# Identity and hedonic factors as determinants of savings intentions.

#### **Abstract**

Savings are a major individual and collective issue. Yet, for several decades, consumers have been saving less or too little. Despite academic research and public initiatives, little is known about individual savings behaviors.

Based on a conceptual model centered on identity and hedonic constructs, major in consumer behaviors theories, and a more precise definition of savings stages, our study investigates the impact of self-esteem, pleasure of saving, and financial well-being, on savings intentions. Using structural equation modeling, we show these factors are more influential than classic determinants such as self-efficacy. Our analysis highlights the benefits of studying and considering savings behaviors as consumers' behaviors and experiences.

Key words: savings, pleasure, self-esteem, identity, financial well-being.

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#### Introduction

Despite the accumulation of savings during COVID-19 lockdowns, most Western consumers display a low savings ratio. Thus, many people might not be able to cover their financial needs for real estate, health contingencies, and especially retirement (Rooij et al. 2011). Insufficient savings may expose individuals and households to financial vulnerability and can damage their financial well-being. Yet, in consumer behavior, a large part of the literature on money is centered on credit, debt, and, in general terms, their misdeeds. The literature on savings remains less abundant. Helping people save more money is a recent concern (Dholakia et al. 2016; Newmeyer et al. 2021). The literature has identified several determinants of savings intentions and behaviors, with a preference for rational determinants, related to risk tolerance, or based on knowledge and skills. But research on the influence of constructs such as financial literacy has been disappointing (Alsemgeest 2015; Asaad 2015; Fernandes, Lynch & Netemeyer 2014; Reyers 2019). To develop a better understanding of why people save, we approach it as consumer behavior. We focus on the realization of saving decisions and we investigate the influence on savings intentions of factors such as the concept of self, pleasure, financial well-being, or involvement. After presenting the conceptual framework of our research and our research questions, we detail our findings, before concluding on the contributions, limitations, and perspectives of this research.

#### **Conceptual Framework and Research Questions**

Money plays many functional and symbolic roles. As people engage daily in financial behaviors (Lee & Hanna 2015), consumers must understand and master how to interact with money to be integrated into society (Abramovitch et al. 1991; Lazarus 2012). To consumers, savings are a strategic issue (Bessière & Gollac 2019; Pincon & Pincon-Charlot 2007) to face life contingencies (Gutter et al. 2012), to invest in durable goods or real estate, for personal or commercial reasons. Savings help attain financial stability and independence (Loibl et al. 2011), and they contribute to financial satisfaction (Joo & Grable 2004; Traut-Mattausch & Jonas 2011). Quantitatively, savings behaviors are extremely significant. For instance, in 2019 French consumers subscribed to 2.5 million new savings accounts (Livrets A), while they closed 2.8 million of such accounts. In this scope, savings decisions and behaviors are a major component of daily life (Asaad 2015; Engelberg 2007). To perform these behaviors and decisions, consumers rely on their knowledge of financial concepts and mechanisms (Grohmann et al. 2015). Savings are inherently complex behaviors (Bayuk & Patrick 2021; Rooij et al. 2011). Savings decisions require basic knowledge of financial concepts (Grohmann et al. 2015). Many households and consumers lack the necessary knowledge to make appropriate decisions when it comes to savings (Pham et al. 2012; Rooij et al. 2011). Thus, consumers need help to save more, more regularly. Besides economic and practical concerns, savings behaviors may be a significant component of the transformative consumer research movement to redirect consumption forces (Keller & Lusardi 2012). As supposed by Baudrillard (1970), savings may be an elitist strategy for those wanting to distinguish themselves from the crowd of consumers. In this respect, savings behaviors apply materialism to money, time, and intangible possessions, thus promoting a new kind of materialism. Furthermore, the savings environment is currently experiencing 3 major evolutions. (a) Savings foundations are still shaken by the aftermath of the subprime crisis. (b) Most governments progressively dismantle public programs for retirement and social security, boosting savings needs. (c) Recently, new competitors: neobanks, and fintech, entered the market. To encourage financial institutions and policymakers in designing, customer-centered, effective new savings programs and strategies, the objective of this research is to clarify how several psychological determinants interact to impact savings intentions, and potentially savings acts. We hereby explore and combine two approaches: (a) defining savings more precisely by distinguishing actions from decisions, and (b) interpreting savings as consumer behaviors, with affective and hedonistic components.

#### Literature review

## What are savings?

Fundamentally, savings are possessions put aside for later use. Savings can involve any tangible or intangible medium (Falicov 2001; Tendy et al. 2015). Using objects as savings may be preferable to investments or holding a savings account, as objects provide almost immediate access to liquid forms of money. The definition of savings as a behavioral process must be more accurately specified. Comparing savings to congruent concepts: wealth, investment, assets, holdings, or capital, we elicited a more precise definition of the concept. Savings behaviors encompass 4 successive stages: (a) decision stage: deciding to save not consumed incomes or possessions that have a value, (b) concretization

stage or savings acts, (c) possession and preservation stage, and (d) consumption stage. Profit may be expected, notably through the gain of interests, but it is not mandatory. The literature focuses on savings decisions and their consequences. Frequently, it considers savings decisions are systematically and flawlessly transformed into savings acts. Instead, most of the time, those acts take place in the future and must be repeated several times to reach the goal associated with the savings decision. That is one of the major problems faced by individual savers. We suggest researching the determinants of savings acts.

