A DYNAMIC MODEL FOR INVESTIGATING CONSUMER UTILITY DERIVED FROM STATUS GOODS*

Kármen Kovács[1]

Received: November 30, 2017
Accepted: October 23, 2018

ABSTRACT: *The purpose of this paper is to present a model that expresses the dynamics of the consumption of status goods from the perspective of consumer utility. The core of the model is how the level and the change of the prestige value of status goods affect the consumer's utility level over time. The model takes into consideration that individuals are often impatient to achieve a higher social position and that the prestige value of status goods changes during their diffusion. The model can be applied to forecast or monitor a proposed or an already realised purchase of status goods.*

Keywords: *social status, status goods, consumer utility, status-seeking behaviour, status consumption*
JEL Classification D11, D91
DOI: 10.15458/85451.79

1 INTRODUCTION

Striving for expressing and enhancing one's social status is a determinant and a continuous phenomenon in developed societies and economies nowadays. Its manifestation is called status-seeking behaviour which has many forms, such as career development and participating in certain events; however, only the consumption of status goods as a type of relative consumption is considered in this paper.

Interpersonal effects play a critical role in the consumption of status goods (Corneo and Jeanne, 1997a, 1997b; Kovács, 2015; Leibenstein, 1950), therefore, the absolute level of consumption is not the only factor in influencing consumer utility. On the one hand, an individual compares his purchased goods with others' possessions[2], and in this way, his perceived relative position also has an effect on his utility level. Furthermore, he can modify his consumption according to others' consumption to achieve a higher utility level and social status, whereas on the other hand, not only the intrinsic value but also the prestige value of status goods has a considerable influence on consumer utility. Frijters (1998) claims that the prestige value of goods is established by the average status of the consumers. Thus, the prestige value changes during the lifecycle of the goods, depending on the social position and the number of adaptors. The more

*The present scientific contribution is dedicated to the 650th anniversary of the foundation of the University of Pécs, Hungary.

Supported BY the ÚNKP-16-4-III New National Excellence Program of the Ministry of Human Capacities.

1 University of Pécs, Faculty of Business and Economics, Pécs, Hungary, e-mail: Karmen@ktk.pte.hu

2 This can occur only if others' consumption can be observed (Arrow and Dasgupta, 2009).

individuals possess certain goods, the lower the status value of the goods. Consequently, consumer utility derived from status goods should be investigated dynamically. It is worth mentioning that status and prestige value regarding goods are used as synonyms in the related literature. Thus, they are used as synonyms also in this paper.

The purpose of this paper is to investigate how the consumer's utility level derived from owning status goods changes over time due to factors related to the rivalry for social status. An own developed model is presented, expressing the dynamics of the consumption of status goods from the perspective of consumer utility. The core of the model is how the level and the change of the prestige value of status goods affect the consumer's utility level over time. The model takes into consideration that present-biased preferences (see O'Donoghue and Rabin, 1999) can be valid during the consumption of status goods, as individuals are often impatient to achieve a higher social position. It also includes that the prestige value of status goods changes during their diffusion, as the social status and the number of adaptors (snobs and followers) vary, and that people have different status properties when they purchase an additional status good to sustain or enhance their social status. Moreover, the form of financing an additional (valuable and durable) status good, which is with or without credit, can also influence the consumer's utility level. According to the model, the overall consumer utility levels per period are determined for the whole considered period, and they can be applied to forecast or monitor a proposed or an already realised purchase of an additional status good. In addition, the model is also beneficial to compare various consumption alternatives, including the different levels of influencing factors to predict and manage the utility levels over the considered time period. The model can be useful to plan or forecast an intended purchase of status goods by taking into account the individual's financial position, to avoid consumer's or household's indebtedness and to find the optimal form of financing valuable and durable status goods for an individual.

It is worth pointing out that consumers tend to overspend on status goods in developed economies[3], the consequence of which can be indebtedness, as occurred during the economic and financial crisis that started in 2008. Frank (2005) argues that when people spend more on status goods due to a rivalry over their relative position, they decrease consumer expenditure on non-positional goods; in this way, welfare loss occurs. Bricker et al. (2014) point out that relative consumption has considerable macroeconomic consequences, such as decreasing the savings rate and greater consumer indebtedness.

The rest of the paper is organised as follows. Section 2 includes a brief literature review about consumption related to status-seeking behaviour. Section 3 presents a dynamic model that describes how the overall consumer utility derived from status goods is influenced by present-biased preferences, the level and the change of the prestige value of status goods, the form of financing additional (valuable and durable) status goods, and the passing of time. Finally, section 4 gives the summary and the concluding remarks.

[3] If social status is important for an individual, he tends to invest a lot of money, time and energy to achieve a higher position (Becker et al., 2005).

2 LITERATURE REVIEW

Interpersonal effects arise at the level of preferences and not at the level of demand (Iannaccone, 1989). The first works about status-seeking behaviour also confirm that. According to Veblen's (1899/1979) conspicuous consumption theory people often strive to display their wealth to others by consuming conspicuous goods so that they can achieve a higher position. In the rivalry for social standing individuals' core drivers are the invidious comparison or pecuniary emulation. The investigation of the demonstration effect described by Duesenberry (1949) also reinforces that consumers' preferences are interdependent. Charness and Rabin (2002) identify the existence of competitive preferences which have relevance during status-seeking behaviour.

Weiss and Fershtmann (1998, p. 802) define social status with a sociological approach as "a ranking of individuals (or group of individuals) in a given society, based on their traits, assets and actions."[4] Similarly, Ordabayeva and Chandon (2011) state that social status is an individual's relative position in a group that is not necessarily observable. Bilancini and Boncinelli (2008) provide a core contribution to the related literature as they point out the difference between cardinal and ordinal status. This is relevant to the research and modelling in related topics and also to the interpretation and application of research findings. Cardinal status reflects the distinction that exists between the status goods possessed by an individual and others. However, ordinal status refers to a consumer's rank in the distribution of the possessed status goods. While Duesenberry (1949) and Akerlof (1997) integrate the cardinal status into the consumer's utility function, Frank (1985) applies the perspective of the ordinal status in his model. It is worth mentioning that Mazali and Rodrigues-Neto (2013) have a particular view of the matter, especially compared to the ones mentioned above. They assume in their model that an individual's status is determined by the brand of the most valuable status goods he consumes. I do not agree with this definition because one's social position is established by more than just one factor or possession. Consequently, a kind of average of their features determines the status.

Some social status elements, i.e. the ones related to the family background, are fixed in the short run (Becker et al., 2005). However, individuals can raise their status by becoming a member of a certain group, investing in observable and valuable assets or doing various activities (Weiss & Fershtmann, 1998). Status is also important for individuals as it affects significantly how successful someone can be in non-market situations (Cole et al., 1992) and it also reflects non-observable abilities (Rege, 2008).

