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Credit use: Psychological perspectives on a multifaceted phenomenon

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Consumer borrowing is a highly topical and multifaceted phenomenon as well as a popular subject for study. We focus on consumer credit use and review the existing literature. To categorize what is known we identify four main psychological perspectives on the phenomenon: credit use as (1) a reflection of the situation, (2) a reflection of the person, (3) a cognitive process, and (4) a social process. On top of these perspectives we view credit use as a process that entails three distinct phases: (1) processes before credit acquisition, (2) processes at credit acquisition, and (3) processes after credit acquisition. We review the international literature along a two-tier structure that aligns the psychological perspectives with a process view of credit. This structure allows us to identify systematic concentrations as well as gaps in the existing research. We consolidate what is known within each perspective and identify what seems to be most urgently missing. Some of the most important gaps relate to research studying credit acquisition from the perspective of credit use as a reflection of the person or as a social process. In particular, research on credit use as a reflection of the person appears to focus exclusively on the first stage of the credit process. We conclude with a discussion that reaches across perspectives and identifies overarching gaps, trends, and open questions. We highlight a series of implicit linkages between perspectives and the geographical regions in which studies related to the perspectives were conducted. Beyond diagnosing a geographical imbalance of research, we argue for future research that systematically addresses interrelations between perspectives. We conclude with a set of global implications and research recommendations.

Keywords: Credit use; Consumer behavior; Borrowing; Debt.

L'emprunt par le consommateur est un phénomène bien actuel, à plusieurs facettes et un sujet d'étude populaire. Nous nous attardons ici à l'utilisation du crédit à propos de laquelle nous faisons un relevé de la documentation. Pour catégoriser ce qui est connu, nous identifions quatre perspectives psychologiques principales de ce phénomène : l'utilisation du crédit en tant que (1) reflet de la situation, (2) reflet de la personne, (3) processus cognitif et (4) processus social. En plus de ces perspectives, nous envisageons l'utilisation du crédit en tant que processus qui comporte trois phases distinctes : (1) les processus avant l'acquisition de crédit, (2) les processus lors de l'acquisition du crédit et (3) les processus suite à l'acquisition de crédit. Nous relevons la documentation internationale selon une structure à deux niveaux qui aligne différentes perspectives psychologiques qui aborde le crédit d'un point de vue du processus. Cette structure nous permet d'identifier les concentrations systématiques de même que les lacunes dans la recherche existante. Nous consolidons ce qui est connu dans chaque perspective et nous identifions ce qui semble devoir être comblé le plus rapidement. Certaines des lacunes les plus importantes ont trait aux recherches étudiant l'acquisition de crédit du point de vue de l'utilisation du crédit en tant que reflet de la personne ou en tant que processus social. En particulier, la recherche portant sur l'utilisation du crédit en tant que reflet de la personne semble se concentrer exclusivement sur le premier stade du processus du crédit. Nous concluons par une discussion qui s'étend à travers différentes perspectives et identifie les lacunes, les tendances et les questions ouvertes. Nous soulignons une série de liens implicites entre les perspectives et les régions géographiques dans lesquelles des études reliées aux différentes

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perspectives ont été menées. En plus de poser un diagnostic de déséquilibre géographique de la recherche nous argumentons en faveur de recherches futures qui portent systématiquement sur les interrelations entre les perspectives. Nous concluons avec un ensemble d'implications globales et de recommandations de recherche.

Los préstamos para el consumidor son un fenómeno multifacético de alto interés actual como también un tema popular de estudio. Este trabajo se focaliza en el crédito del consumidor, además de efectuar una revisión bibliográfica. Para clasificar lo que se sabe, se identifican cuatro perspectivas psicológicas principales sobre este fenómeno: el uso de crédito como (1) un reflejo de la situación, (2) un reflejo de la persona, (3) un proceso cognitivo, y (4) un proceso social. Además de estas perspectivas, se considera el uso de crédito como un proceso que abarca tres etapas bien definidas: (1) procesos antes de la adquisición de crédito, (2) procesos en la adquisición de crédito y (3) procesos después de la adquisición de crédito. Se realizó una revisión de la bibliografía internacional junto a una estructura de dos niveles que alinea las distintas perspectivas psicológicas con el punto de vista de proceso de crédito. Esta estructura permite identificar concentraciones sistemáticas, como también lagunas en las investigaciones existentes. Se consolida lo que se conoce dentro de cada perspectiva y se identifica lo que más parece faltar. Algunas de las lagunas más importantes están relacionadas con los estudios sobre la adquisición de crédito desde la perspectiva del uso de crédito como reflejo de la persona o como un proceso social. En particular, las investigaciones sobre el uso de crédito como reflejo de la persona parecen estar enfocados exclusivamente en la primera etapa del proceso de crédito. Se finaliza con una discusión amplia que cubre las diversas perspectivas e identifica lagunas comunes, tendencias y preguntas abiertas. Se resaltan una serie de conexiones implícitas entre los puntos de vista y las regiones geográficas en las cuales se llevaron a cabo estudios según las distintas perspectivas. Más allá de diagnosticar un desequilibrio geográfico en las investigaciones, se sugiere que en estudios futuros se trate sistemáticamente las interrelaciones entre las distintas perspectivas. Se concluye con un conjunto de implicaciones globales y recomendaciones sobre futuras investigaciones.

Credit use is a socially accepted financial practice (Merskin, 1998; Watkins, 2000) that consumers rely on (Estelami, 2001). Although the recent financial crisis has curbed consumers' appetite for borrowing in some countries (e.g., for the UK see JGFR, 2011), consumer credit remains a global economic force that keeps gaining momentum in emerging markets. For example, in China consumer borrowing amounted to as little as 10.2% of the gross domestic product in 2010 but personal loans have been and are expected to keep growing by more than 20% per year over the next five years. In contrast, the financial crisis has decreased the UK personal loan market over the past five years by about 6% on average (peaking in 2009 with minus 11%). Nonetheless, consumer borrowing in 2010 amounted to about 43% of the gross domestic product (www.mintel.com).

Credit use is a global phenomenon with many distinct facets (e.g., using a credit card differs in several respects from taking a personal loan). It is a complex dynamic process that touches on and is influenced by several psychological processes and entails a multitude of private, societal, and economic implications. Accordingly, credit use has been discussed, observed, and conceptualized by several disciplines and on micro and macro levels. To varying degrees the topic has attracted international academic attention, including regions beyond the West or the Organisation for Economic Co-operation and Development. This paper aims to consolidate and review existing work on psychological and behavioral aspects of credit use. We introduce and follow a two-tier structure based on (a) the implicit perspectives from which credit use has been viewed and (b) the phase of the credit process that has been investigated. We will first specify the remit of the article by narrowing down the phenomenon under scrutiny. Subsequently prevalent perspectives on and phases of credit use are outlined. By integrating the existing literature according to this two-tier framework we identify systematic matches between perspectives and phases and ensuing gaps in the literature We conclude by outlining promising avenues for future research.

PHENOMENOLOGICAL REMIT

Mirroring its economic scope, literature on credit use is vast. A meaningful review necessitates a focus on distinct aspects. Here, we focus on forms of credit that ensure borrowing awareness. This precludes credit cards that can be used without an intention to defer repayment. Predominantly we investigate the case of consumer credit. We further narrow our focus to credit as deferred payment on agreed terms rather than problem debt, which is deferred payment without an agreement between buyer and seller (Lea, 1999). Finally we limit our analyses and review to the private credit user and processes and implications on the micro level. Societal and macro level aspects, the specifics of credit card usage, financial overextension, and the relation between credit use and debts are discussed in more detail elsewhere (e.g., Bernthal, Crockett, & Rose, 2005; Berthoud & Kempson, 1992; Garcia, 1980; Livingstone & Lunt, 1992; Webley & Nyhus, 2001; Wickramasinghe & Gurugamage, in press).

PSYCHOLOGICAL PERSPECTIVES OF CREDIT USE

Viewing credit use as a psychological phenomenon still leaves scope to take multiple perspectives that roughly align with different subdisciplines of psychology and are often informed by disciplines beyond psychology. In particular, four such perspectives can be found in the literature.

Perspective 1: Credit use as a reflection of the situation

A first prevalent perspective views credit use as determined by situational factors. This perspective has been employed by research originating from many disciplinary backgrounds. Findings that we classify as falling under this perspective mainly focus on the role of sociodemographic factors in credit use; but we also include research that focuses on other situational and institutional influences that tend to fall in the category of behavioral economics.

Perspective 2: Credit use as a reflection of the person

The next perspective views credit use as a phenomenon that is situated within the person and hence focuses on factors such as individual attitudes to money and credit use, or on personality traits such as locus of control. This perspective aligns well with personality psychology and it has some commonality with the first perspective in that it portrays credit use as a phenomenon with stable causes, within the situation or the person.

Perspective 3: Credit use as a cognitive process

Yet another perspective acknowledges the fact that credit use, and in particular credit decision making, often involves complex cognitive processes. Research applying this cognitive perspective tends to focus on the prerequisites and the processes involved in the decision to use credit, and studies aspects such as consumer knowledge, perception of loan duration, general time discounting or mental accounting. This perspective is complemented by the first two perspectives in that a person's cognitive processes are influenced by situation and personality. We discuss more generic findings in Perspective 3 and moderating factors in Perspectives 1 and 2.

Perspective 4: Credit use as a social practice

This final perspective is more dynamic in that it portrays credit use as an interactive social phenomenon. It applies a social psychological but also a sociological standpoint and portrays credit use as a means or as a reflection of interpersonal processes and interactions. Topics covered range from research on aspects such as social norms to issues of concrete influences of reference groups. This perspective differs from the previous perspectives in that its focus is on the interrelation between people rather than on characteristics of single individuals or households. Like Perspective 3, Perspective 4 interacts with and complements situational influences and person characteristics discussed in Perspectives 1 and 2.

