf. Gourville and Soman, 1998), that disutility might arise from the mere knowledge of being in debt, and that utility is created by the knowledge that repayment is a step towards becoming debt-free. As a result, (dis)utilities of the loan and the good have multiple components that may develop differently over time and lead to instability of integration.

Finally, we need to acknowledge some limitations of our study. First, although we found indications for hedonic mental integration we cannot be sure that integration is motivationally driven as we did not trace mental processes. Integration patterns do not necessarily result from internal framing processes, but might, for example, be due to an adoption of external framings of the loan and the good. Nevertheless, our findings are largely consistent with hedonic editing and supported by many statements of participants, which indicate motivated framing. Second, our study bears the strong assumption that people are able and willing to report actual mental accounting structures. There is no reason to believe that this assumption is wrong, however, with the exception of a few previous studies (e.g., Ranyard and Craig, 1995) that implicitly apply the same assumption, we have no way to verify it within our study. Third, although the interviewer was carefully trained and remained unacquainted with the literature, demand effects cannot be completely excluded. Fourth, our findings result from a small, cross-sectional interview study. This allowed us to get a much more comprehensive look at the phenomenon than we are able to reflect here. Nevertheless,

⁷ Theoretical support for this possibility comes from Beggan (1994) who found that repayments were frequently framed as gains.



⁴ We ran a second analysis across all codes indicating integration. With one exception, single events were compared with aggregate events. That is, single payments were compared with overall utility from the good, and single consumption events were compared with the overall burden of the loan.

⁵ An analysis of codes related to stated (dis)utilities revealed that this one-way connection is in fact hedonically efficient.

⁶ Prelec and Loewenstein (1998) acknowledge that experienced utility may be influenced by sources other than actual consumption (e.g., a friend comments negatively about the good) but they do not provide for this possibility systematically.

it naturally limits the validity of our interpretations. However, now that we know how people implicitly talk about integration, we are in a position to replicate our findings in large-scale studies.

Our study represents a very first step in a young research venture. Mental integration of consumption events and payments, its hedonic correlates, and its impact on consumer behavior seem worthwhile further examination. This may lead to a better understanding of how consumers perceive personal loans in contrast to other payment methods in the long term. For example, such an understanding could help to configure hedonically efficient pricing policies. In addition, research on causes and consequences of specific mental integration patterns is also worthwhile. Here we found support that selected situational differences (i.e., loan purpose and loan duration) are related to mental integration patterns. However, there may be many other significant factors. For example, an analysis of the psychographics we collected in an additional questionnaire indicated that people with negative credit attitudes might be especially prone to complete integration of the loan and the good. Further studies that control for causalities seem to be a promising endeavor.

In their article on double-entry mental accounting, Prelec and Loewenstein (1998, p. 26) argue that, "the ideal payment arrangements ... will be those ... that create the illusion of free benefits without sacrificing accountability." It seems as if this idealization becomes a reality for many consumers using personal loans.

8. Appendix—Selected questions of the interview guide

- -You've said that you have taken out (intend to take out) a personal loan. How was that? Please tell me a little bit about that—whatever comes across your mind.
- -Why did you take out a personal loan? What was it (will it be) used for? What did (do) you consider as important when taking out the loan? Was (is) someone else involved in the credit decision? Did (do) you have the possibility to finance the good by using some other wealth (e.g., savings) instead of the loan? Why did you decide to take out a loan instead of waiting and saving? Did you consider the possibility that the loan-financed good might break down or be stolen?
- -When you decided to buy the loan-financed good, what happened (will happen) first—the purchase or the loan take out? Why? What did (will) you think about when making the purchase? Did (will) you think of the loan?
- -What has happened since taking out the loan? How long have you been repaying the loan?
- -How do you feel about the loan at the moment? Has (Will) it changed since you first took out the loan?
- -How do you feel about the loan-financed good at the moment? Has (will) it changed since you first took out the loan? Would you say that the loan influences how you feel about the good?
- -Which thoughts cross your mind when you think of the loan? When you think of the loan, does it make you think of the loan-financed good? How often, and in which circumstances do you think about the (prospective) loan?
- -How do you (think you will) feel when you look at your account statement and see that the installment rate was debited? When you see the installment rate on your statement,



how will you label this amount (something like "fixed costs", "for the car", etc.)? Why would you use that label?

-What advice would you give someone thinking about taking out a loan?

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