#### Savings acts, institutional and monetary savings

We define a savings act as any action that results in a quantitative or qualitative change in an individual's monetary savings. This refers to the subscription of different categories of savings products, and to monetary movements (addition, withdrawal, or transfer of money between savings products) concerning these savings products. The numerical importance of such deeds is indisputable<sup>1</sup>.

While the concept of the savings act is more accurate than simply savings behaviors, it is based on two implicit assumptions: (a) the institutional aspect of savings and (b) its monetary nature. Referring to savings products implies excluding any savings behavior that is not carried out exclusively with products managed by a financial institution. This narrow definition also exists among consumers (Tendy et al. 2015). However, institutional and formal acts of savings do not cover all forms of savings. Symmetrically, we cannot consider that consuming less than one's income is sufficient to characterize voluntary savings behaviors. We propose to distinguish between (a) institutional and formal savings acts, i.e. savings acts involving a savings product in a financial institution, and (b) informal savings acts when a sum of money is set aside, whether by earmarking or another separation process, to be used later. With dematerialized money, such a process can be as simple as a mental accounting operation. Focusing on monetary savings is the literature's second assumption. Still, non-monetary savings do exist. In this research, we focus on institutional monetary savings behaviors, specifically savings acts.

## Interpreting savings as a consumer behavior

Savings decisions and behaviors are potentially influenced by many determinants (Gutter et al. 2012). Interestingly, while the literature considers that savings are ancient behaviors (Wärneryd 1998), two restrictive conceptual views prevail to categorize savings behaviors. (a) One defines savings as what remains when income has been spent on consumer goods. Here savings are not even a behavior. (b) Savings are rational behaviors and decisions that don't belong to consumption but may influence it. They are subordinated to consumption (Duesenberry 1949). A third, less popular, framework somehow interprets savings as mechanisms - and not behaviors - apart from psychological and social forces, by convening, biology (Doyle 1999), mathematics, or habits (Katona 1975). All three frameworks exclude savings from consumer behaviors. Still, as is the case for credit and debt, several elements support the hypothesis that savings may be a consumer behavior (Ladwein 1999). For Baudrillard (1968), consumption has no limit. It is « a systematic manipulation of the signs » and an « active mode of relating to objects and building a relationship with others». It satisfies desires as much as needs. It is also social interaction, a practice, a media between individuals and groups (Douglas & Isherwood 1979). Consumer society is not only an economic phenomenon but also a cultural and social one (Douglas & Isherwood 1979; Ladwein 2017). All these characteristics are compatible with money and savings. The development of savings behaviors, such as life insurance, has been allowed by the emergence of social norms (Zelizer 2005). The literature review showed that savings convey a great number of functional but also symbolic, cultural, and social meanings. Saving is a strategy to consume and manipulate time. Trying to save more money in a consumer society may be interpreted as a very elitist social strategy (Baudrillard 1970). Even materialism may be pursued by accumulating money as a specific kind of possession. Indeed, savings magnify two behaviors related to possessions (Belk 1983); possessiveness and acquisitiveness, as it is extremely easy to stock monetary savings. Consumer behavior theory offers the opportunity to explain savings behaviors with identity, hedonic or affective determinants. These concepts can help us better understand how savings acts are implemented. We successively explore pleasure, involvement, subjective financial well-being, self-concept, and self-efficacy as potential determinants of savings intentions.

<sup>&</sup>lt;sup>1</sup> According to the 2013 TNS SOFRES - La Banque Postale barometer, 57% of respondents said they had dipped into their savings over the last 6 months and 31% planned to do so over the next 6 months. In terms of amounts, in 2019, net flows of financial investments - which therefore underestimate the total amount of inflows and outflows generated by acts of savings - represented 143 billion euros, including 89 billion for savings accounts alone and 49 billion for life insurance and retirement savings.

## Research hypotheses

Without long-term longitudinal research, it is extremely difficult to observe repeated savings acts. To circumvent this issue, we rely on savings intentions, defined here as subjective judgments about whether consumers think they will engage in saving money. Being strongly influenced by the economic theories, the literature on savings remains substantially based on the Life Cycle Hypothesis (LCH) (Modigiliani & Ando 1963) postulates. In the articles based on the LCH theoretical frame, the models used are inspired by the Theory of Planned Behavior (TPB). TPB is a psychological theory developed by Ajzen (1985) that postulates that behavioral intentions are determined by three components: attitude, subjective norms, and perceived behavioral control. In turn, behavioral intentions determine behaviors (Ajzen 2012). According to the TPB, saving is a volitional behavior, and savings intentions are a strong predictor of savings behaviors, even if barriers do exist (see Magendans et al. 2017).