CREDIT USE AS A PROCESS

As well as dissecting the literature according to different perspectives, we aim to reflect the phenomenon's dynamic nature by arranging the literature along a process chronology. A chronological process perspective of credit use has been suggested in particular by Kamleitner and Kirchler (2007). In their framework of credit use they recognize that credit use is a process that starts with the consideration of purchasing a good and ends after having paid back the borrowed money. Specifically they distinguish between three phases: (a) before credit take up, (b) during credit take up and (c) during the repayment period.

In the first phase, consumers acknowledge the need for a good and decide on credit use as the preferred method of financing. This first phase in particular involves issues of motivation and intertemporal decision making. It is only in the second phase that consumers decide on a specific credit offer. This phase hence involves issues of information search and comparison of alternatives. The second phase ends with the implicit or explicit signing of a credit contract; this leads to the third phase, which entails all processes that follow credit acquisition. This final phase is particularly concerned with perceptions of the actual credit situation and behaviors related to repayment. This phase ends when the final repayment is made and the debt is settled (Kamleitner & Kirchler, 2007).

A PROCESS-BASED REVIEW OF PHENOMENOLOGICAL PERSPECTIVES

A process view provides a useful framework to review the literature on credit use but it may disguise the extent to which different perspectives on the phenomenon exist and contribute to its understanding. To highlight how different phenomenological stances generate different conceptualizations of the process we review the literature in line with a two-tier approach. We separate it into perspectives but apply a process view within perspectives. Table 1 provides an overview of the main themes researched when applying a two-tier approach.

Not all of the literature on consumer credit can be easily classified in terms of the phenomenological perspectives that the researchers follow. We report findings within the perspective(s) that the main arguments of each respective article best align with. For example, Morgan and Christen (2003) investigated how variations in the extent of income disparities are reflected in consumer credit use. While this could be viewed as research investigating credit use as the product of the situation *per se*, their interpretation follows more closely the notion of credit use as social practice. Not surprisingly, some authors explicitly or implicitly acknowledge the multifaceted nature of credit use. Depending on the actual subject we report their findings in the most appropriate section or sections. Since credit use is influenced by the specific options and economic regulations of the countries involved, we indicate the country of study wherever this seems relevant.

Perspective 1: Credit use as a reflection of the situation

Credit use has often been considered as something that is induced by the circumstances a person faces. What stands out about this first perspective is its true interdisciplinarity. In part this is because demographics, the main aspect studied, is a set of integral variables included in research across disciplines.

Processes preceding credit use

In this phase, consumers consider whether to use credit. Considerations to use credit are often related to specific life circumstances, such as needing money for studying, buying a family home, or caring for young children. Accordingly, credit use was found to be related to demographic variables such as age, family situation, or income. These variables were labeled ‘‘need factors’’ by Kamleitner and Kirchler (2007). They become prevalent when people cannot make ends meet or have increased needs due to their situation. On top of that, research on situational factors has focused on interest rates and the effect of credit limits. Factors are discussed in turn.

Demographics. While overall socioeconomic status does not seem to relate to credit use (Livingstone & Lunt, 1992), specific demographics were sometimes shown to have an effect. Income and wealth seem to be the most obvious factors related to credit use. People with low income or little accumulated assets are presumably in particular need for consumer credit. However, the emerging picture mostly runs against conventional wisdom. Several studies report no difference in disposable income between credit users and nonusers (e.g., Chien & Devaney, 2001 for the US; Gunnarsson & Wahlund, 1997 for Sweden; Livingstone & Lunt, 1992 for the UK), whereas other studies even report that credit use increases with income (e.g., Beer & Schürz, 2007 for Austria; Crook, 2006 for a comparison of Japan, Italy, The Netherlands, the UK, Germany and the US). To some extent this seems due to the effect of income on credit accessibility: For example, low-income groups in the US were found to be more likely to be turned down in credit applications (Zhu & Meeks, 1994). Furthermore, social comparisons discussed in Perspective 4 may override the purely economic impacts of income on credit use. But there may be even more to it. In a Canadian study, Anderson and Nevitte (2006) also find that credit use increases with income whereas saving decreases. In addition, individuals with higher incomes find it less important to teach thrift to their children. This relation to income holds for all income groups except for the richest quartile of households, who are more prone to save (Anderson & Nevitte, 2006). So it could be that the relationship between credit use and income is curvilinear, with the summit of the curve being late in the income distribution.

While a comparison of credit use across people with different incomes paints a counterintuitive

TABLE 1
Overview of dominant themes according to perspectives and phases of credit use

Phases of credit use		
Before	*Acquisition*	*After*
Perspective 1: Reflection of the situation		
Demographics • Income • Age/life cycle • Gender • Education *Life events* *Interest rates* *Credit availability* • To person • In situation	*Access as dependent variable* • Income/financial history • Location *Search as dependent variable* • Amount of debt • Income/financial history • Education/experience	*Credit use as dependent variable (repayment)* • Income/economic situation • Age *Credit use as independent variable* • Spending behavior
Perspective 2: Reflection of the person		
Desire for the good • Social comparison • Materialism *Desire for now* • Delay of gratification/myopia • Self-control *Desire for credit* • Debt/money attitude • Optimism • Sensation and risk seeking		*Credit use as DV* as in phase 1 *Credit use as independent variable* • Wellbeing/mental health • Credit/money attitude • Money management
Perspective 3: Cognitive process		
"Rational" reasons *Intertemporal trade-offs* *Mental accounting* • Debt aversion • Source/purpose matching	*Credit use/choice as dependent variable* • Information search • Installment perception • Duration/timing perception • Interest perception • Dealing with risk • Financial knowledge	*Credit use described* • Re-evaluation • Objective knowledge *Credit use as dependent variable (debt level)* • Financial knowledge *Credit use as dependent variable (subjective burden)* • Thinking pattern • Habituation
Perspective 4: Social practice		
Societal influence • Social comparison • Acceptability *Reference groups: teaching credit use* • Socialization in family • Parental financial history *Reference groups: causing use*	*Choice as dependent variable* • Access as dependent variable *Borrower–lender relation*	*Credit use as dependent variable (perception, repayment)* • Socialization/debt as norm • Borrower–lender relation *Credit use as independent variable* • Work time • Consumption/daily activities • Social dynamics

picture, differences in income experienced by a person seem better aligned with intuition. Income decreases in a Swedish experiment made participants more likely to consider using credit (Karlsson, Gärling, & Selart, 1997).

Unsurprisingly, income seems to influence what credit is used for. Low-income families are more likely to use consumer credit to make ends meet and to maintain their lifestyles, compared to higher income groups who use credit to improve their lifestyle (e.g., Croden, 2000; Morgan & Christen, 2003; Webley & Nyhus, 2001).

The relation between credit use and wealth also somewhat deviates from intuitive expectations. In some studies, credit users were found to have fewer savings than nonusers (Livingstone & Lunt, 1992 for the UK). However, other studies report that some households hold savings and credit at the same time (Viaud & Roland-Lévy, 2000 for France), or report equal likelihood of credit use across wealth classes (Beer & Schürz, 2007 for Austria).

Age and family status reflect particular constellations in which money is needed and are accordingly related to credit use. Young people were reported to use credit more (e.g., Drentea & Lavrakas, 2000; IfS, 2004) but the relationship often seems to be curvilinear. For example, in

Germany the number of outstanding credits rises until the age bracket of 40–45, and declines afterwards (SCHUFA, 2010). For Austria, a similar curvilinear pattern with a peak for the age group of 35–45 was found (Beer & Schürz, 2007). To some extent, this relation with age covaries with lifecycle status. People living in a partnership (Berthoud & Kempson, 1992 for the UK) or married (Chien & Devaney, 2001 for the US) were shown to be more prone to credit use. Specifically, loans seem to be most common among couples with young children and young couples establishing their households (de Vaus, 2004 for Australia).

Gender differences in credit use are usually not very pronounced (Mooslechner & Brandner, 1992 for Austria; Webley & Nyhus, 2001 for the Netherlands). Some studies report a higher likelihood of credit use by men (Anderson & Nevitte, 2006; Davies & Lea, 1995). This may be an indirect consequence of women having a lower income, which affects their creditworthiness and credit limit (van Staveren, 2002). However, considering the actual relationship between income and credit use, additional factors are likely at play.

Findings on the influence of overall level of education are mixed. Some studies (Nyhus & Webley, 2001) found that credit users had a higher educational level than nonusers, whereas others (Livingstone & Lunt, 1992) found no such difference. If education is viewed in terms of specific financial education, the evidence becomes clearer. Due to its link to knowledge and decision making this topic is discussed in Perspective 3.

Other situational factors predictive of the need for money and ensuing credit use are recent job changes (Berthoud & Kempson, 1992) or adverse life-events (Canner & Luckett, 1991; Tokunaga, 1993 for the US). Health in itself had no direct effect (Drentea & Lavrakas, 2000).

Interest rates. Considerations to use credit can also be influenced by rational economic calculations: Borrowing money becomes more attractive when interest rates are low (Katona, 1975). There is substantial international evidence for this relation, and households seem to react quickly to changes in national interest rates (e.g., Dale & Haldane, 1995 for the UK; Garretsen & Swank, 2003 for The Netherlands; Kassim & Manap, 2008 for Malaysia). Consumers also are more likely to respond to unsolicited loan offers if interest rates are lower (Bertrand, Karlan, Mullainathan, Shafir, & Zinman, 2010 for a South African field experiment). People living in richer areas seem to be particularly sensitive (Alessie, Hochguertel, & Weber, 2005 for Italy).

Credit limits and availability. Considerations to use credit can also be influenced by more subtle signals. US surveys and experiments show that an increase in a person's credit limit leads to more spending and credit use (Gross & Souleles, 2002; Soman & Cheema, 2002). This finding provides an interesting parallel to the effect of income on credit use. Indeed, the documented reason behind this effect is that consumers use their available credit limit to infer future income and behave accordingly (Soman & Cheema, 2002). Those who seriously doubt the credibility of this cue are less influenced by credit limits.

