FACTORS INFLUENCING INDIVIDUAL FINANCIAL DECISIONS: A LITERATURE REVIEW[1]

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Abstract: Personal finance and financial education represent important topics, which gain more and more local attention. This attention needs to be placed in the context of the state-of-the-art research, from which future local research can emerge. Financial decision making in the case of individuals and households is a complex process, with many influencing factors. There are vast amounts of research literature exploring various aspects of this issue, with varying degrees of detail and specialization. In this paper I attempt to provide a selective and structured review of (recent) research in the field. Starting from asking what are the main factors that influence financial decision for individuals or households, I subsequently catalogue and discuss some of the most relevant aspects revealed by the literature. Many of the analyzed influence factors have a regional dimension and this paper aims to reveal existing gaps in local research.

Keywords: personal finance, financial education, literature review, financial decision, household finance

The field of personal or household finance is better reflected in recent years in specialized research. One of the most frequent associations of personal finance is with financial education, the underlying idea being that without adequate knowledge and skills one cannot satisfactorily manage her or his own finances, particularly in a dynamic and complex environment. Besides education, however, other aspects emerge from the literature, which appear to have particular importance in the process of individual financial decision. This paper represents an attempt to select some of the most important and generally recent works focused on this area and present a structured perspective on the main factors that influence financial decisions for individuals and households.

Some papers focus on financial decision at a purely individual level while others focus on the household as their analysis unit. Both perspectives have their merits and have been observed in this paper. As it may be the case in a particular instance, we can consider financial decisions at individual or at household level. A useful framework for the concept of financial behavior is presented by Dinga, Pop, Dimitriu, & Milea (2011). Although it doesn't directly concern the decision process, it establishes the main predicates of financial behavior and categorizes financial flows.

The factors influencing financial decisions are presented in this paper on two general categories: internal or external factors. This separation is not necessarily perfect: at least with regard to some factors there can be some discussion concerning their internal or external (to the individual or household) nature. Also, there can be some significant overlapping between elements of the presented factors. So, without representing a final perspective on the structure of the influence factors, this internal/external separation represents mainly a presentation and structuring aid. Another mention regarding the factors presented in the rest of the paper is that they do not constitute an exhaustive list. They simply represent the most important factors revealed by the literature review.

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Internal factors affecting financial decision

Financial education (Carlin & Robinson, 2012; Lusardi, 2008b) and the related concept of *financial literacy* (Calcagno & Monticone, 2011; Lusardi, 2008a, 2008b) are frequently mentioned in relation with the process of making individual financial decisions. In some papers education programs are associated with improved financial outcome (Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff, 2010) while financial literacy is linked to retirement preparation (Lusardi & Mitchell, 2009; Rooij, Lusardi, & Alessie, 2011b) or, as is the case with a more focused study, with stock market participation (Rooij, Lusardi, & Alessie, 2011a). Hilgert & Hogarth (2003) discuss the link between financial knowledge and financial behavior.

Age is another important factor in the literature. For example, Agarwal, Driscoll, Gabaix, & Laibson, (2007), find that for individuals in their early 50s financial choices appear to be optimal, due to age-related cognitive, selection and cohort effects. Their conclusion is that a robust relationship exists between age and financial sophistication. Lusardi (2012a) links older age and financial literacy while Nielsen & Phillips (2008) approach the issue of age-related decline of cognitive functions and its effect on individual economic behavior. The age-related differences in financial decisions were also studied by Shivapour, Nguyen, Cole, & Denburg, 2012; Weierich et al. (2011). Besides age in itself, the stage of the life-cycle in which an individual finds himself is also of great importance (Browning & Crossley, 2001). The connection between age and life cycle is also studied by Gourinchas & Parker (2002) who develop a model of consumption which shows important changes of the consumer behavior over the life cycle.