## Involvement: importance and pleasure of savings behaviors

The literature considers that the level of involvement influences intentions and concretization of decisions. Savings acts and behaviors require commitment (Aldlaigan & Buttle 2001; Eisingerich & Bell 2007). The influence of commitment may be assessed using involvement or satisfaction. Involvement has been associated with savings decisions (Labelle, Colombel & Perrien 2003). We propose to extend its influence to savings acts. Amongst the 5 involvement dimensions identified by Laurent and Kapferer (1986), we focus on the interest and importance of the behavior and the pleasure associated with the behavior. The importance of money is a major dimension of attitudes towards money (Yamauchi & Templer 1982) and attitudes toward savings (Furnham 1999). In models inspired by the Theory of Planned Behavior, constructs of attitudes towards savings frequently include items on savings importance (eg. Croy et al. 2010). If one values savings, and the security it provides, and is committed to the act of savings, then savings acts will be performed seriously, and diligently because they are involved in savings acts. This leads to the following hypothesis:

## H1. The higher the importance granted to savings, the stronger the savings intentions.

Consistent with the PAD (Pleasure - Arousal - Dominance) model of experience, the anticipated positive emotions associated with a behavior correspond to behavioral beliefs of an emotional or affective nature: happy/sad, happy/ contracted, pleasure/boredom, optimistic/pessimistic: emotions can be associated to savings acts. Interactions with money are emotionally charged (Engelberg 2007). The literature sometimes assumes that emotions and affects may influence savings. Hedonic aspects, notably enjoyment, influence savings indirectly: it is predictive of low or non-regular savings (Lunt and Livingstone 1991). They also act directly: savers feel positive emotions towards savings (exciting, satisfying), while non-savers either feel negative emotions (sad, unexciting) related to lower consumption, even if some consumers do not associate any emotion with savings (Tendy et al. 2015). In models inspired by the Theory of Planned Behavior, constructs of attitudes towards savings frequently include items that can be associated with hedonism: eg. saving is pleasant, enjoyable (Loibl & Scharff 2010). Precisely, the literature associates pleasure, hedonistic feelings, and emotions with savings decisions. In the economic literature, pleasure, labeled as savouring is related to one's capacity to report gratification and to be patient. Savers may experience dread or savouring emotions due to the waiting between decisions and outcomes (Loewenstein 1987). Furthermore, when affective dimensions (Labelle et al. 2003) or emotions are associated with savings (Ayadi 2010), it specifically concerns investments. In this case, pleasure and emotions are related to the thrill of taking risks with one's money. As regards repeated savings acts, we postulate that pleasure and positive emotions derive from three aspects: (a) pleasure of seeing projects progressing towards their fruition, (b) satisfaction of being able to repeat savings acts at an acceptable frequency, and (c) a good savings experience when conducting savings acts. In this perspective, consumers having no particular project attached to their savings behaviors, or those who do not succeed in repeating their savings acts, would experience less pleasure with their savings behaviors. Thus, we propose the following hypothesis.

## H2. The higher the pleasure associated with savings, the stronger the savings intentions.

Pleasure and positive emotions associated with savings acts reinforce the importance granted to savings. According to Laurent and Kapferer (1986), the importance of savings as an object, and the pleasure associated with it, are related in terms of consumers' involvement. Also, we can propose the following hypothesis:

## H3. The higher the pleasure associated with savings, the higher the importance granted to savings.

Besides pleasure, other sentiments such as financial well-being behaviors can influence savings acts and intentions.

#### Financial well-being

Even if its definition is disputed (Brüggen et al. 2017), financial well-being is one of the major facets of wellbeing. According to Brüggen et al. (2017), financial well-being is the perception of being able to sustain current and anticipated desired living standards and financial freedom. The relationship between well-being and savings behaviors is well-established. As monetary possessions, savings help increase financial well-being. Saving is associated with economic optimism (Lunt & Livingstone 1991). Savings intentions interact directly with well-being (Kim et al. 2003), or indirectly, through money management (Donnelly et al. 2012). Most of the time, the savings literature postulates that future financial well-being is consecutive to past savings behaviors. Still, present savings intentions and behaviors may be positively influenced by present subjective financial well-being. Savings behaviors and intentions are often repeated, as savings goals and decisions can rarely be achieved with only one single savings act. When planning and thinking about future savings acts, consumers are influenced by their current subjective financial well-being. When consumers are aware of rational and positive consequences of their savings decisions and acts, eg. when their savings decisions for their 401(k) personal retirement savings plans lead to positive outcomes, they reinforce their savings behaviors and display higher saving rates. Thus, consumers use a kind of reinforcement learning as they observe their past behaviors lead to better financial outcomes (Choi et al. 2009). The same mechanism can operate with financial well-being playing the role of a subjective consequence of savings decisions and acts. First, to maintain their subjective financial well-being, consumers have to repeat their savings acts, by holding their savings intentions at a high level. Second, since subjective financial well-being is based on a comparison between financial mean and expectations, high subjective well-being indicates consumption expectations are met. It is a sign consumers may devote more income to savings. Their savings intentions shall be stronger. Third, subjective financial well-being may be the trigger of a reinforcement mechanism applied to savings intentions. If it is already high, consumers can consider that their past savings acts were accurate and adapted and thus, can be renewed. This leads to the following hypothesis:

#### H4. The higher the financial well-being, the stronger the savings intentions.

The literature considers the association between financial management behaviors and financial well-being as a "common finding" (Kim et al. 2003). This relationship is moderate (Sahu & Rath 2003; Gutter & Copur 2011). The reasoning behind the positive influence of perceived self-efficacy on subjective financial well-being remains unexplained (eg. Gutter & Copur 2011). It seems based on a chain of relationships: a) financial self-efficacy is a proxy of financial literacy and education, b) financial self-efficacy and financial literacy are positively influencing financial management behaviors, c) financial management behaviors lead to positive financial outcomes, d) positive financial outcomes positively influence financial well-being, so e) financial self-efficacy influences financial well-being. Still, if not investigated by the literature, a causal scheme, where financial well-being influences savings intentions and behaviors, is hypothesized (Brüggen et al. 2017). First, when consumers are satisfied with their financial well-being, that is with the consequences of their financial behaviors, they are aware that these behaviors were optimized, among other factors, by their financial self-efficacy. Their financial well-being is a cue of a positive mastery experience, i.e. that their financial self-efficacy is producing positive outcomes. Besides mastery experience, self-efficacy is also influenced by psychological states (Bandura, 1997). Financial well-being can be one of these psychological states. The need to assess one's self-efficacy on a specific subject is only limited when behavior is a habitual routine (Bandura 1982). As savings acts are repeated but are not habitual routines, consumers need to reassess their self-efficacy after each savings act. If financial self-efficacy may depend on or may be related to financial education, knowledge, or skills, it includes a self-confidence component (Bandura 1982). Self-efficacy mitigates or controls self-doubts, it implies self-assurance. Lown's (2011) financial self-efficacy scale includes at least one item directly referring to self-confidence. Acting as a psychological state, increased financial well-being will positively reinforce the self-confidence part of financial self-efficacy. Therefore, we propose the following hypothesis:

## H5. The higher the financial well-being, the higher the financial self-efficacy.

Self-concept and savings behaviors: the case of self-esteem

While self-efficacy focuses on the impact of skill on savings intentions and behaviors, savings may be driven by mechanisms related to the self and identity (Dulebohn & Murray 2007). Economic psychology and economics mobilize self-esteem as a reinforcement of «adequate» skills and practices. Simultaneously, the strong influence of self-concept on consumer behavior is well established (Sirgy 1982). As a possession, money is an extension of the self (Belk 1988). Money is associated with self-concept (Belk 1988; Prince 1993) and self-esteem (Tang 1992). Self-concept is positively associated with wealth accumulation (Gathergood 2012), lower spending, and a greater propensity to save (Baumeister 2002; Romal & Kaplan 1995). Individuals are more motivated when the tasks they perform have implications for the extended or shared self (Kaiser et al. 2017). Saving is involving, and socially meaningful. Savings behaviors are associated with the goal of self-actualization (Xiao & Noring 1994). The literature distinguishes several facets of self-concept: sense of self, self-image, self-congruence, self-representation, self-continuity, social self, ideal self, and self-esteem (Rosenberg 1979; Sirgy 1982). Several of these facets have been associated with materialism and credit misuse (Donnelly et al. 2013; Richins 2011), and poor personal financial management (Dew and Xiao 2011). According to the goal theory, people are more motivated when tasks they conduct have implications for their extended or shared self (Kaiser et al. 2017). So we may postulate that savings behaviors are an expression of the self. But some facets of self, such as the realization of self, negatively influence financial behaviors and decisions (Topa et al. 2012). We focus on one of the most important concepts related to self and identity: self-esteem. Self-esteem is the degree to which the qualities and characteristics contained in one's self-concept are perceived to be positive (APA Dictionary). Even if self-esteem has been associated with financial planning (Neymotin 2010), and subjective financial knowledge (Tang & Baker 2016), it has rarely been associated with financial behaviors. For Neymotin (2010), individuals with low self-esteem may act inefficiently or refuse to implement a savings behavior, because their low self-esteem leads them to be less persistent and to block information that indicates failure, which would lead to suboptimal decisions. It seems quite logical to postulate that perceived self-efficacy, whether general or specific, is reinforced by high self-esteem.

#### H6. The higher the self-esteem, the higher the financial self-efficacy.

Self-esteem also influences attitudes and values. First, self-concept is one of the individual determinants of involvement (Valette-Florence 1989). As a dimension of the involvement with saving, the importance granted to savings is potentially influenced by self-concept, including by the self-esteem facet. Then, as concerns money, high self-esteem is associated with ascetic values, but also with non-generosity (Prince 1993). This finding can be extended to savings as a form of money. Most importantly, people with high self-esteem tend to be less materialistic and are more inclined to save (Park & Roedder John 2011; Tang & Baker 2016). Hence we propose the following hypothesis:

#### H7. The higher the self-esteem, the higher the importance granted to savings.

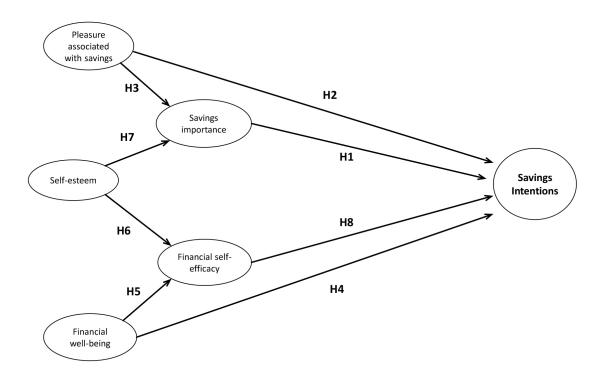
## Self-efficacy

To assess more accurately the impact of pleasure, self-concept, and well-being on savings acts with a parsimonious model, we mobilize only one reference savings determinant. Among major savings determinants (Aaker et al. 2011; Engelberg 2007; Gutter et al. 2012; Romero & Craig 2017), financial self-efficacy is perceived as an influential construct (Allgood & Walstad 2016; Parker et al. 2012; Robb & Woodyard 2011). Self-efficacy is a central concept of the Social Cognitive Theory (Bandura 1997). Financial self-efficacy can be defined as the subjective feeling of having the ability to achieve one's financial goals (Forbes & Kara 2010), the ability to understand the issues of domestic finance, its mechanisms, the skills to perform financial calculations and measure the consequences of saving or mismanagement (Jappelli & Padula 2013). It is akin to a form of self-confidence that overrides objective knowledge of financial topics (Parker et al. 2012). In models inspired by the Theory of Planned Behavior, it appears as the major determinant of behaviors and intentions. It is the primary factor influencing financial behavior intentions (Chatterjee et al. 2011; Croy et al. 2010; Gutter et al. 2012; Loibl et al. 2011; Magendans et al. 2017). Financial self-efficacy influences investment and retirement decisions and behaviors (Dietz et al. 2003; Forbes & Kara 2010; Chatterjee et al. 2011). We can therefore formulate the following hypothesis:

## H8. The higher the financial self-efficacy, the stronger the savings intentions.

Based on these different elements we designed a conceptual model displayed in Figure 1 below.

Figure 1: Conceptual model



#### Method

The data for this research were collected through an Internet survey of a sample of French consumers, who were all members of an access panel. The sample consisted of 410 individuals aged 18 to 75. The questionnaire was self-administered in February 2020. It was designed to limit common bias variance. This sample is representative of the French population regarding age, gender, professional occupation, and income. It diverges from the French population in household structure and education. Both criteria may influence savings behaviors. According to our sample, French people are frequent savers: 54% save every month.

We chose to use scales that exist in the literature, adapting them to our research. The first scale used concerns the importance granted to savings and comprises 5 items. It focuses on the anticipation and security provided by saving (Briers & Laporte 2013). We measured pleasure associated with savings behaviors by adapting the 3-item pleasure scale from Laurent et Kapferer's (1986) implication profiles. We measured perceived financial self-efficacy by translating Lown's (2011) Financial Self Efficacy Scale. This scale has 6 items, all formulated negatively. We measured self-esteem using a shorter (4 items) version of the RSE scale validated by Tambs and Roysamb (2014). We measured subjective financial well-being by slightly adapting Sharma and Alter's (2012) 5-item scale. The last scale measured saving intentions. We adapted Ayadi's (2010) 3-item scale to include all kinds of savings acts, whichever the saving product. To facilitate the execution of the questionnaire, all items in these constructs were measured using 5-point Likert scales (1 = strongly disagree to 5 = strongly agree). Items are detailed in Table 1.

Table 1

## Constructs

Scale	Itel ref.	Item wording	Outer loadings	Cronbach alpha	Jöreskog Rho	Composite reliability	AVE	R²
Importance granted to	IME1	Saving money gives me a sense of security	0,817					
	IME2	It is very important to me to save money for the future	0,873					
	IME3	Financial planning for the future provides me a sense of security	0,890 0,881		0,895	0,913	0,678	0,279
savings (Rose & Orr, 2007)	IME4	I prefer to save money because I am never sure when things will collapse and I will need the cash	0,774		,,,,	6,616	0,070	0,270
	IME5	It is very important to me to save enough to provide well for my family in the future	0,756					
Pleasure	PLE1	It would give me pleasure to save	0,915					
associated to savings (Laurent & Kapferer,	PLE2	Everytime I save, it is a bit like giving msyelf a gift	0,860	0,860 0,879		0,923	0,800	0,019
1985)	PLE3	Saving is a pleasure to me	0,908			ļ		
Perceived financial self-	FSE1	It is hard to stick to my spending when unexpected expenses arise	0,829		0,849	0,894	0,678	0,156
	FSE2	It is challenging to make progress towards my financial goals	0,856	0.042				
efficacy (Lown, 2011)	FSE4	When faced with a financial challenge, I have a hard time figuring out a solution	0,818	0,842				
	FSE5	I lack confidence in my ability to manage my finances	0,787					
	FWB1	Compared to my financial position last year, my financial position this year is much better	0,823		0,862	0,899	0,641	0,189
	FWB2	In comparison to most of my peers, I am financially much better off	0,773					
Subjective financial well- being (Sharma & Alter, 2012)	FWB3	Compared to my material possessions last year, my material possessions this year are generally more important	0,815	0,86				
Alter, 2012)	FWB4	In comparison to most of my peers' material possessions, my material possessions are more important	0,782					
	FWB5	In comparison to last year, my ability to spend money freely is less constrained	0,806					
	EST1	I take a positive attitude toward myself	0,823					
Self-esteem (Tambs et Roysamb, 2014)	EST2	I feel that I'm a person of worth, at least on an equal plane with others	0,752					
	EST3 (reverse)	I certainly feel useless at times (reverse)	0,812		0,825	0,876	0,639	X
	EST4 (reverse)	I feel I do not have much to be proud of (reverse)	0,836					
Savings intentions (Ayadi, 2010)	INT1	I intend to realize saving deeds during the next 6 months	0,939					
	INT2	It is very likely that I will save money during the next 6 months	0,950 0,930		0,930	0,955	0,877	0,394
	INT3	Saving money is one of my projects for the next 6 months	0,921					