Credit availability within a specific context also influences propensity to use credit. Simple signals such as a sales person offering installment payments can raise awareness and usage of credit among consumers (e.g., Erasmus & Mathunjwa, 2011). However, in some cases credit availability may backfire and inhibit consumer spending. Offering installment billing decreased demand for luxury jewelry and gifts because it reduced the perceived quality of the products (Anderson & Simester, 2001).

Patterns of situational characteristics. Importantly, no characteristic of credit users and situations sufficiently explains the observed differences in isolation (cf. Kamleitner & Kirchler, 2007). For example, older and better educated consumers are less likely to be influenced by credit limits (Soman & Cheema, 2002), and based on UK data neither income nor age alone was able to explain debt while in combination they were (Berthoud & Kempson, 1992). It is also difficult to partial out single factors because they frequently co-occur. Consequently, patterns of characteristics need to be further examined but current examples of this practice are rare (for examples of exceptions see Gunnarsson & Wahlund, 1997; Viaud & Roland-Lévy, 2000). On top of these dynamic patterns of direct influence there are likely to be indirect influences. For example, income, education, age and gender may have additional indirect effects on consumer credit use because they relate to consumer knowledge about credit (e.g. Erasmus & Mathunjwa, 2011; Mandell, 1973).

Processes at credit acquisition

In this phase, consumers decide on specific credit arrangements. Situational factors determine the options they can objectively choose from and are subjectively aware of.

Access. Access to credit has been examined in connection with several demographic variables. The most important indicator for the type of credit used is income, with higher income groups having better access to credit with lower interest rates (e.g., Berthoud & Kempson, 1992 for the UK). The current debt situation was also predictive of the type of credit used. The smaller the loan and the higher existing debts, the more likely it was that consumers had to use credit sources with high interest rates (Drecnik Worden & Sullivan, 1987). While middle-income groups used so-called "mainstream commercial credit" (e.g., bank overdrafts, bank loans) to borrow large amounts, low-income groups, in particular young families with dependent children, had to borrow small amounts from the "alternative credit market" (e.g., high interest pawnbrokers) or from relatives and friends (e.g., Croden, 2000). The UK Survey of Low Income Families also finds that low-income households are particularly likely to combine different sources of credit (Bridges & Disney, 2004). This fits well with the finding that young Finnish people who have low incomes, marginal employment or are single parents are particularly likely to use so-called instant small loans that can be applied for by short message service or through the internet (Autio, Wilska, Kaartinen, & Lahteenmaa, 2009). Because it influences credit availability, home ownership seems to moderate the relation between income and credit source. In contrast to low-income tenants, low-income homeowners have been found to have access to and to use credit arrangements that are similar to the general population (Bridges & Disney, 2004). Finally, some studies suggest that access to credit may be constrained by discrimination. For example, controlling for relevant financial characteristics, Weller (2009) reports that African-Americans were more likely to be denied a loan than Whites.

The immediate local accessibility of alternative forms of credit may accentuate demographic access issues. Payday lenders are particularly likely to be found in neighborhoods characterized by lower income, a higher rate of ethnic minorities or immigrants, a higher density of young adults or elderly and of people working for the military or in nonmanagement occupations (Gallmeyer & Roberts, 2009). (For a similar effect of neighborhood on (decreased) mortgage lending in Detroit see Silverman, 2005.)

Search. Another factor influencing the choice of a specific credit alternative is the extent of search (for a discussion of the underlying cognitive processes see Perspective 3), which is related to situational factors. Search was found to increase with the amount borrowed, previously experienced debt, higher income and educational level, and to be higher for credit novices (Chang & Hanna, 1992; Drecnik Worden & Sullivan, 1987). In contrast, negative previous experiences such as being denied credit reduced search, probably because borrowers were heading to the most promising lender (Drecnik Worden & Sullivan, 1987). Those most likely to search for information about credit are young singles and people having easily realizable assets. While young singles may have enough time to compare offers, the second group of consumers needs to justify using credit (Drecnik Worden & Sullivan, 1987). Notably, the type of information source used may also depend on situational factors such as what the loan is for (Lee & Hogarth, 2000).

Processes during payback

The situational perspective in the payback phase has two sides. On one side situational influences determine how consumers deal with an existing loan. On the other side the loan itself becomes a situational determinant that may influence consumer behavior. Such influences are commonly located between Perspectives 1 and 2. We reported influences of a more situational, ad hoc nature within Perspective 1 and will report influences on more stable experiences and behavioral patterns that are located within the person in Perspective 2.

Situational effects on credit behavior. Also in the final phase, demographics and situation may play an important role. For example, for all but informal loans tenants are more likely to be in arrears than homeowners (Bridges & Disney, 2004 for the UK) and older consumers are more likely to reduce their debts (Xiao, Sorhaindo, & Garman, 2006 for the US) and less likely to default (SCHUFA, 2010 for Germany). As for the choice of credit source, income once again emerges as an important predictor of debt repayment (e.g., Livingstone & Lunt, 1992 for the UK); possibly in part because it is positively related to responsible financial management, such as paying bills on time or saving money (Perry & Morris, 2005).

Credit and its situational effects. Even after controlling for demographic characteristics, consumption patterns of borrowers were found to differ from those of nonborrowers (Fan, 2000). Borrowers spent less money on necessities, but more on luxuries. While this reflects differences with regard to psychological variables (see Perspective 2), it may in part also reflect a genuine effect of credit use on behavior. After all, UK credit users and nonusers agree that credit encourages the purchase of things not really needed (Berthoud & Kempson, 1992).

Discussion of Perspective 1

Overall, situational factors influence credit use in all three phases. Research has predominantly focused on the first phase, leaving in particular scope for research in the final phase. There also is a pronounced focus on demographic variables. Probably this is because data sets containing demographic variables are easily available and because demographic variables have clear policy implications. Additional research opportunities mainly exist with regard to more nuanced observations of well-researched variables (e.g., by identifying particular consumer groups characterized by a combination of income, assets, family status, etc.) and to the identification of specific situational influences that go beyond the few variables identified. The potential scope for this latter field of investigation is vast and could include topics such as the effect of different forms of installment credit on store image perception and purchase likelihood, the effect of environmental variables such as weather on the propensity to take out a loan (e.g., Hirshleifer & Shumway, 2003 for an effect on stock market behavior), or conversely the effect of loan usage on leisure activities. Another field where little research exists is the dynamic interplay between consumers needing credit and credit institutions granting (or declining) credit; this interplay contributes to a concentration of particular credit types in certain communities and the use of expensive credit types by poorer consumers (e.g., payday lenders).

Perspective 2: Credit use as a reflection of the person

Viewing credit use as a reflection of the person has a long tradition, even beyond psychology. Already three-quarters of a century ago, Keynes (1936/1997) identified six motives for borrowing money: enjoyment, extravagance, short-sightedness, miscalculation, ostentation, and generosity. Keynes did not go into detail with the proposed motives, but listed them after reflecting what might drive people to consume immediately or postpone a purchase and delay consumption. Many contemporary researchers have delved into the matter more deeply. Personal characteristics affect credit use in multiple ways. Broadly speaking, they influence whether a person is likely to strive for goods within time frames that necessitate credit use and how a person feels about and deals with credit *per se*.

Processes preceding credit use

Depending on personal characteristics, people are more or less prone to use credit and consume immediately rather than to save and consume at a later point in time. Personal characteristics that have been investigated tend to influence specific components in the genesis of credit use. They range from factors relating to the propensity to desire the unaffordable, to factors relating to desiring objects now rather than later, to factors relating to the propensity for credit use *per se*.

Factors related to the desire for the credit-financed good. Among the factors that mainly influence the desire for the good, Keynes' motive of ostentation and the related disposition to make social comparisons found particularly strong support that consistently emerges across a plethora of conceptualizations and measurements. A series of studies demonstrated that a person's propensity for social comparison, the need to express one's identity through social relations and consumption, the motive to possess commodities which relevant others own, and even the tendency to express power and prestige through money increase the propensity for credit use (e.g., Livingstone & Lunt, 1991 for the UK; Palan, Morrow, Trapp, & Blackburn, 2011 for Canada; Roland-Lévy & Walker, 1994 for France). The amount of credit taken does not seem to be affected (Livingstone & Lunt, 1992). This finding seems to hold across forms of credit (e.g., Bernthal et al., 2005 for US credit card users). As Viaud and Roland-Lévy (2000, p. 430) put it, credit allows "access to a valorised identity." People that were able to make favorable social comparisons had lower time preferences (i.e., they were less present-oriented and discounted future events less) and were less susceptible to credit use (e.g., Groenland & Nyhus, 1994).

A similar personal factor that has been linked to the propensity to desire the unaffordable and consequently use credit is materialism. Some studies suggest that consumers with high levels of materialism hold more favorable attitudes to borrowing money and are more likely to do so, sometimes excessively (Pirog & Roberts, 2007 for credit card usage; Watson, 2003). However, the effect does not consistently emerge (e.g., Norvilitis et al., 2006 found no relation to credit card use) and seems to be indirect in nature. Namely it has been shown to be mediated by poor impulse control and difficulties in delaying gratification (Watson, 2003). Somewhat related to the concept of materialism is fashion orientation. In the context of credit card usage among South Koreans, fashion orientation emerged as a significant predictor of credit use (Park & Burns, 2005). Other traits that have been identified as potential drivers of credit use include high levels of narcissism (Rose, 2007), low levels of introversion, and low levels of emotional stability (e.g., Nyhus & Webley, 2001).