Focus and attention on financial matters is taken into account in the model of Ameriks, Caplin, & Leahy (2004). They acknowledge that many individuals or households are “absent-minded”, having little knowledge on their spending and consumption. This approach is quite useful because it recognizes a very important aspect that need to be added to the life cycle model of consumption.

Cognitive functioning is studied together with financial literacy and age by Banks (2010) who finds that these are evolving aspects in the course of the individual’s life, which are also related to his/hers economic circumstances. According to Banks there is a clear link between the cognitive abilities of a person and his/hers economic choices. Related to this area is also the study of the impact on individual financial decisions of computational error (Chen & Rao, 2007) and the bad choices in general (Finke, 2005). Also, worth mentioning is the analysis of the relationship between numeracy and financial decisions (Lusardi, 2012b). Quite often, individual financial behavior displays perception or analysis errors. The lack of attention or information, the inability to correctly process the available information, uncertainty or other such elements sometimes lead to less than adequate financial decisions.

Family dynamics or the choice of who makes the financial decisions in the household is an issue approached by Smith, McAdle, & Willis (2010). They also focus on the cognitive traits of the person. Here we obviously go beyond individual, towards the household as the unit of concern in terms of financial decision. The related field of family economics, in a more general, approach is also analyzed in the seminal paper of Bergstrom (1996). A related area of study concerns *household structure*. In this respect a very interesting study, in which age differences in couples and their impact on savings preferences are investigate by Browning (2000). Starting from the idea that wives are younger than husbands, in general, and also women live longer than men, he basically shows that household members have different positions on the life cycle, due to differences in age perspectives over the future, with an important set of consequences. The issue of bargaining power in the household is discussed by Friedberg & Webb (2006), who present the existence of a moderate importance of individual earnings on financial decisions taken by the couple.

Psychological factors. Benhabib & Bisin (2002) analyze the ability to self-control in the face of conflicting preference for the consumption-saving choices. The impact of convenience on the choice of financial institutions is discussed by Lee & Marlowe (2003). This may not be a "pure" psychological factor, but does have some connections that allow the placement of the issue in this class. In the category of psychological factors we might also include the "home bias" discussed by Grinblatt & Keloharju (2001), which expresses the preference for domestic financial assets. The perception and processing of information by individuals are at the core of the psychological aspects that lead to the process of making financial decisions (García, 2013). A more unusual and theoretical approach is that of Cheng (2010), based on the idea that the use of unconscious thought can increase the effectiveness of financial decisions. The author argues that the conscious component of the decision making capacity is complemented by the unconscious component, suggesting the need to integrate both components in the decision making process.

Gender, or the involvement of women in financial decisions in married couples is the focus of the study of Bernasek & Bajtelsmit (2002). Their work shows that the level of income earned by a woman has a direct impact on her participation in the financial decision-making process in the household. Fonseca, Mullen, Zamarro, & Zissimopoulos (2010, 2012) look at the gender gap in financial literacy and the sharing of financial decisions in the household. Another important issue, regarding gender and women's risk aversion is studied by Schubert, Martin, Gysler, & Brachinger (1999). Powell, Melanie, Ansic (1997) look at the way gender influences the process of financial decision making, pointing to a smaller acceptance of risks by women and their preference for different financial strategies. Schubert, Brown, Gysler, & Brachinger (1999), on the other hand, find no gender related differences in the attitude towards risk and financial decision. The gender-related differences in financial decisions were also studied by Shivapour et al. (2012).

The impact of *health* on financial decision making was discussed by James, Boyle, Bennett, & Bennett (2012). The structure of the households portfolios is related to the health of their members in the paper of Rosen & Wu (2004). They observe the existence of a strong connection between individual health and financial decision, individuals with health problems tending to maintain safer and more liquid portfolios.