A form of status-seeking behaviour is the consumption of status goods. A reason for this is that status and consumption are complements (Becker et al., 2005). Rauscher (1993) states that status goods reflect their owner's social position, however, with a

[4] Individuals rank members of society differently. Nevertheless, an individual's social or relative position can be determined relatively unambiguously.

prospective approach, those are the "goods that an individual expects to increase his or her status" (Kovács, 2015, p. 376). Thus, they can be regarded as 'positional goods' (Hirsch, 1976). The group of status goods is wide and varied. Not only tangible goods can demonstrate the social position, but also the use of certain services and some forms of free-time activities can do that. Therefore, studying in private universities, eating in elegant restaurants and taking part in luxury holidays can reflect an individual's social standing. Furthermore, one subgroup of status goods is luxury goods with a very high price as their core feature, usually reflecting in their appearance as well. Another subgroup of status goods includes conspicuous goods that are consumed to display their owner's wealth to others (Veblen, 1899/1979).

Various types of motivation for consuming status goods have been broadly scrutinised in the literature; based on the internal (e.g. hedonism, self-concept) and external (e.g. exclusivity, social identity) drivers Eastman and Eastman (2015) develop a conceptual model of status consumption. The consumption of status goods can be also explained according to the social comparison theory described by social psychologist Festinger (1954). The core of his theory is that individuals would like to assess themselves accurately. Thus, they compare themselves with others, and then they evaluate themselves based on the comparison. In line with this, Hopkins and Kornienko (2004) argue that individuals usually take into consideration others' expected consumption decisions which serve as a reference point before purchasing status goods. Thus, the consumption of status goods has to be visible to others, which means that the consumption of status goods satisfies not primarily basic needs but social needs (Chao and Schor, 1998).

Status-seeking behaviour through consumption is an everlasting form of rivalry among individuals (Trigg, 2001). The main reason for this is the interdependence of people's social position. Thus, Immorlica et al. (2015) study status seeking activities in social networks. Scitovsky (1976) explains that if an individual purchases a certain status good as one of the innovators, his social status rises. However, the status of the individual who has not adopted the good yet diminishes as a consequence. Thus, according to his theory, status-seeking through consumption is a zero-sum game. Similarly, Bianchi (2007) argues that consumers' positional interactions reflect a kind of vertical rivalry among them. The rivalry for social status occurs not only in the social elite but in all classes of society, even though in various forms. Different goods can provide prestige for individuals in various social classes. Possessing a yacht can contribute to belonging to the elite group, while a used car owner or a person who can afford to go on holiday can be successful in the rivalry in the poorest segments of society. Furthermore, there are many goods, such as cars, houses or clothes, which are consumed in (almost) any social class. However, some of their features reflecting the owner's social status can be extremely different, e.g. the brand, the age, the comfortability and the extras in case of cars; or the place, the condition and the area in case of houses. Mason (1981) argues that both vertical and horizontal rivalry can arise. There is a vertical emulation when individuals aim at getting a higher social status by imitating the consumption patterns and the behaviour of the members of the upper classes. In the case of horizontal rivalry, individuals in the same segment

compete with each other. Trigg (2001) states that the social norms directing rivalry change with the economy. In my opinion, the increase of purchasing power, the spirit of consumer society, the relevant role of social networks and the enhanced social and geographical mobility have a significant influence on the rivalry for social status nowadays.

The aspiration for sustaining or enhancing one's social status is present continuously at both social and individual levels. Striving for maintaining and developing the position is relevant for individuals not only because a more favourable or higher-than-before status is a utility-increasing factor, but also because as a result of consumption externalities generated by others' status-seeking behaviour, an individual's relative position can weaken besides the same or even the increasing consumption levels of status goods. For an individual to sustain or enhance his social status, which is beneficial to him, it is necessary (but not sufficient) to maintain or raise his relative consumption. Regarding the dynamics of the consumption of status goods this means that at the same time an individual does not become saturated by status goods due to their positional features. However, their functional characteristics can cause saturation (as in the case of normal goods). Thus, individuals can be highly innovative and fickle in the social status rivalry when they choose intermediary assets, such as status goods or their features.

On the other hand, it is also important to realise that an individual's relative consumption can increase (even significantly) in such a way that his absolute consumption level is unchangeable or rises only moderately. When others are forced to decrease their absolute consumption level in consequence of increasingly unfavourable economic conditions and to weaken personal financial position, an individual who has a stable financial position and can finance (or even slightly increase) his earlier consumption level of status goods can realise a more beneficial consumption than before and can get into a more favourable relative position this way. These relations again reflect that others' consumption continuously influences the change of an individual's social status.

According to the reasoning mentioned above, it is clear that an individual gets into a better relative position in consequence of others' altered consumption decisions and levels. However, in the following such a situation is pointed out when it is the individual who is the originator and determiner of the outcome of his status-seeking behaviour. An individual who is strongly motivated and involved in status-enhancing is able and willing to take a risk to improve his relative position. It can be a financial risk if, for example, he invests into a relatively expensive good compared to his income or wealth position (and, for example, the consumption is covered by credit). However, besides the financial risk he usually takes a social risk as well, since the individual's status is exposed to a risk of not being sure whether he can achieve the desired status through consumption or ownership of status goods. Furthermore, there is a kind of psychological risk because an individual's self-concept and self-esteem can be influenced badly if it is confirmed that he 'has taken on too much' by overspending to get the preferred good. To some extent, the three above

mentioned types of risk arise during the consumption of all status goods. Thus, if an individual purchases a status good that is not suitable for his real financial and social standing, it can have several negative consequences for him and his status can even diminish due to his inappropriate decisions. This could be seen during the economic crisis that started in 2008, as several consumers became heavily indebted as a result of their earlier status aspirations.

Bricker et al. (2014) emphasize that the relative income standing of households affects the financial decisions related to the consumption of status goods considerably. Households with a higher income level tend to contract a higher loan, become more indebted or even choose more risky portfolios to finance their consumption in order to sustain or enhance their social status.

However, a paradox situation arises when consumers become indebted due to purchasing status goods. The purpose of status goods is to reflect or enhance the owner's social position, however, those who do not assess their property status or income standing correctly and 'take on too much' by overspending due to their present-biased preferences, cannot achieve their goals through consuming goods and end up in a relatively disadvantageous social and a bad financial position.

3 THE MODEL

3.1 Framework and assumptions

The core of the model focuses on the dynamics of the consumption of status goods from the viewpoint of the individual consumer's utility. More precisely, how the level and the change of the prestige value of status goods affect the consumer's utility level from the perspective of various time periods. In other words, the main point of the model is that the prestige value of status goods changes over time and it has an effect on the individual consumer's utility. By applying a dynamic approach the model helps understand how various alternatives of the consumption of status goods and their influencing factors, such as the level of present-biased preferences, the prestige value and the diffusion process of status goods, as well as the form for financing additional (valuable and durable) status goods, affect the overall consumer's utility level over time.