Factors related to the desire to consume now. Spearheading the second group of characteristics are self-control and the ability to delay gratification. Both factors were quite consistently shown to relate to credit use and the ensuing risk for indebtedness (e.g., Kamleitner, Hornung, & Kirchler, 2011; Livingstone & Lunt, 1992; Webley & Nyhus, 2001). Closely related to the ability to delay gratification are present orientation, myopia, and the propensity to strongly discount future events. All these factors were argued to increase credit use (e.g., D'Orlando & Sanfilippo, 2008; Groenland & Nyhus, 1994). The line between the different constructs seems to some degree drawn by disciplinary borders. Behavioral economists, such as Stango and Zinman (2006), who find that a household's tendency to underestimate exponential data series (as those involved in installment credits) is predictive of the level of short-term installment debt, are more prone to talk about individual discount rates and myopia. However, psychologists are more likely to talk about delay of gratification and present orientation. Regardless of terminology and concrete conceptualization, results seem to be robust in general. The evidence extends to the related construct of locus of control, which refers to a person's ability to control the immediate environment (Rotter, 1966). Effects on credit use are however not quite as robust (Cosma & Pattarin, 2010). For example, Perry (2008a) and Perry and Morris (2005) found that the more US consumers believed they were able to control the course of events, the more their financial knowledge enabled them to use credit responsibly. Effects also extend to different forms of credit including credit cards (Norvilitis et al., 2006). However, although effects emerge consistently, their nature and direction may vary across different forms of credit. Wang, Chen, and Wang (2008), for instance, report evidence that an external locus of control decreases the extent of mortgage loans; this is opposite to the effect commonly found on credit card debt. This may be due to the fact that credit-card spending is affected by impulse, whereas mortgage use is usually extensively planned. But it may also be because concurrent credit card usage depletes resources and negatively affects credit scores and deposits.

Factors related to the propensity to use credit. The main factor in this final group of characteristics is attitude. Although the causal nature of the relationship is not always entirely clear, people holding a favorable attitude to credit use are more likely to use credit than others (e.g., Bakar, Masud, & Md Jusoh, 2006 for Malysia; Chien & Devaney, 2001 for the US; Chudry, Foxall, & Pallister, 2011 for the UK; Haultain, Kemp, & Chernyshenko, 2010 for New Zealand; Webley & Nyhus, 2001 for The Netherlands). Consistent effects of attitudes on credit use are found across the globe and across forms of credit (e.g., for the effect on credit card usage in China see Wang, Lu, & Malhotra, 2011). Moreover, it seems that the effect of attitudes encompasses all three attitude dimensions; that is, cognition, affect, and behavior (e.g., Cosma & Pattarin, 2010 for Italy), but that attitudes to the specific type of credit often matter more than debt attitudes in general (e.g., Norvilitis et al., 2006 for credit cards). Notably attitudes to money in general are also likely to be related to credit use (e.g., Anderson & Nevitte, 2006; Stone & Maury, 2006) in terms of both whether and how it is used (Baker & Hagedorn, 2008). Actual money management habits are also related to the likelihood of credit use (e.g., Kamleitner et al., 2011). Many of these findings relate to personality traits that were already discussed. In a way this signals that traits may influence credit use in multiple ways: directly through their influence on what consumers strive for, and indirectly through what the resulting behaviors necessitate. For example, reflecting a possible lack of self-control, borrowers used more flexible money management strategies than non-borrowers (Livingstone & Lunt, 1992). Similarly, reflecting a high individual discount factor or present orientation, borrowers have been reported to manage their financial resources on shorter time horizons, and they used more but simpler money control techniques (Hayhoe, 2002; Webley & Nyhus, 2001).

Some quite specific traits are also likely to increase the acceptability of credit use for a person. One such trait is optimism. Optimistic people borrowed roughly double the amount of comparably pessimistic consumers (Brown, Taylor, & Wheatley Price, 2005; Van Raaij & Gianotten, 1990). Moreover, optimists assume that it takes them less time to pay back their debts and they are consequently found to have higher credit card debts (Norvilitis et al., 2006). However, Hynes (2004) warns not to prematurely conclude that overoptimistic consumers overborrow. He emphasizes that the term "overoptimism" is vague and that different forms of optimism may have different effects on credit use, an aspect that has yet to be investigated (for a discussion of situation-specific expectations rather than optimism as a personal trait see Perspective 3).

Another trait that may encourage credit use is sensation seeking (Norvilitis et al., 2006), which in turn relates to risk seeking (Wong & Carducci, 1991; Worthy, Jonkman, & Blinn-Pike, 2010). High sensation seekers tend to risk more and engage more in problematic financial behaviors than low sensation seekers. The more cautious consumers are, the lower their burden of debts (Dahlbäck, 1991). Financial risk taking was one of the factors discriminating between Swedish households pursuing different financial strategies including credit use (Gunnarsson & Wahlund, 1997). Importantly, the relationship between risk propensity and consumer credit may be instigated by a third factor: The more people know about credit, the more cautious they may be. However, in particular for sensation seeking the evidence predominantly stems from research on credit card usage. Generalizability to other forms of credit has yet to be established.

Processes at credit acquisition

In contrast to all other perspectives and despite potential relations, the literature is silent about the effect of personal characteristics during the stage of credit acquisition. Factors that have been shown to influence acquisition processes in other contexts, such as the influence of need for cognition (Cacioppo & Petty, 1982), on search are likely to also relate to consumer credit acquisition. However, the translation into this specific context has yet to be made.

Processes during payback

The perspective of the person is particularly interesting in the payback phase. Consumer credit is dealt with not only as a function of the person; it also has an influence on the person.

Influence of person characteristics on credit behavior. Few studies have investigated how personal characteristics influence credit behavior after debts are incurred. One example is that of Meier and Sprenger (2008), who found that the more patient individuals are in terms of time preferences, the more likely they take part in counseling programs. Conversely, the more participants had present-biased time preferences, the higher wasd their amount of outstanding debt.

Influence of credit use on the person. The most prominent personal consequence of credit use is psychological well-being. The evidence ranges from observed effects on overall psychological well-being (Brown et al., 2005; Norvilitis et al., 2006), through anxiety (Drentea & Lavrakas, 2000) and depression (Stradling, 2001 for UK students), all the way to mental disorders. For example, Jenkins et al. (2008) found that debtors were more likely to suffer from mental disorders (23%) than nondebtors (8%). Notably it is not the actual level of debt that predicts negative consequences for psychological and even physical wellbeing but the subjective perception and worry about the existing debt level (Cooke, Barkham, Audin, Bradley, & Davy, 2004; Jessop, Herberts, & Solomon, 2005, for UK and Finnish students). Also, the relation does not seem to generalize across all forms of debt. In particular for mortgage debt the otherwise robust link has not been established (see Brown et al., 2005 for mortgage use) and it sometimes seems to hide a more complex pattern. For example, consumer debt increases depression because it leads to perceived economic pressure but after controlling for economic pressure, the net effect on depression is negative, presumably because consumer credit allowed consumption of desired goods in the first place (Dew, 2007). For most studies, some degree of caution is warranted. The causal nature of the link between mental wellbeing and credit use has rarely been established beyond doubt. An exception is a UK longitudinal study (Andrews & Wilding, 2004) that corroborates the existing evidence by documenting a causal effect of student debt on reduced wellbeing.

Another consequence of credit use facing similar causality issues is attitude. Several studies suggest that attitudes change in response to credit use (Godwin, 1997). For example, a UK study found that school pupils aged between 16 and 17 who are about to enter university and by and large had never used credit were most debt-averse. Attitudes were more favorable among those taking up their undergraduate studies; they were the most favorable among final year undergraduates who had the highest propensity to be in debt and the highest debt levels (Lea, Webley, & Bellamy, 2001).

Another set of personal responses to credit use falls under the broad heading of money management; again causalities often remain unclear. Credit users have been shown to worry and think more about money than nonusers (e.g., Hayhoe, Leach, & Turner, 1999) and they may change their perception of their own money management. In particular there seems to be an element of self-blame involved. For example, Finnish users of instant loans are more likely to see themselves as "wasteful" consumers than those who do not use instant loans (Autio et al., 2009) and UK evidence suggests that noncredit users are more likely to attribute money management difficulties to demands by children than credit users. Credit users themselves thought that money problems were more a function of the person than of the situation (Livingstone & Lunt, 1992).

Messinis, Henry, and Olekalns (2002) propose a quite different effect of credit on behavior. They suggest that consumer credit allows consumers to break with previous consumption habits (i.e., the consumption level consumers need in order to derive a certain level of utility), thereby assisting consumers in becoming more forward-looking and independent from the past. This influence of consumer credit on consumer behavior has partly been supported by aggregate US data (Messinis et al., 2002) but has not yet been traced at the individual level.

Discussion of Perspective 2

What stands out about this perspective is that it does not distinguish between specific phases of the credit process. Its main concern is with the propensity and the extent of credit use. This static approach leads to substantial gaps in literature. Specifically, there is a lack of knowledge about the influence of personal characteristics on credit acquisition and credit behavior thereafter.

Another consequence of the static nature of research falling under this perspective is its frequent inability to ensure causality. Even if traits are comparably stable, prolonged debt experiences may provoke changes in a person's psychological makeup. Whereas there is some evidence that attitudes are indeed cause and consequence alike, similar evidence for most other personal characteristics is virtually nonexistent.

An aspect that has been similarly neglected is the possibility that specific combinations of personal factors may have explanatory power beyond the sum of their individual effects. Research has also yet to establish the effect of specific combinations of situational and personal factors. Some studies collected data on both perspectives, but these have rarely been combined systematically. The general—and, as far as we can see, untested—assumption seems to be one of a linear combination of psychological and situational effects.

Although personal characteristics have been associated and investigated across a wide range of forms of credit, there is hardly any evidence for whether effects of personal characteristics occur for specific forms of credit only. An impressive body of evidence focused on credit card use, predominantly by student populations. In several instances where findings likely generalize to other forms of credit we reported these findings. However, caution needs to be exercised because it is possible that personality is particularly relevant for impulsive forms of borrowing, exemplified by some patterns of credit card use.

The way we structured the review of findings in the first phase suggests that different characteristics influence different components of the propensity to use credit (desire for the good, desire for immediate consumption, acceptability of credit). We feel that such a distinction might be potentially useful but empirical data have yet to verify it across the credit process (e.g., the different clusters of characteristics may lead to differences in search behavior).

Perspective 3: Credit use as a cognitive process

Credit use is a process that results from the elaboration of several factors, involves potentially elaborate comparison and decision processes, and is finally judged and evaluated based on a person's understanding of the situation. It is hence adequate to conceptualize consumer credit use as a series of cognitive tasks.