External factors affecting financial decision

Culture. The issue of culture is approached in relation to financial decisions in several relevant studies. Breuer & Quinten (2009) even coin the term "cultural finance" while in Breuer & Salzmann (2009) it is asserted that *"national culture is a strong indicator for the portfolio structure of households, as it predicts the use of certain asset classes very effectively, but it is less powerful when it comes to the more general characteristics of household finance"*. An interesting analysis that can be included in this area is related to time preferences (Breuer & Wang, 2011). The authors argue that there is a relationship between the individuals' time preferences and their financial planning horizon. A specific approach is that of Chui & Kwok (2008) who discuss the impact of national culture on the use of life insurance. Also relevant is the analysis of culture and the configuration of national financial systems (Kwok & Tadesse, 2006).

Religion. Renneboog & Spaenjers (2009, 2011) show that religious households have a longer planning horizon in financial issues. The authors make distinctions between the influence of Catholicism and Protestantism in household finance.

The threat posed by *stereotypes* is the issue of an interesting study (Carr & Steele, 2010), which argues that such stereotype concerns influence the financial decisions of individuals as a result of increased loss-aversion.

Uncertainty regarding future income, which influences current consumption, is a subject developed by Carroll (1994). Placing this factor in the category of external factors is a debatable decision. Uncertainty can be described as a matter of personal perception, in which case it would be an internal decision factor, or as an expression of the economic realities, version preferred in this paper.

Access to financial advice, which is positively related to the level of financial literacy (Collins, 2012) is also understood as an external factor of influence. Certainly, the need to receive advice is due to an internal availability of the individual, but the availability of this advice is a characteristic of the environment. In favor of the initial part of the previous statement comes the study regarding the neurobiological basis for the influence of advice on financial decision (Engelmann, Capra, Noussair, & Berns, 2009). Also, a neuroeconomic approach of the assessment and attitudes towards risk is presented by Engelmann & Tamir (2009), while a general analysis of the attitude towards risk is carried out by Guiso & Paiella (2004). The positive impact of advice on financial behavior is presented by Tang & Lachance (2012).

Demographics. Population aging, for example, is a long term change that induces transformations both in the organization of the financial systems (Ciumara et al., 2013) and in the individual attitudes towards personal finances. When we refer to geography or demographics as influence factors we can also include *migration* and the transnational character of some households and its impact on household finance and financial decision, which is studied by Seshan & Yang (2012). This is an important area of study, particularly for countries with significant numbers of migrant workers.

Financial system development. Financial decision is limited by the practical possibilities of exercising financial choices. The concrete variety and availability of financial vehicles limits the possibilities of financial expression. This issue was also dealt with by Kwok & Tadesse (2006) in their analysis of financial systems in terms of national culture.

The *economic environment* is a powerful source of influence over personal financial decisions. Certainly, the position on various stages of the economic cycle plays an important role. Even if other elements relevant to financial decisions remain constant, financial behavior is substantially different in periods of economic expansion compared to periods of recession, for example.

Somewhat beyond the scope of this literature review, but with potential interest are a number of other studies which focus on tangential issues. For example, Levav & Argo (2010) examine how physical contact influences the willingness to accept risk and consequently decision making. Also Wood, Downer, Lees, & Toberman (2012) discuss the existence of some important life events, such as marriage or parenthood, in response to which households become more actively involved in making financial decisions.

Table 1: Classification of factors influencing individual financial decisions

Internal factors	External factors
(Financial) Education and Literacy	National culture
Age/Positioning on life cycle	Religion
Focus on financial matters	Stereotype threats
Cognitive functioning	Income uncertainty
Family dynamics	Access to financial advice
Household structure	Geography
Psychological elements	Demographics
Gender	Financial system development
Health	Economic environment

This literature review is by no means complete. The purpose of this paper was to select the most relevant studies that deal with factors that influence individual financial decisions, with the objective of obtaining a clearer perspective over the subject. It is important to note that many of the discussed influence factors have a regional dimension which can be exploited in future local research. Personal finance is a research area that gains momentum, particularly after the serious financial crisis of the past years, and a focus on the regional dimension can be of substantial interest.

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