We imagine such situations where at time zero a consumer already has a certain amount of status goods. This group of various status goods includes for example clothes, accessories, smartphones, electronic appliances or cars and influences the owner's social status considerably. An individual purchases an additional status good to sustain or enhance his social status. We assume that this status good is valuable and durable, for example, it can be a house or a car. Thus, this good influences the consumer's utility in the long run not only in the period when it is purchased. We also assume that individual's preferences can be time-inconsistent.

First, let us look at the initial consumer utility function. From the perspective that goods can be classified into positional and non-positional goods (Frank, 1985; Hirsch, 1976), or in other words, status and normal goods (Mason, 1992), we claim that individual i's consumer utility in period t in a general form can be written as

$$u_{it} = \sum_{j=1}^{n} v_{St}(x_{ij}) + \sum_{j=1}^{n} v_{It}(x_{ij}) + \sum_{j=1}^{n} v_{It}(y_{ij}) \quad (1)$$

where

- u_{it} is individual i's consumer utility in period t,
- x_{ij} is the amount of status good j consumed by individual i,
- $v_{St}(x_{ij})$ is the (perceived[5]) status or prestige value of good j consumed by individual i in time period t, where $0 \leq v_{St}(x_{ij}) \leq 1$[6],
- $v_{It}(x_{ij})$ is the intrinsic value of status good j consumed by individual i in time period t, where $0 \leq v_{It}(x_{ij})$,
- y_{ij} the amount of normal good j consumed by individual i,
- $v_{It}(y_{ij})$ is the intrinsic value of normal good j consumed by individual i in time period t, where $0 \leq v_{It}(x_{ij})$.

We assume that individual i strives to maximise his consumer utility. As the model focuses on how the consumer utility deriving from status goods varies due to the change of the prestige value of status goods, which is a consequence of mainly individuals' continuous status-seeking behaviour, interpersonal effects and the diffusion of status goods, the intrinsic value of both status and normal goods is ignored from the consumer's utility function. Thus, in the following, the consumer's utility function includes only the factors related to status-seeking behaviour and the prestige value of status goods, further their expense side.

A budget constraint is not included in the model. The consumption of status goods is induced by the rivalry for social status considerably. Thus, the consumer utility

[5] The perceived and not the real status or the prestige value is integrated into the consumer utility function, since it is the prestige value perceived by an individual that directly influences his utility level and decision-making regarding status-seeking behaviour, and not the real prestige value which cannot usually be directly realised or determined by an individual.

[6] The status value of a good that is $v_{St}(x_{ij})$ reflects a relative value. The value of 1 means that the good has reached its maximum prestige value, that is, the good is possessed by individuals with the highest social status, meaning that only a few people possess it. A low status value demonstrates that the good is diffused among consumers and most of the people who possess it have a relatively low social status. Thus, this approach is consistent with Frijters's (1998) view.

[7] An additive relationship is assumed among the prestige value of the various goods, as each and every status good can contribute to consumer utility separately. (Akerlof (1997) also integrates the variable of status as an additive component into the indirect utility function in his status model.) There can be a correlation between the prestige values of the goods in certain cases, such as a summer house and a sailing boat. However, it would be difficult to handle the relationship between the status values in the utility function from the applied approach, and it is actually not relevant regarding the core of the model presented in this paper.

derives primarily from the prestige value of the owned status goods and the possibility of an individual to maintain or enhance his social status this way. As emotions, social needs and emulation influence the consumption of status goods significantly, it cannot be considered as a rational and optimal decision which is a core concept in traditional consumer economics. This issue is studied from a behavioural perspective, and the budget constraint is not included in this model.

Present-biased preferences can be valid in the case of status-seeking behaviour, such as the consumption of status goods, which leads us to the belief that status is considered as asset allocation to achieve future benefits and gain favourable relationships (Geiger-Oneto, 2007; Lin, 1990, 1994). Thus, status rivalry in the society makes most of the individuals impatient in the sense that they strive to achieve a desired or higher status as soon as possible, or they advance the purchase of valuable and durable status goods to enjoy and benefit from the status expression or enhancing. Consequently, time as an influencing factor is also relevant regarding consumer utility.

As the model takes the possibility of present-biased preferences into consideration, let us see how it is integrated into the consumer's utility function. Based on O'Donoghue and Rabin's (1999 p. 106) point of view at time period 0, individual i's overall utility deriving from consumption is

$$U_i^0 = u_0 + \beta\delta u_1 + \beta\delta^2 u_2 + \beta\delta^3 u_3 + \cdots, \tag{2}$$

that is,

$$U_i^0 = u_0 + \sum_{i=1}^{\infty} \beta\delta^i u_i \tag{3}$$

where

- u_t is per-period consumer utility,
- δ is time-consistent discount factor for long-run, where $0 < \delta \leq 1$.
  Its meaning and role are the same as the discount factor in simple standard economic models during exponential discounting. Applying parameter δ reflects that the following utilities are weighted less heavily than the former levels of utility. Thus, from today's point of view the utility of 100 euros today is greater than the utility of 100 euros tomorrow. Furthermore, an individual prefers 100 euros tomorrow to 100 euros the day after tomorrow.
- Parameter β expresses "bias for the present". If $\beta = 1$, preferences are time-consistent and simple exponential discounting is needed. However, if $0 < \beta < 1$, present-biased preferences are reflected.
  In the case of present-biased preferences, an individual prefers immediate consumption and short-run benefits compared to later consumption and long-run benefits. Consequently, an individual places disproportionately higher weight on present consumption than on any future ones (O'Donoghue & Rabin, 1999).

This actually reflects an individual being impatient. The lower the value of β is, the more impatient the individual is. The impatience can arise due to visceral factors (Loewenstein, 1996), self-control problems (Casari and Dragone, 2011) or as a consequence of the change of the consumer's reference point (Hoch and Loewenstein, 1991). The impatience can be manifested in immediate consumption when a new product or innovation is introduced into the market. Another example is that individuals strive to purchase certain status goods as soon as possible so that they do not lag behind in social status rivalry .

In the following sections, (2) and (3) as general forms of overall consumer utility functions are applied to represent present-biased preferences in the model.