Processes preceding credit use

The first phase involves the decision to use credit. From a cognitive perspective it can result from "rational" reasons and it always involves intertemporal trade-offs. In addition the literature suggests that credit use can be framed in terms of what is known as "mental accounts."

"Rational" reasons. Beyond being situationally demanded or psychologically desired, credit use may result from weighing its pros and cons against each other. Even if sufficient liquid assets were available, people might decide to use credit because committing to an installment plan with fixed rates provides a means of self-control and leaves untouched already laboriously acquired savings, possibly earmarked for another purpose (Erasmus & Mathunjwa, 2011; Katona, 1975). This reason is prone to be particularly pronounced if interest rates are low, and most people perceive behavior along those lines as cautious and intelligent (Katona, 1975). Similarly, credit may sometimes be used because it is the only way of taking advantage of a temporary offer (Erasmus & Mathunjwa, 2011). Another economically motivated reason is that credit can be used to translate expectations into effective demand, such as among UK students who borrow money because they expect higher future incomes (Christie & Munro, 2003; Davies & Lea, 1995). An additional example involves the US consumer sentiment, as an indicator of consumer expectations, predicting the use of revolving credit (Lamdin, 2008). This reason falls into more than one perspective and relates to use of credit across the lifecycle (Perspective 1), the effects of credit availability (Perspective 1), and optimism as a predictor of credit use (Perspective 2).

Intertemporal trade-offs. Deciding to use credit implies favoring consuming now and paying back later over saving now and consuming later. Research on intertemporal choice has consistently shown that future benefits and costs are discounted compared to their valuation in the present (Kassam, Gilbert, Boston, & Wilson, 2008; Soman et al., 2005). Present rewards loom larger than future rewards, whereas future costs are discounted compared to present costs (Loewenstein & Thaler, 1989; Webley & Nyhus, 2008). If rewards are immediate and the price is payable at a later point in time, perceived benefits become more likely to outweigh the perceived costs (Mowen & Mowen, 1991). This is one of the fundamental principles favoring credit use. In addition, the existence of several small future costs further fosters their undervaluation. Indeed, several theoretical papers suggest that intertemporal discounting and myopia are major drivers of borrowing (e.g., D'Orlando & Sanfilippo, 2008; Fehr, 2002; Laibson, 1997). Notably intertemporal discount rates vary as a function of the overall amount of credit. Smaller loans provoke higher discount rates than larger loans (Estelami, 2001), leading to an increase in the underestimation of credit cost, in particular for comparably small consumer credit.

Mental accounting. An intricate view on intertemporal trade-offs is provided by Prelec and Loewenstein's (1998) "prospective double-entry mental accounting model." These authors acknowledge the existence of discounting and model it within the remits of a so-called mental account. Mental accounting (e.g., Thaler, 1985) posits that people seek to keep an overview of their spending by mentally separating and tracking incomes and expenditures in different mental accounts and budgets. Mental accounts can be established across several transactions (e.g., a budget for all leisure activities) or, as in the case of the double-entry mental accounting model, for a specific transaction such as a loan. To evaluate a mental loan account, Prelec and Loewenstein posit that consumers anticipate streams of future pleasures of consumption and pains of payment. When "booking" these streams on the mental account they can be "coupled." Coupling is the degree to which thoughts of payment arouse thoughts of consumption and vice versa. If consumers strongly couple payment and consumption then every consumption episode is attenuated by the disutility of the outstanding debt. Because of the anticipated negative effect of installments on consumption pleasure the model predicts and empirically demonstrates strong overall debt aversion—despite temporal discounting. However, this prediction depends on the degree to which consumers are likely to couple and on the nature of the good. Credit financing would mostly be accepted for long lasting goods that depreciate in utility slowly or not at all (e.g., houses or cars). In these cases the pain of paying can always be buffered by the utility derived from the good.

Another relevant finding from the mental accounting literature relates to people's tendency to match certain sources of money with certain spending purposes. Karlsson, Gärling, and Selart (1997) manipulated the source of money available for consumption (income, income increase, saving for a buffer, saving for a goal) and the consumption motive (replacement or purchase of a desired commodity) and asked Swedish students to indicate their propensity to pay either in cash or by installment plan. If the saving purpose and consumption motive were not compatible, participants were more inclined to use credit.

Processes at credit acquisition

Credit acquisition is a complex process with potentially risky implications. The cognitive perspective looks at three main dimensions: the search for information, the perception of different components of a credit offer, and the contemplation of credit risks. Intimately linked to the discussion of these dimensions is a discussion of consumers' financial knowledge.

Search for information about credit alternatives is relevant for reaching an economically sound decision. Yet 8% of consumer credit decisions in the UK (excluding credit cards and revolving credit) are made on the spur of the moment (Berthoud & Kempson, 1992). Even if decisions are not made impulsively, low levels of information search are commonly reported (e.g., Peterson & Black, 1984). An early example is a study by Day (1972, as cited by Dauten and Dauten, 1976), who found that only 27% of US credit users recalled searching for credit information prior to credit use, and just 20% considered alternative credit sources. In particular, loans that follow classical scripts, such as student loans (Scott & Lewis, 2001), seem to be characterized by particularly low levels of information search. In part, the frequent failure to search may also be due to the perception of high search and switch costs (Canner & Luckett, 1992). Indeed, loan financing of consumer goods amounts to an instance of multidimensional pricing (Herrmann & Wricke, 1998) and the complexities involved do not guarantee better decisions based on search (Estelami, 2001). In particular, for convenient use of credit (e.g., payday loans) it is often difficult to actually engage in price comparison (Competition Commission, 2006). Notably, searching does not necessarily translate into better decisions. US consumers who searched were no more likely to borrow at favorable conditions than those who did not search (Drecnik Worden & Sullivan, 1987).

Perception of credit components. A considerable body of research investigated how consumers understand and perceive specific details of a loan and which information they care about the most. Overall the literature suggests that consumers care most about the immediate implications, i.e., monthly repayment amount and loan duration, followed by total costs and interest rates. Consumers care less about auxiliary features such as rebates (e.g., Wonder, Wilhelm, & Fewings, 2008 for a US experiment). Notably consumers are likely to be biased by how information is presented (e.g., Estelami, 2001) and appear unable to integrate the different dimensions of a loan to an overall favorability judgment. In a German study on car loans, consumers even struggled to realize the trade-off between down payments, repayment amount and loan duration (Herrmann & Wricke, 1998). A UK experiment found that people were able to make limited trade-offs (McHugh, Ranyard, & Lewis, 2011).

Component: Monthly installment. A host of studies points to the overwhelming importance of monthly installments in borrowing decisions (e.g., Herrmann & Wricke, 1998 for Germany; Ranyard & Craig, 1995; Ranyard, Hinkley, Williamson, & McHugh, 2006 for the UK). As with other price judgments, it is not necessarily the absolute level of monthly payment that influences consumer judgments. US consumers focused on the first digit of the repayment amount (Wonder et al., 2008), and "psychologically odd" numbers (e.g., \$199) made credit costs look smaller (Estelami, 2001).

Component: Duration and timing. Overall, consumers seem to prefer loans of moderate or short length (Wonder et al., 2008 for the US) and to want to repay loans as quickly as possible, including a preference for repaying more at an early stage and less at a later stage (Hoelzl, Kamleitner, & Kirchler, 2011 for Austria). Interestingly this preference for "getting it over with quickly" persists even if it would make economical sense to owe more for longer, i.e., in the absence of interest (Hoelzl et al., 2011; Wonder et al., 2008). A force potentially counteracting this preference is the established preference to somewhat match the life or usage time of a financed object with the repayment period (Hirst, Joyce, & Schadewald, 1994). This may explain why consumers prefer shorter loans for hedonic purchases (Wertenbroch, Soman, & Nunes, 2001).

If information on loan duration is not provided, consumers find it difficult to estimate (Ranyard & Craig, 1993) and tend to underestimate actual loan duration, especially for loans with long payback times (e.g., Overton & MacFadyen, 1998 for Canada; Ranyard & Craig, 1993 for the UK; Seaward & Kemp, 2000 for New Zealand). Underestimation of loan duration becomes more pronounced if installments are low, but estimates improve if information on loan costs in terms of total or monthly interests is added and if people use mental arithmetic (Lewis & van Venrooij, 1995; Overton & MacFadyen, 1998; Ranyard & Craig, 1993). Notably the actual timing of the loan can influence the subjective discount rates that consumers apply in judging future costs. Immediate installment payments induce higher discount rates than distant payments, and delays in payment time lead to a decline in discount rates (Estelami, 2001).

Component: Interest and annual percentage rate. Unsurprisingly, consumers prefer loans with lower interest rates (Wonder et al., 2008 for a US experiment). However, the understanding of interest rates is limited and, depending on the type of credit, may even be nonexistent (e.g., Lewis & van Venrooij, 1995 for the UK); for example, some UK students felt that their loan was free (Scott & Lewis, 2001). A particular interest rate that lenders in several countries (e.g., most countries in the European Union) are legally required to provide is the annual percentage rate (APR). Again, understanding of APR is limited (e.g., Herrmann & Wricke, 1998 for Germany) but it is nonetheless used as an indicator of price (Ramsay, 2010). For example, a representative survey, a process-tracing study and experiments from the UK suggest that consumers (a) misunderstand the relation between APR and total cost of a loan, (b) overestimate total cost based on APR, and (c) choose between different loan offers based on total cost rather than APR (McHugh et al., 2011; Ranyard et al., 2006). Notably lack of understanding does not prevent beneficial effects. Taking APR (inaccurately) into account led to more consistent judgments when comparing loan offers (Herrmann & Wricke, 1998).

Dealing with risk. If consumers consider the risks entailed, they may seek means to reduce or avoid the risk at the time of credit acquisition and apply risk-defusing operators (Huber & Huber, 2008; Kirchler, Hoelzl, & Huber, 2010). Behavior in the context of consumer credit was shown to be consistent with a two-dimensional threshold model. If a perceived risk exceeded both a threshold of loss probability and a threshold of loss value, risk defusing operators such as credit risk insurance, or planning for a worst case scenario, were activated. However, in cases of small borrowed amounts and short loan duration, risks were denied (Ranyard, Hinkley, & Williamson, 2001).