The scales were carefully translated from English into French. We checked the consistency of the translation by retranslating scales into English. A preliminary PCA including all the scales and Cronbach's alpha measures were conducted. It confirmed the reliability and validity of the measures we selected for the constructs. The data were analyzed with a partial least squares structural equation modeling software (SmartPLS 3). 2 items were discarded from the financial self-efficacy scale. All constructs are reliable. Cronbach's  $\$ are all above 0.8, as are Jöreskog Rho as detailed in Table 1. According to the usual procedure (Fornell & Larcker 1981), the outer loadings of the items are all significant (p<0.001) and are greater than 0.75. This makes it possible to achieve convergent validity. The wording of all the items can be found in Table 3. The AVEs (Average Variance Extracted) associated with each construct are also all greater than 0.5. Composite reliability also is above the required thresholds. The discriminant validity is supported by Fornell-Lacker and HTMT criteria (Cf. Table 2). Items correlated better with their construct than with other competing constructs (Henseler et al. 2016). Post hoc tests were conducted to assess common bias variance.

**Table 2**Fornell-Lacker & HTMT criteria

Fornell Lacker	Subjective financial well-being	Perceived financial self-efficacy	Importance granted to savings	Savings intentions	Pleasure associated with savings	Self-esteem	
Subjective financial well-being	0.799						
Perceived financial self-efficacy	-0.267	0.825					
Importance granted to savings	0.167	-0.116	0.824				
Savings intentions	0.317	-0.287	0.541	0.937			
Pleasure associated with savings	0.159	-0.098	0.514	0.441	0.894		
Self-esteem	0.228	-0.216	0.173	0.133	0.062	0.798	

нтмт	Subjective financial well-being	Perceived financial self-efficacy	Importance granted to savings	Savings intentions	Pleasure associated with savings	
Perceived financial self-efficacy	0.303					
Importance granted to savings	0.183	0.144				
Savings intentions	0.345	0.325	0.592			
Pleasure associated with savings	0.183	0.115	0.547	0.456		
Self-esteem	0.268	0.250	0.201	0.161	0.092	

## **Findings**

As recommended for PLS analyses, hypotheses were tested using bootstrapping (Hair et al. 2017). Based on direct paths and effects, all hypotheses were validated (Table 3, Figure 2). The influence of pleasure associated with savings on the importance granted to savings (H3. &=0.506; t=10.909) is high, but expected, as both constructs belong to implication profiles (Laurent & Kapferer 1986). Financial self-efficacy is reinforced by positive financial well-being (H5. &=-0.234; t=4.348)², confirming our conceptual hypothesis. Importance granted to savings (H1. &=0.394; t=6.963) has the largest influence on savings intentions, notably since it draws on the influence of pleasure associated with savings.

<sup>&</sup>lt;sup>2</sup> Since all financial self-efficacy items are negatively worded, for all relationships involving financial self-efficacy, a negative value indicates a positive relationship.

The direct influence of pleasure associated with savings (H2. &enstraingle =0.191; t=3.588), financial self-efficacy (H8. &enstraingle =0.177; t=3.953), and financial well-being (H4. &enstraingle =0.174; t=4.385) on savings intentions, is very similar in magnitude. Even if these relationships are moderate, they indicate that both pleasure associated with savings and financial well-being have a direct and indirect impact on savings intentions. Thus, hedonic and affective factors significantly impact savings intentions. The influence of self-esteem on the importance granted to savings (H7. &enstraingle =0.145; t=2.486) and financial self-efficacy (H6. &enstraingle =0.166; t=2.399) is validated. It confirms the indirect influence of self-esteem on savings intentions and behaviors. Overall, the impact of importance granted to savings exceeds the influence of financial self-efficacy on savings intentions, even when it is reinforced by self-esteem and financial well-being. This result underlines financial self-efficacy's smaller impact once affective, hedonic, and self-concept factors are enlisted to predict savings intentions.