3.2 Case I: The status good is purchased without credit

Assuming that individual i owns n number of status goods in the initial time period when $t = 0$, let us look at the case in which an additional valuable and durable status good, such as a car or a house, is purchased and consumed by individual i. We assume that individual i purchases this good, that is the status good $n + 1$, without credit in period 1, in this way, the cost arises regarding this status good[8] only in period 1. As the good is valuable and durable, it has a status value not only in period 1 when it becomes the consumer's property but also in the subsequent periods or a longer run. However, the status value of the good changes during its lifecycle, depending on primarily the number and the social status of adaptors and the ratio of snob consumers and followers. Thus, individual i's consumer utility can be expressed for each time period in the following way

$$u_{i0} = \sum_{j=1}^{n} v_{S0}(x_{ij}) \tag{4}$$

$$u_{i1} = \sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - C_1(x_{in+1})] \tag{5}$$

$$u_{i2} = \sum_{j=1}^{n+1} v_{S2}(x_{ij}) \tag{6}$$

$$u_{in} = \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) \tag{7}$$

[8] The consumer's utility function is extended by a cost factor as the model assumes the purchasing of a valuable and durable status good where the related consumer expenditure can be considerable; thus, it decreases the consumer's utility level. It has relevance especially when a consumer buys a relatively expensive good compared to its prestige value or his financial position. (The price as a feasible factor of prestige value is assumed to be integrated into the status value of the good.) (In the literature on the consumption of status goods there are some examples for that the consumer's utility function is completed by the price or cost factor, see Corneo and Jeanne (1999) and Frijters (1998).)

where

- u_{it} is individual i's consumer utility in period t,
- x_{ij} is the amount of status good j consumed by individual i,
- $v_{St}(x_{ij})$ is the (perceived) status or prestige value of good j consumed by individual i in time period t, where $0 \leq v_{St}(x_{ij}) \leq 1$,
- $C_1(x_{in+1})$ is the price of status good $n+1$ purchased by individual i in period 1.

According to (2) and (3), further (4), (5), (6) and (7) from the perspective of period $0,1,2 \ldots n$ individual i's overall utility deriving from the consumption of status goods in Case I is

$$U_i^0 = \sum_{j=1}^{n} v_{S0}(x_{ij}) + \beta\delta\left[\sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - C_1(x_{in+1})]\right] + \beta\delta^2 \sum_{j=1}^{n+1} v_{S2}(x_{ij}) + \cdots + \beta\delta^n \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) \quad (8)$$

$$U_i^1 = \sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - C_1(x_{in+1})] + \beta\delta \sum_{j=1}^{n+1} v_{S2}(x_{ij}) + \cdots + \beta\delta^{n-1} \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) \quad (9)$$

$$U_i^2 = \sum_{j=1}^{n+1} v_{S2}(x_{ij}) + \cdots + \beta\delta^{n-2} \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) \quad (10)$$

$$U_i^n = \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) \, . \quad (11)$$

3.3 Case II: The status good is purchased on credit

Similarly to Case I, let us assume that individual i owns n number of status goods when $t = 0$ and purchases a valuable and durable status good in period 1. However, in Case II we assume that the status good $n+1$ is purchased on credit, consequently the cost arises regarding this status good not only in period 1 but also in the subsequent periods. The change of the status value of the good is taken into account while studying this case as well. Thus, individual i's consumer utility can be expressed for each time period in the following way

$$u_{i0} = \sum_{j=1}^{n} v_{S0}(x_{ij}) \quad (12)$$

$$u_{i1} = \sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - c_1(x_{in+1})] \quad (13)$$

$$u_{i2} = \sum_{j=1}^{n+1} v_{S2}(x_{ij}) - c_2(x_{in+1}) \quad (14)$$

$$u_{in} = \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) - c_n(x_{in+1}) \quad (15)$$

where

- u_{it} is individual i's consumer utility in period t,
- x_{ij} is the amount of status good j consumed by individual i,
- $v_{St}(x_{ij})$ is the (perceived) status or prestige value of good j consumed by individual i in time period t, where $0 \leq v_{St}(x_{ij}) \leq 1$,
- $c_t(x_{in+1})$ is the amount of credit repayment in period t.

Similarly, according to (2) and (3), further (12), (13), (14) and (15) from the perspective of period $0,1,2 \ldots n$, individual i's overall utility deriving from the consumption of status goods in Case II is

$$U_i^0 = \sum_{j=1}^{n} v_{S0}(x_{ij}) + \beta\delta\left[\sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - c_1(x_{in+1})]\right] + \beta\delta^2\left[\sum_{j=1}^{n+1} v_{S2}(x_{ij}) - c_2(x_{in+1})\right] + \cdots + \beta\delta^n\left[\sum_{j=1}^{n+1} v_{Sn}(x_{ij}) - c_n(x_{in+1})\right] \tag{16}$$

$$U_i^1 = \sum_{j=1}^{n} v_{S1}(x_{ij}) + [v_{S1}(x_{in+1}) - c_1(x_{in+1})] + \beta\delta\left[\sum_{j=1}^{n+1} v_{S2}(x_{ij}) - c_2(x_{in+1})\right] + \cdots + \beta\delta^{n-1}\left[\sum_{j=1}^{n+1} v_{Sn}(x_{ij}) - c_n(x_{in+1})\right] \tag{17}$$

$$U_i^2 = \sum_{j=1}^{n+1} v_{S2}(x_{ij}) - c_2(x_{in+1}) + \cdots + \beta\delta^{n-2}\left[\sum_{j=1}^{n+1} v_{Sn}(x_{ij}) - c_n(x_{in+1})\right] \tag{18}$$

$$U_i^n = \sum_{j=1}^{n+1} v_{Sn}(x_{ij}) - c_n(x_{in+1}) \,. \tag{19}$$

3.4 The outcomes of Cases I and II with various alternatives

The purpose of this section is to study and analyse how the overall utility derived from the consumption of status goods is influenced by present-biased preferences, the changing prestige value of the goods which individual i already possesses in time period 0, the level and the change of the prestige value of a valuable and durable status good purchased in time period 1 and its cost. In the following, the overall utility derived from the consumption of status goods is calculated according to the various possible values of the influencing factors that reflect diverse consumption circumstances (Table 1). Thus, the consumer's utility levels can be compared over the period considered. Its purpose is to investigate how the degree of impatience, the initial and the changing prestige values of the already owned status goods, the financing (with or without credit) of an additional status good, and the initial and changing prestige values of the purchased status good influence the level and the change of consumer utility over time.

We can see four alternatives for β expressing "bias for the present". If $\beta = 1$, preferences are time-consistent. The other three values reflect present-biased preferences. If $\beta = 0.25$, that is relatively low, the individual is very impatient, so he would like to get certain goods as soon as possible. If $\beta = 0.75$, the individual is moderately impatient, but he also prefers immediate consumption to the latter consumption. The value of δ is not relevant related to the core of the studied issue, and partly due to this it is unchangeable in all alternatives. Besides the initial time period 0, there are ten periods. We assume that individual i already possesses ten status goods when $t = 0$. It reflects that everyone owns at least some goods (e.g. clothes, electronic appliances) which, besides their functional utility, also indicate one's social position. There are four alternatives (*a, b, c* and *d*) for $\sum_{j=1}^{10} v_{St}(x_{ij})$, which implies the owner's financial position and social status in dynamic approach. In the case of *a* the status values being summed up are the same in all time periods, which reflects that while the status value of some goods increases over time, others' status value decreases at the same time, as they are in different phases of the diffusion process. The overall value of 5 for *a* indicates an intermediate level regarding the status value as according to (1) $0 \leq v_{St}(x_{ij}) \leq 1$. In the case of *b* the status values being summed up decreases with time as the goods diffuse among consumers due to the bandwagon effect. Furthermore, as $\sum_{j=1}^{10} v_{S0}(x_{ij}) = 8$, this means that the consumer owns goods with a relatively high prestige value, which leads us to the assumption that he's in a good financial position. Alternative *c* reflects a group of goods with a lower status value and choice *d* indicates an even lower status value that can imply an individual's bad financial position.