Financial knowledge. Financial knowledge influences cognitive processes involved in credit use, in particular at and after credit acquisition (see Lusardi & Mitchell, 2007 for a review). For decades (e.g., Mandell, 1973 for a very early example), most studies have attested to overall low levels of financial literacy. For example, the JumpStart Coalition for Personal Financial Literacy (2002, as quoted by Norvilitis & MacLean, 2010) found that on average American students answer less than 60% of items assessing financial knowledge correctly. A comparable Canadian study attested to even lower levels of financial knowledge, with 49% of answers being correct. But knowledge matters. Those who know more make better decisions. For example, less knowledgeable US consumers were less likely to refinance their mortgages when interest rates were falling (Campbell, 2006), more likely to decide on loans depending on the first digit of the monthly rate (Wonder et al., 2008), and more likely to overestimate their credit score (Perry, 2008b). Knowledge not only enables consumers to make better decisions from a given set of options, but also seems to increase the favorability of the options available. Controlling for income, education, and life events, Perry (2008a) finds that consumers who are more knowledgeable receive better credit scores.

Processes during payback

With the onset of actual credit use, a number of factors have been considered from a cognitive perspective. On one hand reconceptualizations of the situation have been identified. On the other hand people's objective knowledge about and their subjective perceptions of this situation (in particular perceived loan burden) have been investigated.

Re-evaluation. Those persons who use credit seem to become more likely to view credit as an alternate form of income (Norton, 1993), as delayed payment, or as an agreement to gradually pay in the future (Katona, 1975). Such reconceptualizations are in line with people's preference to frame decisions as gains. Indeed, via experiments with US students, Beggan (1994) showed that the majority of credit users shifted their reference point to the state of being in debt. Hence any action leading out of debt was subsequently perceived as a gain. This finding may be one of the reasons underlying people's preference for quick repayment.

Clearly not all credit users manage to put a positive spin on the repayment process (see also Perspective 2), and the interpretation of loan repayment may vary across loan purposes and cultures. For example, a majority of Malaysian students holding a study loan perceived the loan as a burden and as a limitation for their future life (Bakar, Masud, & Md Jusoh, 2006).

Financial knowledge. The effect of financial knowledge on the persistence and level of debt is equivocal. For example, level of knowledge among US college students correlated positively with the level of credit card debt outstanding in one study (Norvilitis et al., 2006), but showed no such correlation in another study on a similar sample (Jones, 2005). A study investigating financial knowledge and credit behavior of young Canadians (Lachance, Beaudoin, & Robitaille, 2006) and a representative US survey (Lyons, Rachlis, & Scherpf, 2007) even find the opposite relation. Those who owe more know more. The solution to these disparities may lie in at least two factors. First, the way knowledge and credit use are measured may contribute to inconsistencies. Second, the link may actually be twofold and therefore be highly sensitive to other characteristics such as sample age. It is likely that low levels of knowledge contribute to taking out more debt in the first place. But being in debt constitutes a learning experience that may increase levels of knowledge (cf. Lyons et al., 2007). However, several studies suggest that learning from past experiences may lead to less favorable learning outcomes than learning from other sources: Only learning from family members had worse learning outcomes (Lachance et al., 2006; Perry, 2008b). Learning from professionals such as in credit counseling has been shown to help people in reducing their debt (Staten, Elliehausen, & Lundquist, 2002).

Objective knowledge of debt situation. Considering the complexity of issues involved in decision making, it comes as no surprise that people are often not well informed about the details of their existing credit plans. Most people know how much they have to pay every month and how large a part of their income that is (Katona, 1975). This knowledge is relevant for maintaining a regular financial overview, and for many credit users it is all that matters (Emmons, 2004 for the US; Erasmus & Mathunjwa, 2011 for Swaziland). Knowledge in terms of actual credit costs and contractual obligations is much less pronounced (e.g., Berthoud & Kempson, 1992 for the UK; Erasmus & Mathunjwa, 2011 for Swaziland) and is not specific to consumer credit (e.g., Lee & Hogarth, 1999 for US mortgage users; Warwick, Mansfield, & Cook, 2000 for credit card holding US students).

Subjective debt burden. An important theme in the literature is the question of how consumers think about and perceive their debt burden. Using credit involves the cost of borrowing and the benefits of consumption, and consumers differ in the extent to which they establish mental associations between these costs and benefits. In particular it has been argued that it is hedonically efficient for consumers if (a) the loan makes them think of the loan-financed good, and (b) consuming the good makes them not think of the loan and the required repayments (Prelec & Loewenstein, 1998). Speaking of a "mental one-way street from the loan to the good," Kamleitner and Kirchler (2006) found some evidence for this association pattern in interviews with Austrian personal loan users. Notably the extent to which loan and loan-financed object were mentally associated seemed to relate to the nature of the loan-financed good. The association seemed to be stronger for goods that can easily be justified. Differences in consumers' mental associations were shown to be, indeed, hedonically meaningful, but the effect was restricted to one direction of association (Kamleitner, Hoelzl, & Kirchler, 2010 for surveys and experiments with Austrian loan users). The more a loan-financed object brought to mind thoughts of the loan, the more burdensome the loan was perceived. Contrary to theoretical expectations (Prelec & Loewenstein, 1998), the extent to which the loan brought to mind the loan-financed good had no effect.

Effects of potential habituation over time were also investigated. In particular, a study on Austrian mortgage users likely generalizes to the case of consumer credit (Hoelzl, Pollai, & Kamleitner, 2009). At different times of the payback process, homeowners were asked to report current, predicted, and recollected burden of paying for the mortgage. The perceived burden did not change over time, although loan users recalled and predicted a decrease of loan burden. Predictions, recollections and experiences of the degree to which the house brought to mind thoughts of the mortgage followed and predicted this pattern of results. Thus these findings further corroborate the effect of the object–loan association on perceived loan burden. In addition, they question the reliability of habituation accounts and suggest a role of misforecasts. Self-reported evidence of habituation such as the case of students who self-assertively become "debt-blind" (Eccles & Bird, 2004) may be at least partly due to a recollection bias rather than to actual habituation. The extent to which habituation occurs with regard to aspects other than loan burden has yet to be investigated. Also, based on the current evidence it cannot be precluded that habituation does occur, but only at the very early stages rather than gradually as commonly assumed.

Discussion of Perspective 3

Most literature pertaining to the cognitive perspective was interested in the decision itself, i.e. the evaluation and comparison of different credit options. This might suggest that the current literature paints the most comprehensive picture of the second phase of the credit process. This is not the case. Instead of looking at the phenomenon from different cognitive angles, the existing literature has focused on selected aspects in great depth. For example, as Kamleitner and Kirchler (2007) point out, the stage of acquisition also involves the possibility that consumers decide against taking out credit after careful consideration. Such choice neglect is likely to occur on a regular basis, yet it is heavily understudied. The same holds for different forms of mental processing. It is entirely unclear whether processing the credit decision analytically or via imagery (e.g., MacInnis & Price, 1987) leads to similar credit choices and behaviors.

Maybe most importantly, the consequences of different choices are unknown, and the implicit assumption seems to be that biased choices are bad choices. In the face of rising consumer credit, voices calling for consumer education have gained volume in recent decades. The launch of a number of education initiatives has followed these calls. Fox, Bartholomae, and Lee (2005) review different financial education programs and, while attesting the evidence to be promising, argue that the long-term effects of the majority of programs is largely unknown and heavily reliant on self-reports. Based on a review of consumer decision making in the context of credit, Elliehausen (2010) concludes that although consumers clearly simplify and use heuristics, the extent to which this actually impairs their decisions is still not at all clear. Our literature review is in line with that. Often preferences and perceptions have been measured rather than establishing whether those preferences and biased perceptions are indeed making consumers worse off (in affective and monetary terms). Considering the enormous amounts of money spent on these programs, ascertaining such effects seems a key priority.

The most substantial research gap is likely to be found in the final phase. As Table 1 shows, only this perspective considers credit and its perception exclusively as consequence and not also as cause. Implications for how credit use may affect cognitions and decision processes beyond the narrow financial situation would be worth exploring.

An interesting point that puts research falling into the cognitive perspective apart from all other perspectives is its rather strong reliance on student samples. Although most findings have at least once been confirmed in a sample of actual loan users, the experimental nature of the perspective entails a substantial reliance on student samples. An exception is the topic of knowledge, which is on the borderline between Perspectives 1 and 3. Indeed, those demographic constellations that were shown to be correlated with debt, such as a young age and low income, are those that tend to be associated with low levels of credit knowledge (e.g., Lyons et al., 2007).

A final aspect that distinguishes research in this perspective from other perspectives is its geographical origin. Available research has been done nearly exclusively in Western Europe and the US. The fact that there are cultural differences in cognitive preferences and processing highlights the need to widen the geographical scope of research (e.g., Ghorbani, Bing, Watson, Davison, & Mack, 2002; Monga & John, 2007).

Perspective 4: Credit use as a social practice

Using consumer credit is a learned social practice that involves at least two social entities, the borrower and the lender. Research classified as part of the social perspective acknowledges and investigates these interpersonal effects throughout all phases of credit use.

Processes preceding credit use

Social influences determine whether and for what people use a particular form of credit. Influence occurs at various levels of social agglomeration; specifically, at the level of the society and reference groups—first and foremost, at the level of the family or household.