Figure 2: Results

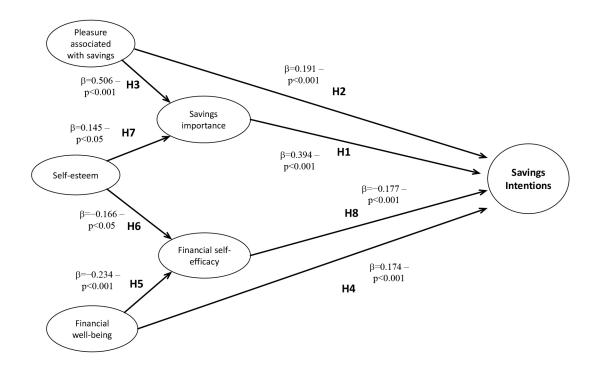


Table 3
Test of the hypotheses

		Direct effects				Total effects				
		Original Sample (O)	Sample Mean (M)	T Statistics	P Values	Original Sample (O)	Sample Mean (M)	T Statistics	P Values	
H1	Savings Importance -> Savings Intentions	0.392	0.394	6.963	0.000	0.392	0.394	6.963	0.000	
H2	Pleasure / savings -> Savings Intentions	0.195	0.191	3.588	0.000	0.393	0.391	8.192	0.000	
Н3	Pleasure / savings -> Savings Importance	0.505	0.506	10.909	0.000	0.505	0.506	10.909	0.000	
H4	Financial well-being -> Savings Intentions	0.174	0.174	4.385	0.000	0.214	0.216	5.241	0.000	
H5	Financial well-being -> Financial self-efficacy	-0.230	-0.234	4.348	0.000	-0.230	-0.234	4.348	0.000	
H6	Self-esteem -> Financial self-efficacy	-0.163	-0.166	2.399	0.016	-0.163	-0.166	2.399	0.016	
H7	Self-esteem -> Savings Importance	0.142	0.145	2.486	0.013	0.142	0.145	2.486	0.013	
Н8	Financial self-efficacy -> Savings Intentions	-0.176	-0.177	3.953	0.000	-0.176	-0.177	3.953	0.000	

## **Discussion**

We identified a model where constructs related to consumer behavior, specifically self-esteem and pleasure, influence self-efficacy and directly impact savings intentions. Even if the relationships observed are moderately significant, they endorse the objective of our research. Savings behaviors, specifically savings acts, can be analyzed as consumer behaviors, opening new ways for interpreting savings. Emotional and hedonic mechanisms influence savings intentions and potentially savings acts, as they do with most consumer behaviors. First, we must confirm that savings intentions predict accurately savings acts. The influence of pleasure appears to extend beyond the thrill of risking one's money by selecting investments. It can be a simpler set of emotions, related to the satisfaction of having accomplished one's goals, or of mastering saving skills. Together with financial well-being, it highlights the experiential nature of savings behaviors. Savings experience is a promising area of research. The interpretation of financial well-being influence is more complex. By

associating our finding that financial well-being impacts financial self-efficacy with the already explored influence of financial self-efficacy on financial well-being, we describe a circular relationship between both constructs. It is most likely this loop includes savings behaviors. If we proposed that well-being influences self-efficacy through the self-confidence component of self-efficacy, how self-efficacy may directly influence well-being remains to be explored. To investigate in-depth these relationships, we have to analyze both concepts' definitions. Self-efficacy is well-defined by the Social Cognitive Theory (Bandura 1997). But based on the TPB, self-efficacy must be distinguished from controllability of behavior (Ajzen 2002): is well-being more influential on controllability than on self-efficacy? The Social Cognitive Theory's literature adopts no definitive position on the level of precision of self-efficacy. Using an existing construct, we tested financial self-efficacy. What would be the influence of a more specific savings self-efficacy? The financial well-being definition also is discussed (Brüggen et al. 2017). Here we investigated mostly the hedonic aspect of this construct. How would this influence evolve if we include an economic aspect, or a eudemonic aspect (Ayadi, Paraschiv, Vernette 2019)? What would be the influences of enlarged financial well-being including 4 facets (Ayadi, Paraschiv, Vernette 2019)? Investigating financial satisfaction (Dew & Xiao 2011; Donnelly et al. 2012; Joo & Grable 2004; Prawitz et al. 2006) may be a decisive stage here. Indeed, this concept position is disputed: some distinguish it from financial well-being (eg. Brüggen et al. 2017), while others consider it a facet of well-being (Ayadi, Paraschiv, Vernette 2019). If financial well-being differs from financial satisfaction, what are the interactions between both constructs?

Several elements of the reinforcement mechanism we relied on to explain financial well-being and pleasure influences on savings intentions must be investigated. If we retain Rothschild and Gaidis terminology (1981), first we have to determine if financial well-being and pleasure or savings experience are primary or secondary reinforcers. If they are secondary reinforcers, which is most likely, their effects will be weaker than a primary reinforcer such as the interest rate of a given savings product. According to behavioral learning theory, saving is a situation of simultaneous choice: financial well-being and pleasure reinforcement effect shall be continuously maintained, all the more so since they are both delayed reinforcers.