In Case I the cost arises only when the status good is purchased. However, in Case II (when the status good is purchased on credit) we assume an annuity with the interest rate of 10%.

Option z for $v_{St}(x_{in+1})$ reflects a status good that reaches its maximum status value when it is purchased, that is when $t = 1$, so when only a few consumers with a high social status possess it. Its diffusion process is relatively slow, especially if it is compared to choice *y*. The values express the status value decreasing at a lower rate in the former and not in the latter case. In the case of *x*, a consumer chooses a status good with an increasing status value, as more and more snob consumers purchase it in the introduction phase of its lifecycle. It can occur when, for example, an individual purchases a new model of a certain car brand. Then, the status value decreases beyond its maximum within a short period. Choice *v* represents a status good that is purchased in the maturity stage and has a relatively slow diffusion rate among consumers.

Table 1: *Some possible values of the influencing factors of the consumption of status goods*

β				δ	t	$\sum_{j=1}^{10} v_{St}(x_{ij})$				C	c_t=10%	$v_{St}(x_{in+1})$			
						a	b	c	d			z	y	x	v
0.25	**0.5**	**0.75**	**1**	0.8	0	5	8	5	3						
					1	5	7.5	4.5	2.5	10	1.1	1	1	0.8	0.5
					2	5	7.0	4	2		1.1	0.95	0.9	0.9	0.45
					3	5	6.5	3.5	1.5		1.1	0.9	0.8	1	0.4
					4	5	6.0	3	1		1.1	0.85	0.7	0.9	0.35
					5	5	5.5	2.5	0.5		1.1	0.8	0.6	0.8	0.3
					6	5	5.0	2	0		1.1	0.75	0.5	0.7	0.25
					7	5	4.5	1.5	0		1.1	0.7	0.4	0.6	0.2
					8	5	4.0	1	0		1.1	0.65	0.3	0.5	0.15
					9	5	3.5	0.5	0		1.1	0.6	0.2	0.4	0.1
					10	5	3.0	0	0		1.1	0.55	0.1	0.3	0.05

In the following, various combinations of the influencing factors as the alternatives of consuming status goods are compared.

First, such alternatives are compared (Figure 1) when it is assumed that the individual has a stable financial position which enables him to get and possess a group of various status goods with the average prestige value being around the intermediate level in the long run. At the same time, this reflects a stable social position. The sum of the status values of the already owned goods being summed up is around the intermediate level over the whole period considered. Furthermore, the individual has financial resources to purchase an additional status good in time period 1, so credit is not needed. The good is at the beginning of its lifecycle, which means that only a few consumers possess it. As the

prestige value of the status good is high or at the maximum level when it is purchased, the individual can strengthen his social position even more. The choice "ß=0.75, b, C=10, y" provides the highest overall utility until $t = 3$, and the lowest one at the end of the period. Comparing "ß=0.75, b, C=10, y" with choices "ß=0.75, a, C=10, y" and "ß=0.75, a, C=10, x", it can be stated that the already owned goods with a constant intermediate sum of the values yield higher overall utility beyond $t = 4$ in all periods. Similar remarks can be concluded when comparing "ß=0.25, b, C=10, x" and "ß=0.25, b, C=10, z" with "ß=0.25, a, C=10, z". The latter one provides a lower overall utility before $t = 5$ than the other two alternatives; moreover, it exceeds them in the second part of the considered period. It is also worth mentioning that "ß=0.75, b, C=10, y" creates a higher overall utility than "ß=0.25, a, C=10, z" until $= 8$, but the latter exceeds the former one in the last two periods. In other words, a less impatient individual with a decreasing status value of his property who purchases a status good with the maximum prestige value with a normal decreasing rate realizes a higher overall utility until $t = 8$ than an impatient individual who has goods with a constant intermediate sum of the prestige values and the additionally purchased good loses its prestige value with a low rate.

Figure 1: *Six alternatives with a or b when the additional status good is purchased without credit*

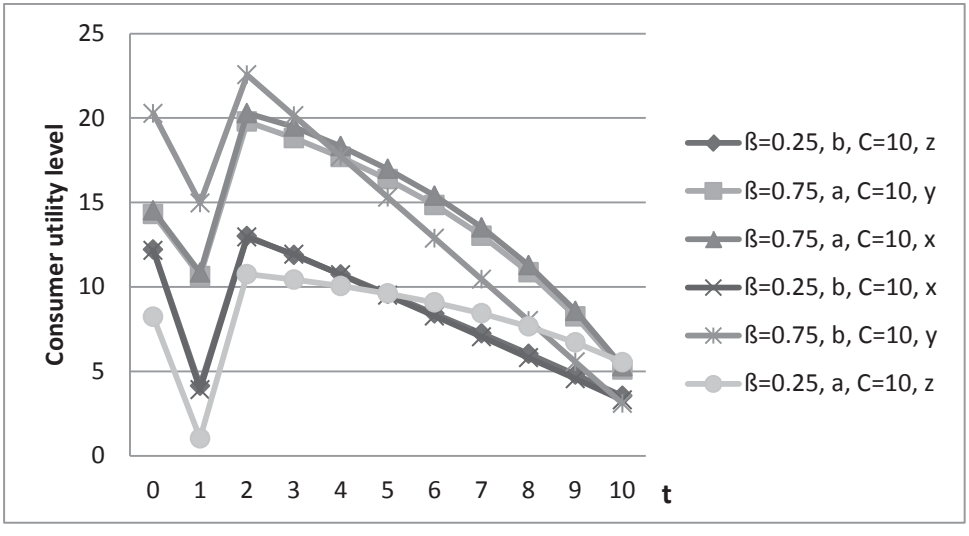
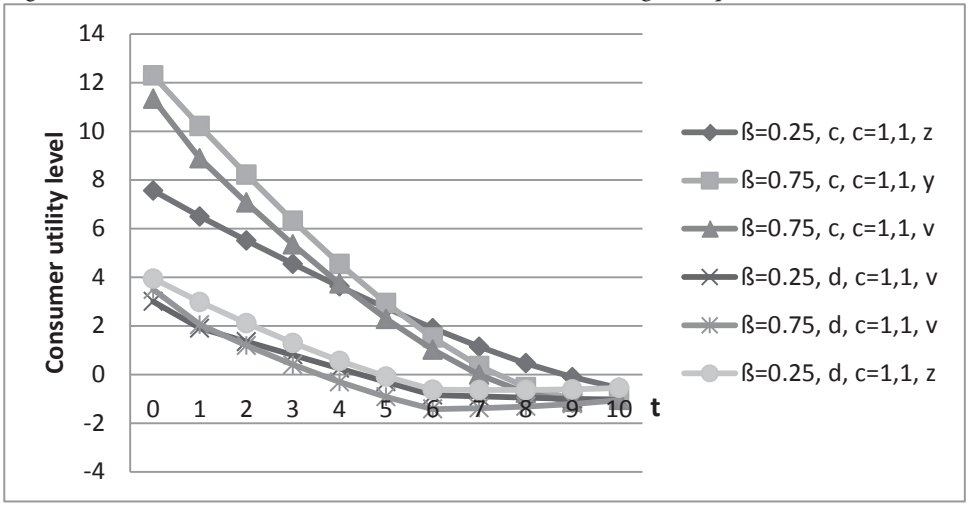