Societal influence has long been recognized across disciplines. Notably, the most pronounced societal effects on credit use that were identified and postulated in recent (mostly Western) discourses are indirect. What is socially motivated is the acquisition of a currently unaffordable good rather than credit use *per se* (e.g., Starr, 2010). Theoretical and empirical evidence comes from many quarters (e.g., Bourdieu, 1984 and social reproduction theory; Duesenberry, 1949 and the relative income hypothesis). Just as an individual's propensity for social comparison influences credit use (Perspective 2), so do the societal standards and dynamics from which such comparisons may arise. For example, based on longitudinal economic macrodata, Christen and Morgan (2005) find that the extent of inequalities in the US is positively correlated with consumer credit use. The underlying argument is that income inequalities accentuate the need to catch up with others in terms of consumption. Higher income groups, to which income has been shifted, increase their conspicuous consumption thus raising the consumption norms for all. Brown (2008) argues that this is one of the main factors underlying the credit crunch. Interestingly, the phenomenon outweighs the effect of interest rates on consumer credit and persists even if income rises across social strata and the need for credit presumably decreases (Christen & Morgan, 2005; Sidime, 2004). Crossnational evidence further supports the link between inequality and credit use. Consumers in new member countries of the European Union increased their use of credit despite rising salaries (Babeau, Pioneer Investments, & Unicredit New Europe Research Network, 2004), presumably in order to adapt their consumption to the new Western reference standards. Also, on a global level there are voices that attest to a spreading of consumerism across cultural spheres (Stearns, 2006), bringing with it the demand for goods that can often only be afforded through recourse to credit.

Notably the societal underpinnings of credit use are not restricted to the desire to smooth factual consumption inequalities. Social influences are also observed in terms of whether and which forms of debt are at all socially acceptable (Erasmus & Mathunjwa, 2011 for Swaziland). The general acceptability of credit use is tightly linked to the norms prevailing in a society and has hence seen dramatic historical changes (for an overview in a mainly Christian context see Gelpi & Julien-Labruyère, 2000). These norms often reflect religious core beliefs. For example, in the Middle Ages Christian churches banned interest on loans, which was perceived as a theft of time, and usury was deemed a cardinal sin. Christian heritage has had an undeniable yet mute influence on the social practice of credit use in Europe, and is reflected even at the level of language. The German word *Schuld* means debt as well as fault and guilt, and similar connotations are found in other languages such as Italian. Religious differences in the approach to credit are assumed to prevail to date, with attitudes being more relaxed in Protestant than in Catholic areas (Gelpi & Julien-Labruyère, 2000). Religious influences are as pronounced beyond a Christian or European context. What seems common to the majority of religious stances is that credit was originally deemed a means to help the poor. For example, Chinese monasteries are likely to have operated the first pawn shops (Skully, 1994). Any form of exploitation or payment for borrowing was hence, at least originally, more or less expressly prohibited. Probably best investigated (although this may be restricted to investigations in Western societies) is the Islamic notion of Sharia banking, which involves a set of informal rules that determine what credit is acceptable for (e.g., services are usually not debt-financed) and a ban on interest that is also still observed in some orthodox branches of Judaism (Ghazali, 1994; Lewison, 1999). This highlights that cultures differ not only with regard to what credit is acceptable for but also what would be an acceptable (in terms of nature) price of repayment. This aspect is also briefly addressed in the following section on processes during credit acquisition. The role of culture similarly suggests generational differences and the influence of social media, which is an important motor of cultural influence. For example, younger generations in the UK tend to hold more favorable credit attitudes than older generations (e.g., Livingstone & Lunt, 1991; see also Perspective 1). In particular in an age in which the global reach of media is at a historical high, debt culture can spread and influence the acceptability of credit use. For example, Merskin (1998) argues that US game shows have a role to play since they normalize debt, and Brown (2008) and Stearns (2006) stress that consumerist messages in social media fuel the phenomenon on a global scale.

Reference group influence: Teaching credit use. Society's influence is translated through socializing agents; in particular, the family. Financial literacy and behavior start at home when children talk with their parents about money and consumption, and when they observe parental decision making and consumption patterns. US students report learning most about money from their parents, much more than at school or from friends and the media (Norvilitis & MacLean, 2010).[1] On the most basic level there seems to be a positive link between parental credit attitude and actual credit usage (Stone & Maury, 2006 for a study among US Airforce members). A link also exists at the behavioral level, although it is more complex. Explicit parental behavior and hands-on mentoring of financial skills were related to lower levels of credit card debt in a student sample (Norvilitis et al., 2006). However, this was mediated by the consequently learned delay of gratification which predicted problematic credit card use. Student credit card debt was particularly high if parents avoided talking about finances. More generally, the way in which money is used in a family seems to relate to credit use. If money was used as reward and immediate spending was approved, the propensity for (impulsive) credit use increased (Hayhoe, 2002 for the US; Lai, 2010 for Taiwan).

A factor beyond expressed attitudes and explicit teachings is the actual debt situation of parents. Evidence on its influence is inconclusive. If anything (Norvilitis et al., 2006 found no effect), it seems that parental debt and financial stress reduced the odds of incurring consumer debt (Stone & Maury, 2006). One explanation may be that those who are in debt put more importance on teaching thrift as a value for their children (Anderson & Nevitte, 2006).

Reference group influence: Causing credit use. Pahl (2008) argues that the way in which credit is used depends strongly on the household's money management system and the relations between household members, which are in turn culturally dependent. In particular in households in which members hold separate accounts, credit may be used to overcome income differences at the intrahousehold level. Credit use may also be strategically used to influence household dynamics. Women in Honduras sometimes resorted to microcredit[2] because they anticipated that it would alter the power dynamics of their household (Vonderlack-Navarro, 2010), such as making them less dependent on an abusive partner. It was this very motive of independence that disposed some Cameroonian men to prevent their wife's credit application (Mayoux, 2001). The motive of social independence through credit use may be more general and global than the current evidence, but it has not yet been explored in other contexts.

Processes at credit acquisition

Processes at credit acquisition are influenced by a different set of social factors. The main influences here are on the preference for specific forms of credit. In addition the relationship between borrower and lender has been investigated.

Influence on credit choice. Social processes shape the preference for different forms of credit. This holds, for example, for forms of group borrowing as found in microcredit. In this context socially motivated gender differences in the choice of credit source have been identified. Based on evidence from Kenya, Johnson (2004) reports that women are more likely to resort to more social but also more rigid microcredit structures whereas men are more inclined to opt for informal and individualistic ways of borrowing, such as borrowing from friends. The strongest influence that social processes have on the choice of credit probably originates from cultural (in particular religious) norms that determine acceptable forms and practices of credit. Differences are particularly pronounced with regard to whether interest is deemed an acceptable price for credit. Usury has been deemed a dubious practice from the earliest civilizations (Homer & Sylla, 1991). The Bible and the Talmud and Sharia law expressly forbid the taking of any form of interest, and ancient Greek (e.g., Aristotle) and comparably modern (e.g., Karl Marx) philosophers argued strongly against it (Lewison, 1999). Usury equals sin, and it is wrong for money to bear fruit that does not

[1] Note that learning from family members is often not leading to high credit knowledge (e.g., Lachance et al., 2006 for Canada).

[2] The term "microcredit" mostly refers to the provision of small loans to groups who do not usually have access to credit (mostly women) for the purpose of financing income generating activities. Participants usually commit to save regularly as a member of a wider group of microborrowers (for an overview see, for example, Elahi & Rahman, 2006). The purpose of microcredit is hence different from that of consumer credit, and it is not discussed in depth here. However, in contrast to consumer credit use in Western societies, microcredit use in developing countries has often been studied through ethnographic research. This approach yielded some additional insights that are likely transferable to other forms of credit.

also result from labor. Nonetheless credit use has been a historical necessity and different societies have either developed ways around the prohibition of interest or come to accept it. Whereas Christianity has gradually moved away from obeying the never universally practiced principle of interest-free lending (Gelpi & Julien-Labruyère, 2000), Islamic banking and pockets of orthodox Judaism have established profitable ways of conforming to these laws (Ghazali, 1994). For example, faithful Muslims may borrow through usage of the Murabaha. The ‘‘financier’’ buys the goods that the buyer desires but cannot currently afford and resells, them to the buyer at a higher price but on deferred terms. Another example is prevalent informal loans in the Philippines for which zero interest rates dominate while repayment can be made through other means such as labor (Fafchamps & Gubert, 2007). Although financial products such as the Murabaha are increasingly available and even offered by non-Islamic banks, their usage still has potential for growth. Even in Islamic Jordan many consumers hold non-Islamic loans and lack awareness of the Islamic financial products available. The main reason they use Islamic banks and banking products is not religion but the trust they hold in the bank’s reputation (Kamal, Ahmad, & Khalid, 1999), a factor that seems of universal importance.

Borrower–lender relationship. Credit use involves interaction between at least two parties, the lender and the borrower. Trust is an important issue, in particular for consumer credit, which is often not secured by collateral. The relationship matters for both parties involved (Moulton, 2007). On the side of the borrower, service quality as a proxy for the relationship with the lender is key in choosing a loan provider (e.g., Cho & Hu, 2009 for US loan users; Lymperopoulos, Chaniotakis, & Soureli, 2006 for Greek mortgage users). Relationships are of equal importance to the lender. Despite institutional rules aimed at reducing the need for trust in credit decisions, the person representing the institution was shown to very much care about issues of trust. In the absence of ongoing relationships and established trust, lenders revert to relational proxies in order to assess borrowers’ trustworthiness (Moulton, 2007). These proxies can be the result of gut reactions and are established through the way borrowers present their case in verbal and nonverbal terms. For example, the accounts that borrowers provide for why they need credit may be crucial. Borrowers who explain their need for a loan and in addition either acknowledge that their own past behavior necessitated the loan or deny any such role of the self are perceived as more trustworthy and more likely to receive a loan from peers (Sonenshein, Herzenstein, & Dholakia, 2011) A borrower’s estimated character becomes one of the three main ‘‘Cs’’ of lending: credit, collateral, and character. If lenders harbor doubts on the third, most subjective C, they are less inclined to grant credit and more inclined to insist on risk management measures such as higher down payments (e.g., Moulton, 2007).

Processes during payback

Research on this phase continues some of the themes investigated in the earlier phases, in particular reference groups. In addition literature has looked at credit use as a cause of social practices and constellations.

