Mental counting and the use of separate accounts in a digital bank

The purpose of this study is to investigate whether customers of a digital bank are using some form of mental accounting by dividing their money into separate accounts, and if digital accounting increases financial control by making saving easier. Moreover, the role of propensity to plan and level of self-control for saving behavior is studied.

In a time marked by considerable changes in the financial environment and easy access to spending opportunities (Evry 2019), having control over personal finances can be difficult. This is reflected in the increasing amount of consumer debt and loan defaults we see today (Andersen 2017, Dinero 2019). Researchers have found that people who exhibit planning behavior arrive at retirement age with much more wealth than non-planners (Rabinovich and Webley 2007). To be able to first plan, and then to follow one's plan, an individual needs self-control. Self-control can be especially difficult when an act does not involve immediate reward (O'Donoghue and Rabin 1999, Garon, Masse et al. 2015). One tool that can be used to help with both planning and self-control of personal income is metal accounting (Antonides and Ranyard 2017). Mental accounting refers to cognitive operations used to organize and keep track of financial activities (Thaler 1999). One way to do this is by categorizing or labeling money coming into the household, e.g. "holiday", "entertainment", "health", and so on. According to traditional economic models this kind of labeling would be redundant, but behavioral economists have found that money is not fungible and that labeling matter (Thaler 1999). Research has shown that when money has been divided into multiple accounts where each account has a specific purpose, this will increase the psychological cost of spending money that was set aside for a different purpose (Thaler 1999, Soman and Cheema 2011). E.g. in an experiment done by Soman and Cheema (2011) among low-income consumers, they found that people saved more when earmarked money was partitioned into two accounts than if it was pooled into one. However, it can also lead to myopic decision-making, e.g. saving for the future while at the same time incurring high interest rate on debt (Sussman and O'brien 2016).

The expectation for the study is that dividing money into separate accounts and saving towards a concrete goal will be positively related to good personal financial management and saving.

For this study, data from 594 customers of a Norwegian digital bank has been analyzed. The data was collected through a survey that was e-mailed from the bank to its customers. The survey included 3 questions measuring self-control, 9 on propensity to plan, 2 on personal finances and 2 on mental accounting along with 11 on socio-economic characteristics.

Preliminary analyses show that more than 70% of the participants divided their money into several accounts in addition to expense/salary accounts. 58% of these found that this helped in not spending the money set aside for something else, and 38 % found that it helped to some extent (see Table 1).

Running an ordinal logistics regression with dependent variable “Difficult to manage financially” with three categories (Not at all difficult, A little difficult, and Difficult / Very difficult), participants finding it helpful to save for specific goals were more likely to move up in levels towards having difficulties managing their finances, compared to those who did not find this helpful (odds ratio 2.906). When it came to level of self-control and propensity to plan, probability of finding it difficult to manage financially decreased as these levels increased (odds ratios 0.448 and 0.686). In addition, from a binary logistics regression with “Easier to save for concrete goals” as the dependent variable, an increase in level of self-control led to a lower probability of finding it helpful to save for a concrete goal (odds ratio 0.555). An increase in propensity to plan on the other hand, led to a higher probability (odds ratio 1.331).

The expectation for the study was that dividing money into separate accounts, and saving towards a concrete goal, would be positively related to good personal financial management and saving. Even though a majority of the participants answered that separating money and saving for a specific goal made it easier to save/not use money set aside for something else, it was more likely that participants finding it easier to save for a concrete goal found it difficult to manage their personal finances. A reason for this could be that participants who have good financial management do not necessarily need these kinds of incentives to save.

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Table 1

Sample characteristics

		Difficult to manage financially		
	All	Not at all difficult	A little difficult	Difficult / Very difficult
N	**594**	**335**	**198**	**41**
Do you divide money into several accounts?				
Yes, one account in addition to expense/salary account	21,9 %	22,2 %	19,2 %	38,5 %
Yes, several accounts in addition to expense/salary account	70,4 %	72,1 %	71,5 %	53,8 %
No, only expense/salary account	7,7 %	5,7 %	9,3 %	7,7 %
Does it help to divide money into different accounts?				
Yes, I don't spend money set aside for something else	58,4 %	62,6 %	54,4 %	45,7 %
Yes, somewhat	38,2 %	32,8 %	43,9 %	54,3 %
No, I use money set aside for other things	3,5 %	4,6 %	1,8 %	0,0 %
It is easier to save for a specific goal				
Strongly agree / agree	54,4 %	49,8 %	58,6 %	61,0 %
Agree somewhat	21,4 %	17,9 %	27,8 %	22,0 %
Either or	14,5 %	18,5 %	10,6 %	4,9 %
Disagree / Strongly disagree	9,7 %	13,7 %	3,0 %	12,2 %