Figure 2 presents alternatives where the already owned group of status goods provides lower prestige in the initial period than the alternatives studied in Figure 1. Thus, the individual is in a lower social position in time period 0. He is in a worse financial position, since credit is required to purchase an additional status good to enhance his social status. If an individual purchases the status good at the beginning of its lifecycle, he can strengthen his social position much better. The alternative "ß=0.25, c, c=1,1, z" describes a relatively impatient

individual who buys a status good with the maximum prestige value and a low diffusion rate. Thus, this consumer strives to achieve a considerably better position quickly. Let us compare this to "ß=0.75, c, c=1,1, y" and "ß=0.75, c, c=1,1, v", that is, the choices which reflect lower impatience and an additional status good with the same initial prestige value but a faster diffusion rate or with the intermediate initial prestige value and a similar diffusion. The impatient consumer with "ß=0.25, c, c=1,1, z" realises less utility in the first periods, but from $t = 6$ the overall utility of this choice exceeds the two other alternatives' utility levels. In the last periods, all the choices provide a negative overall utility level reflecting the fact that purchasing an additional status good on credit (and conditions found in Table 1) is an excessive burden for the consumer in terms of the effects on his financial position or in other words, the prestige value of the already owned status goods. Furthermore, it is worth pointing out that "ß=0.25, d, c=1,1, z" yields a greater overall utility level in each and every period than "ß=0.75, d, c=1,1, v". This means that if the conditions of the already owned goods are the same, the consumer who is more impatient and purchases a status good with the maximum prestige value and a low diffusion rate can realise a higher overall utility over the whole period considered than the less impatient consumer who buys a status good in the middle of its lifecycle. Finally, the alternatives including *d* generate a negative overall utility level earlier than the choices including *c*. This reflects the fact that due to the individual's weaker financial position or the already owned less valuable status goods in the case of alternatives with *d*, investing into any additional valuable and durable status goods is a more considerable burden.

Figure 2: *Six alternatives with c or d when the additional status good is purchased on credit*

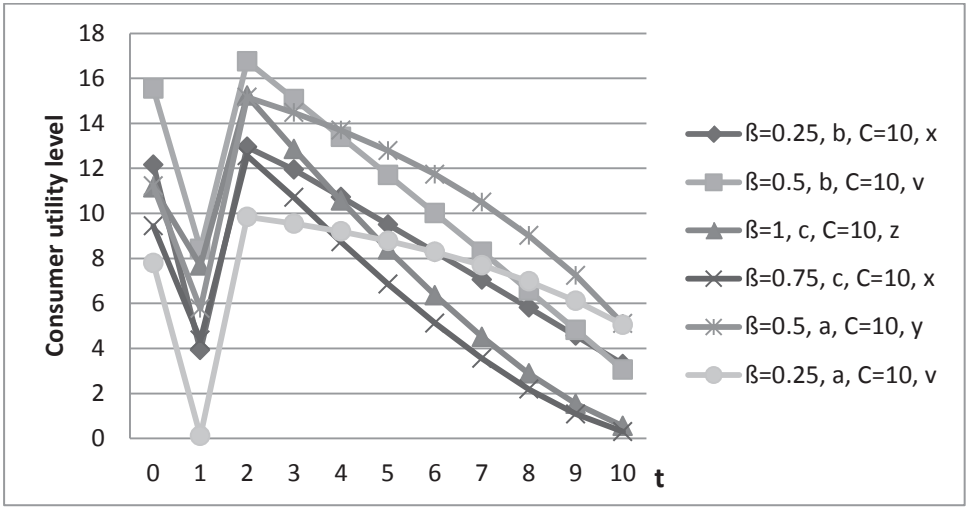


In the following, more different alternatives are compared to see how they are related to each other regarding the overall consumer utility considering the influencing factors and the passing of time. Figure 3 depicts choices when an additional status good is purchased without credit. The overall utility of "ß=0.5, b, C=10, v" is the highest from $t = 0$ to $t = 3$ due to the prestige value of the already owned status goods and the intermediate degree of impatience. The alternative "ß=0.25, b, C=10, x" which expresses a more impatient individual who

purchases an additional status good at the very beginning of its lifecycle provides a lower overall utility in every period except the last one. Thus, it is the manifestation of present-biased preferences that causes the lower utility level here. When $t = 2$, there are two alternative pairs which provide almost the same overall utility level, "ß=0.5, a, C=10, y" and "ß=1, c, C=10, z", further "ß=0.25, b, C=10, x" and "ß=0.75, c, C=10, x". However, the difference of the overall utility levels increases in the following periods and becomes considerable when $t = 10$. Nevertheless, this means that diverse choices with various levels of the factors can establish the same level of the overall utility directly after purchasing the additional status good due to the trade-offs, the overall utility of the alternatives decreases variously in the latter periods because of the different lifecycles and diffusion rates of the goods and the various degrees of impatience.

Both the slope and the intersection of the lines of the alternatives have relevance in Figure 3. The choice "ß=0.25, a, C=10, v" provides the lowest overall utility until $t = 3$. However, since its line is the least steep due to the low diffusion rate of the additional good, this can provide one of the highest utility levels in the last period. Furthermore, it intersects "ß=0.75, c, C=10, x" when $t = 4$, so the less impatient consumer having status goods with initially a moderate and later decreasing prestige value realises lower and lower overall utility with an increasing rate as he purchases a status good at the beginning of its lifecycle. Similarly, the overall utility of "ß=1, c, C=10, z" is lower than "ß=0.25, a, C=10, v" from $t = 5$, which reflects the effect of trade-offs between the influencing factors on the utility level again.