Reference group effects. Reference group effects are pronounced. For instance, financial socialization in terms of whether money was used as reward or whether immediate spending was approved in the family affects the likelihood of experiencing repayment difficulties (e.g., Webley & Nyhus, 2001). Similarly, it matters whether debt is a common experience within the ingroup. For example, UK students have been shown to worry about being in debt but they were able to mitigate these worries by being aware that debt is the norm among their peers (e.g., Scott & Lewis, 2001). Among young nonstudent borrowers anxieties related to debt were observed to be higher, presumably because debt was not the norm among their peers (Eccles & Bird, 2004).

Borrower–lender relationship. The importance of mutual trust raises the question of whether judgments of borrower character actually relate to repayment performance. In fact, some particularly ‘‘trustworthy’’ accounts for the need to borrow (those including an element of denial) were associated with an increased likelihood of paying back late (Sonenshein et al., 2011).

Influence of credit use on social processes. Credit use potentially affects intrahousehold dynamics. Overall the evidence points to gendered effects as the handling of credit matters tends to fall to women, in particular if the financial situation turns precarious (Thorne, 2010). Likely partly as a result of this gendered responsibility, consumer credit leads wives to work more hours than they would prefer but has no influence on the relation between preferred and actual hours worked for husbands (Clarkberg & Moen, 2001).

The case of Honduran women's use of microcredit provides additional and likely transferable insights. Vonderlack-Navarro (2010) finds that debt repayment may generate a new dependence on financial help from a partner, both through the need for and request of direct and indirect support. Credit use may also influence a family's activity patterns, such as reducing parents' qualms in asking children to help in the family business or reducing spending on other categories to enable servicing the loan.

Considering the impact of credit on everyday practices and that money matters are the most frequent source of spousal arguments (Kirchler, Rodler, Hölzl, & Meier, 2001), it is no surprise that the mere existence of credit has a robust influence on the extent of marital conflict (Dew, 2007 based on data from the National Study of Families and Households). Although the emotional burden associated with repayment is felt by both partners, it often centers especially on those in charge, i.e., women (Thorne, 2010).

Finally, there is some evidence that it matters who pays the debt. While perceived financial responsibility predicted compulsive buying when parents paid the debt, no relation was found when students paid their debt themselves (Brougham, Jacobs-Lawson, Hershey, & Trujillo, 2011). This credit card based evidence may suggest that having someone else pay one's debts can increase the influence of perceived responsibility on behavior.

Discussion of Perspective 4

The social perspective provides a wide spectrum of highly insightful snapshots on select aspects. On the whole these snapshots tend to open up more questions than they provide answers to, the main exception being the influence of social comparison processes. There are several different reasons as to why a social perspective seems particularly timely and promising in terms of future research. (a) Social processes are likely to moderate or even cause many of the findings outlined in the other perspectives. (b) The nature of the perspective necessitates extended comparisons across different contexts. Nearly all of the reported findings may be sensitive to cultural variations, not least because social dynamics and credit acceptability vary substantially across cultures. (c) In several parts of the world more social forms of (group) borrowing such as microcredit, which currently corresponds mostly to investment credit rather than to consumer credit, are on the rise. (d) Even in Western societies the emergence of peer-to-peer lending between strangers (Mintel, 2010) accentuates the role of social interactions for credit use.

We outline a few exemplary lines of research that seem in particular need of further investigation. First, whereas there is some evidence that credit may be used in order to ascertain social independence, the reverse motive—an aspiration to increase social cohesion—is yet unexplored. Such a motive could take the form of using credit for social means, but also of using credit in itself as a social clue. This last aspect fits well with the suggestion that the rise in credit use has partly resulted from a global reduction in extended social kin ties. Whereas extended kin may have served as an essential source of credit in earlier eras, societal change means that this kind of aid may no longer be as readily forthcoming (Cohen, 2007), although it may have reinforced the social ties.

Second, it would be interesting to see how credit use changes socially relevant behaviors. There is some speculation that credit use may influence relations in the household because it reduces spending opportunities (Dew, 2007). There is little evidence as to what kind of expenses consumers compromise on in order to repay their debts and which social implications such compromises have. Anecdotal evidence from the UK suggests that it is often social activities that are being cut first. The ensuing indirect social costs of credit are as yet unaccounted for, as are potential intercultural variations.

Third, evidence on parental influence or reference group effects in general (e.g., for what uses of credit were deemed acceptable in the US, see Engel, Blackwell, & Miniard, 1993) is also likely to be moderated by culture. In the face of different parenting styles and different forms of parent–child relations (e.g., Dixon, Graber, & Brooks-Gunn, 2008; Dwairy, 2010), different conceptualizations of the household and different household dynamics (e.g., Pahl, 2008) across the globe and over time, such differences are likely to be observed.

Fourth, what is notably missing for Phase 2 is an investigation of the involvement of others in the search process. At present, search tends to be investigated as objective information transfer rather than social communication.

Finally, a social perspective is best suited to deal with credit taken by groups beyond the household level, such as certain arrangements of microcredit where members of the scheme are allowed to borrow in turn. Evidence on when and why processes that are known from group work, such as free-riding, occur is currently scarce (for an exception see Abbink, Irlenbusch, & Renner, 2006), but the phenomenon entails a rich field of research opportunities for psychologists that is still virtually untouched.

GENERAL DISCUSSION

By introducing four implicit perspectives on credit use we aimed to integrate what is there and highlight what is missing. Table 1 provides an encompassing overview of the themes identified, including an identification of key dependent and independent variables. Although the table can be viewed as no more than a rough overview and subjective proxy and classification of the existing state of the art, it is useful for the purposes of diagnosing the field. In particular, it helps to establish observations that are of a more overarching nature than most of the points discussed in the concluding remarks to each perspective. We discuss a few select key insights and implications.

The first phase, which precedes credit use, has clearly received most attention. But Table 1 does not highlight different dependent variables, for a reason. The dependent variable that has been consistently looked at is whether consumers take up credit, and potentially also the amount. Although these two variables are the most fundamental, the picture should be broader. For example, we know little about how nonborrowers think and speak about credit or how those intending to take out credit prepare for doing so in other than financial terms. Does the mere anticipation of credit use influence other consumer decisions? In particular the third phase, which looked at credit as dependent and independent variables alike, may prove inspirational. If actual credit influences thoughts, feelings, and behaviors, its anticipation may do so just as well.

A second and more obvious observation is that the themes identified in different fields of the phase-perspective matrix are often likely related, which hampers (causal) interpretations. Only a minority of potential interactions and co-occurrences has been investigated. For example, time preference was shown to co-occur with age and income (e.g., Lawrance, 1991). Future research should pick and match many of the established themes, leading to novel insights.

One insight based on a crossperspective analysis is that a rise in affluence is likely to increase credit use. This becomes evident from a situational perspective (e.g., credit availability), a personal perspective (e.g., optimism), a cognitive perspective (e.g., translating expectations into demand), and a social perspective (income inequality, consumerism). Considering that affluence is rising globally, this suggests that the phenomenon of consumer credit use is likely to expand further on a global scale, further nourishing philosophical debates over what constitutes a socially and culturally appropriate level of material affluence (Cohen, 2007).

This ratchets the need for systematic incorporation and identification of cultural nuances into the study of borrowing. The picture emerging is anything but geographically balanced. To a large extent this is because we did not have access to documents in many languages. However, beyond that it may also reflect a particular scientific interest in the topic, as well as the social acceptability of talking about it, in so-called debt cultures, primarily the US. Across perspectives most research has been conducted in North America and Europe. Even within Europe research is concentrated on a few countries only (UK, Netherlands, Sweden, France, Austria) despite pronounced differences in usage patterns in other European countries such as Denmark, Greece, or Turkey (Betti, Dourmashkin, Rossi, Verma, & Yin, 2001; Kaynak & Harcar, 2001).

The geographical concentration is most pronounced for research that can be classified as belonging to the cognitive perspective; it is least concentrated for the situational perspective; and it is eclectic, i.e., specific aspects are investigated in specific cultural backgrounds, for the social perspective. Those aspects for which crosscultural evidence is available seem to suggest that the phenomenon is more similar than disparate across the globe. Rarely did evidence become inconclusive due to geographical divisions. However, this seeming universality may be misleading because the most culturally sensitive perspectives (Perspectives 3 and 4) mostly lack crosscultural or crossnational comparisons. Reliably establishing such comparisons will be anything but easy.

Addressing such differences would have to start with assessing differences in the meanings and connotations associated with credit. Meanings are bound to vary based on historic differences and the prevalence of different forms of borrowing found across cultural contexts (e.g., whether interest is an acceptable price for borrowing or whether borrowing for luxury goods is acceptable). For example, in parts of the former Soviet Union many goods had to be bought on credit regardless of available funds due to the intricacies of the economic system. Informal informants report that this is still shaping how people in Kazakhstan approach credit, and it clearly delineates approaches of different generations. Developing a global understanding of differences and similarities in the understanding and practice of credit use is an outstanding endeavor that necessitates large-scale international collaboration. Yet if meanings of the terms were comparable, hurdles for international research would still remain. Even commercial market databases such as Mintel only cover a limited number of countries, and do so in a superficial manner that does not ensure comparability across countries.

A major issue complicating any attempts at comparison is that national banks and statistical offices release figures on credit use based on different definitions and broken down in different ways. More generally, measurement of credit use is an issue (Bertola & Hochguertel, 2007; Betti et al., 2001). This is crucial because cultural variations most likely influence what credit is used for and which source of credit is tapped into. Both of these questions influence all phases and perspectives and may lead to fundamental differences in the psychological practice of credit use (cf. Berthoud & Kempson, 1992). Different legislation systems are likely to contribute to differences. For example, the US, which has been studied the most, has historically followed a low intervention ideal in policies regulating credit use and offer whereas some countries in central Europe put emphasis on protecting consumers from easy access to credit (Ramsay, 2010).

To conclude, credit use is a multifaceted phenomenon. Dissecting its integrated facets into different perspectives and phases is a useful way of diagnosing the state of the field and highlighting and hopefully inspiring its enormous future research potential. In particular, it highlights the social and therefore culturally sensitive nature of the phenomenon, which stands in juxtaposition to the currently available evidence.

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