Finally, self-esteem influence on financial self-efficacy potentially confirms that self-efficacy includes a specific self-confidence component. The extent of commonality between both concepts is to be explored: if self-confidence is predominant in financial or saving self-efficacy, self-esteem could be a proxy of financial self-efficacy. The influence of self-esteem on savings confirms that values associated with savings and savings behaviors are a promising area of research.

#### **Limitations and Further Research**

This research has some limitations. Our definition of savings behaviors as savings acts, and the method we use to elicit them, are open to improvements. Savings decisions frequently stem from spouses' joint decisions or even from family choices: it would be enlightening to duplicate our research by interviewing couples together. Financial well-being and financial self-efficacy constructs could be improved. Several classical factors influencing savings can supplement our conceptual model, for instance: risk tolerance, time styles, motives, materialism, frugality, or sobriety. An investigation of mediating and moderating effects is needed, notably for those effects involving sociodemographic factors. Indeed, according to the Life Cycle Hypothesis and to most theories of saving based on LCH, age, income, and professional status are the major determinants of the amount of money saved. Frequent savers, or those with higher income, shall be specifically studied as they have more opportunities to save and more savings experience. Transcultural comparisons are in order as identity, hedonistic and affective factors are strongly influenced by the cultural environment. Longitudinal research would allow us better investigate how psychological determinants influence savings acts.

Research on savings and savings acts shall focus on 3 areas: (a) an analysis of the emotions and experiences associated with savings acts (b) the value of savings behaviors and the practice of saving, and (c) a better conceptualization of financial well-being and financial self-efficacy and equivalent concepts. Our results confirm that, compared to savings decisions, savings acts can trigger emotional responses and support an experience. Apart from dread and savouring, emotions associated with savings acts, and their influence on the repetition of these acts, remain to be investigated. The different facets of the savings experience for each of the 4 stages of savings behaviors shall be explored, using the framework developed by Roederer (2012). The investigation of meanings associated with savings and savings behaviors can help better understand the savings experience. An integrative theoretical framework shall be developed to better understand, and map, how the different constructs related to financial well-being, financial literacy, and financial self-efficacy do interact. This framework could be based on the referential proposed by Ayadi, Paraschiv, and Vernette (2019). Furthermore, since self-efficacy, self-esteem, or attitudes towards risks are shaped and influenced by socialization, it appears strategic to investigate how the various sources of financial, and economic socialization, interplay to influence

consumers' savings behaviors. Resources similar to social capital (Pinçon & Pinçon-Charlot 2007) or cultural capital are needed to understand what is expected from a potential saver. As for overindebtedness (Duhaime 2003), these resources make it possible to avoid bad choices and, ultimately, financial failure and its psychosocial problems. The lack of cognitive, cultural, or social resources (Hamilton et al. 2019) at the stage of saving action may increase savouring (Arrondel et al. 2014), influence the willingness to postpone gratification, and affect feelings of self-efficacy, and self-esteem (Hamilton et al. 2019). The complexity of the actions required to save may impede the realization of savings decisions. Finally, considering informal, non-institutional, or non-monetary savings acts shall help limit the consequences of barriers to formal and institutional savings, which are poorly understood and little studied.

## **Managerial implications**

Banks and policymakers shall include hedonistic values, and emotions when developing savings products, and savings programs, building upon positive savings experiences. The pleasure of a savings act, and its repetition, shall inspire communication campaigns. Applying experiential marketing to savings behaviors offers a new approach to savings programs, complementary to incentives, nudges, and automated savings. Today, when not automated, the action of saving is a set of purely administrative, and digital actions, with few human interactions. A savings act probably offers a bland experience. Such characteristics may stimulate disinterest, and even resistance, to the transformation of savings intentions into actions, accentuating the impact of cognitive biases, and psychological barriers, notably when low-income or vulnerable consumers are concerned. To make savings acts more experiential, financial institutions, and policymakers, may develop a kind of 'savingscape' approach, trying to make saving as easy, and fun, as possible. They must communicate on the savings experience rather than on its rationality. Simultaneously, if self-esteem is an important determinant of savings behaviors, dedicated public programs shall regularly support consumers' self-esteem. Adding self-esteem to customer profiles, eg. for KYC (know your customer) compliance purposes, is another consequence of our findings. Both self-esteem and pleasure are enhanced by the collective, and collaborative, structures, far from individual, rational behaviors. Savings acts may benefit from their potential ability to generate communities of consumers, sharing ideas, and choices, but also practices and skills (Newmeyer et al. 2021).

## Conclusion

With this work in progress, we demonstrated that the consumer behavior framework can greatly enhance the understanding of savings behaviors. The investigation of savings experiences together with a better understanding of concepts such as financial well-being, and self-efficacy will help managers design new, more effective, savings campaigns, and programs. The influence of self-esteem and pleasure on savings intentions may be a clue to possible relationships between savings and materialism. Bringing experience, and pleasure, to savings, would be greatly appreciated by consumers. The influence of reinforcement mechanisms also is a promising area of research on savings. By specifically analyzing the different stages of savings behaviors, other significant findings will emerge.

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