Figure 3: *Six more different alternatives when the additional status good is purchased without credit*



The alternatives outlined in Figure 4 are different from the choices in Figure 3 where the additional status good is purchased on credit. According to Figure 4, similar relations can be observed as in Figure 3. Moreover, the overall utility level of "ß=0.5, a, c=1.1, y", "ß=0.25, b, c=1.1, x" and "ß=0.75, c, c=1.1, x" is nearly equal when $t = 0$.

However, over time the difference between the overall utility levels increases due to the diverse effects of the influencing factors. Thus, it is worth anticipating the overall utility levels for the subsequent periods. Especially because "ß=0.75, c, c=1.1, x" provides a negative utility level from $t = 8$, which reflects that purchasing a status good at the beginning of its lifecycle is an excessive burden for the consumer compared to his financial position. It is also valid for "ß=1, c, c=1.1, z", where the preferences are time-consistent the diffusion process of the additional status good is relatively slow, with an intermediate prestige value at the end of the considered period. Furthermore, the line of "ß=0.25, a, c=1.1, v" indicates low volatility and, on the other hand, this choice assures an intermediate but compared to the others a relatively high overall utility level in the second part of the considered period. In this way, an impatient consumer who possesses goods with the intermediate overall status value and purchases an additional status good in its maturity stage can realise only low overall utility in the first periods compared to others but can enjoy a relatively good position in the second part of the considered period.

Figure 4: *Six more different alternatives when the additional status good is purchased on credit*

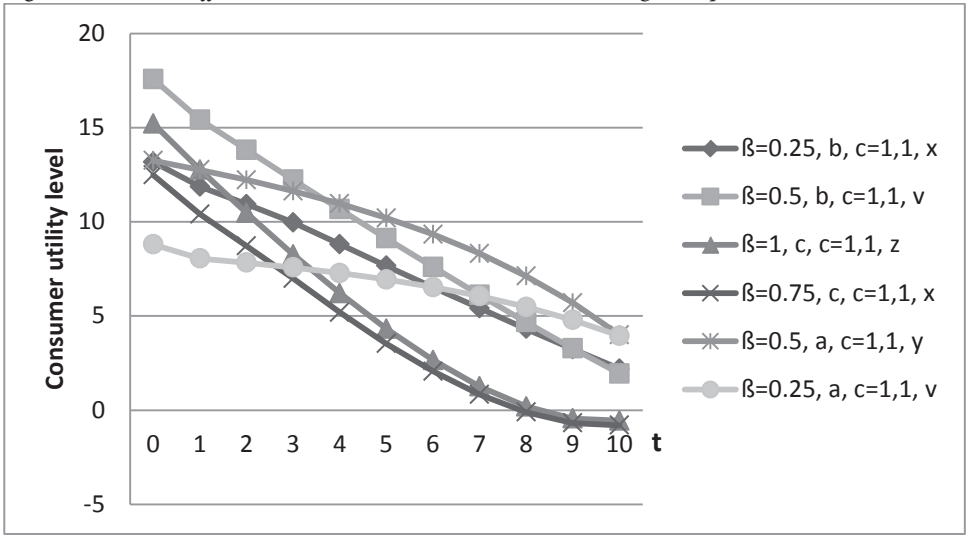
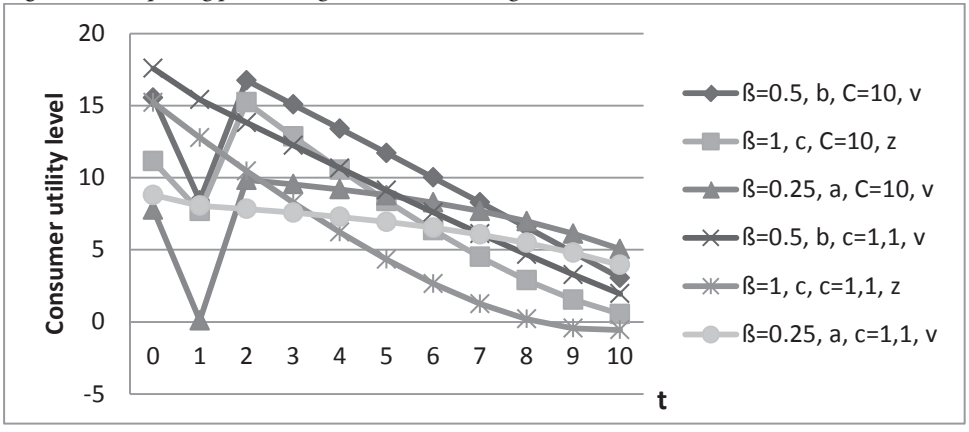


Figure 5 illustrates three pairs of alternatives; each pair includes the versions of purchasing on credit and without credit. If the additional status good is purchased on credit, the consumer achieves a higher overall utility level when $t = 0$ and $t = 1$. However, from $t = 2$ to the end of the considered period, purchasing the additional status good without credit provides a higher overall utility in each and every period. Consequently, the overall utility on the date of purchasing is higher if the individual finances the status good with credit. Purchasing on credit is more advantageous than buying without credit even for a very impatient individual. This can explain why credit is popular in the case of purchasing valuable and durable status goods among people who cannot afford to pay for the desired goods.

Figure 5: *Comparing purchasing additional status goods with or without credit*



3.5 Discussion

Even though O'Donoghue and Rabin (1999) incorporate parameter β into the consumer utility function which reflects time-inconsistent preferences, they do not consider the various degrees of impatience explicitly. Moreover, they do not link the different levels of impatience to economic and social circumstances, neither do they compare them. My analysis fills the gap. In the case of present-biased preferences, the more impatient the individual is, that is, the greater his desire to get a certain good as soon as possible, ceteris paribus, the lower the consumer utility level. This is due to the lower value of β.

By applying Frijters' (1998) interpretation about the prestige value of goods and taking into consideration that status goods reflect their owner's social position (Rausher, 1993) and that their consumption is an everlasting form of rivalry (Trigg, 2001), the model assumes that a consumer possesses not only one but more status goods at the same time. The results suggest that in the long run, it is more advantageous for a consumer to own status goods in different stages of their lifecycles and gain intermediate prestige value from them than to possess such status goods which are in the similar stages of the diffusion process. In other words, a consumer can realise a higher utility level if he strives to sustain the average prestige value of the possessed status goods around the intermediate level.

The added value of the model is that it considers how the various levels of impatience can relate to the purchasing context, the status value of the goods and the rivalry for social status. A very impatient individual who purchases a status good at the beginning of its lifecycle and with a high prestige value on credit can realise a higher utility level in the long run than a less impatient person who buys the status good in its maturity stage. Thus, it is understandable why new status goods are purchased on credit

and why the maturity stage of the lifecycle is not waited for. These results complete the relations described by Frijters (1998).

Various alternatives can provide a similar overall utility level directly after purchasing the additional status good due to trade-offs. However, over time the overall utility of the alternatives decreases differently because of various lifecycles and diffusion rates of the goods and the various levels of impatience. Thus, it is worth prospecting future utility levels, especially in the long run. This is valid both for purchasing on or without credit.

The findings explain why credit is popular among consumers who cannot afford to pay for the wanted status goods. The reason is that the overall utility on the date of purchasing is higher if the individual finances the goods with credit. At the same time, taking a credit reflects the individual's impatience, as he does not want to wait for collecting enough money to pay for the desired goods.

Overall, as figures also indicate, a person's social status can be enhanced only temporarily and not permanently by purchasing only one status good. This finding is in accordance with both Scitovsky's (1976) logic as well as my argumentation described in the literature review section.

The limitation of the analysis is that it takes into account only a few variations of the stock of the already owned status goods, some diffusion rates and one form of loan recovery. Furthermore, the analysis focuses on the level and the change of consumer utility derived from purchasing and owning status goods in various circumstances but eliminates the level of disposable income the consumer can spend on status and other goods.

4 SUMMARY AND CONCLUSIONS

Status-seeking behaviour is a relevant and never-ending phenomenon in developed economies. Its main form is the consumption of status goods. As people tend to overspend on status goods to sustain or enhance their social status, indebtedness and a decreasing saving rate can be the consequences. Furthermore, interpersonal effects, individuals' relative position and the prestige value of status goods have a considerable role in consumer decision making. Due to this, it is important to investigate how the purchasing and the possessing of status goods influence the consumer's utility level.

The presented model reflects the dynamics of the consumption of status goods from the perspective of consumer utility. The core of the model lies in how the level and the change of the prestige value of status goods affect the consumer's utility level over time. The added value of the model is that it takes into account that present-biased preferences can be valid during the consumption of status goods, as individuals are often impatient to achieve a higher social position. Furthermore, a novelty of the model is that it

also includes that the prestige value of status goods changes during their diffusion and that people have different status properties when they purchase an additional status good to sustain or enhance their social status. A core point is the form of financing the additional status good; two alternatives are considered, purchasing on or without credit.

According to the findings, the more impatient a consumer is, the lower his utility level is. However, impatience can be transformed into an advantage in the long run. For example, a very impatient individual who purchases a status good at the beginning of its lifecycle (with a high prestige value) on credit can realise a higher utility level than a less impatient consumer who adopts the status good later. The findings also verify the advantage of credit in the case of buying new status goods as the overall utility on the date of purchasing is higher if the consumer finances the good with credit. The results suggest that the social position can increase only temporarily by getting a status good. However, owning several status goods which are in different stages of their lifecycles and together provide an intermediate prestige value can be advantageous for the consumer in the long run. It is also the novelty of the model that relations mentioned above can be described.

According to the comparison of the alternatives of consuming status goods, it can be seen how the various alternatives are related to each other regarding the overall consumer utility, considering the influencing factors and the passing of time. The main conclusion is that diverse alternatives can provide the same or a similar level of the overall utility directly after purchasing the additional status good without credit, due to the trade-offs among influencing factors, however, the overall utility of the alternatives decreases variously in the latter periods because of the different lifecycles and diffusion rates of the goods and the various degrees of present-biased preferences. Furthermore, due to the trade-offs, an alternative that yields a relatively low overall utility level in the first periods can provide one of the highest levels at the end of the considered period.

The model that is based on the overall consumer utility levels per period can be applied to forecast or monitor a proposed or an already realised purchase of an additional status good. In addition, it is advantageous to compare various consumption alternatives including the different levels of influencing factors to predict and manage the utility levels over the considered time period. It can also be beneficial to plan or forecast an intended purchase of a status good by taking into account the individual's financial position to avoid consumer's or household's indebtedness and to find the optimal form of financing a valuable and durable status good for an individual.

REFERENCES

Akerlof, G. A. (1997). Social distance and social decisions. *Econometrica, 65*(5), 1005–1027.

Arrow, K. J. & Dasgupta, P. S. (2009). Conspicuous consumption, inconspicuous leisure. *The Economic Journal, 119*(541), F497–F516.

Becker, G. S., Murphy, K. M. & Werning, I. (2005). The equilibrium distribution of income and the market for status. *Journal of Political Economy, 113*(2), 280–310.

Bianchi, M. (2007). Introduction. In Bianchi, M. (Ed.), *The Evolution of Consumption: Theories and Practices* (pp. xi–xxx). Amsterdam; Oxford: Elsevier.

Bilancini, E. & Boncinelli, L. (2008). Ordinal vs cardinal status: two examples. *Economics Letters, 101*(1), 17–19.

Bricker, J., Ramcharan, R. & Krimmel, J. (2014). Signaling status: the impact of relative income on household consumption and financial decisions. *Finance and Economics Discussion Series,* Washington, D. C.: Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board. Available at http://www.federalreserve.gov/econresdata/feds/2014/files/201476pap.pdf (accessed April 12, 2015).

Casari, M. & Dragone, D. (2011). Impatience, anticipatory feelings and uncertainty: a dynamic experiment on time preferences. Università di Bologna, Working Paper DSE No. 777. http://ssrn.com/abstract=1904880

Chao, A. & Schor, J. (1998). Empirical tests of status consumption: evidence from women's cosmetics. *Journal of Economic Psychology, 10*(1), 107–131.

Charness, G. & Rabin, M. (2002). Understanding social preferences with simple tests. *The Quarterly Journal of Economics, 117*(3), 817–869.

Cole, H. L., Mailath, G. J. & Postlewaite, A. (1992). Social norms, savings behavior, and growth. *Journal of Political Economy, 100*(6), 1092–1125.

Corneo, G. & Jeanne, O. (1997a). Conspicuous consumption, snobbism and conformism. *Journal of Public Economics, 66*(1), 55–71.

Corneo, G. & Jeanne, O. (1997b). Snobs, bandwagons, and the origin of social customs in consumer behavior. *Journal of Economic Behavior & Organization, 32*(3), 333–347.

Corneo, G. & Jeanne, O. (1999). Segmented communication and fashionable behavior. *Journal of Economic Behavior & Organization, 39*(4), 371–385.

Duesenberry, J. (1949). *Income, Saving and the Theory of Consumer Behavior.* Cambridge, MA: Harvard University Press.

Eastman, J. K. & Eastman, K. L. (2015). Conceptualizing a model of status consumption theory: an exploration of the antecedents and consequences of the motivation to consume for status. *Marketing Management Journal, 25*(1), 1–15.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117–140.

Frank, R. H. (1985). The demand for unobservable and other nonpositional goods. *American Economic Review, 75*(1), 101–116.

Frank, R. H. (2005). Positional externalities cause large and preventable welfare losses. *American Economic Review, 95*(2), 137–141.

Frijters, P. (1998). A model of fashions and status. *Economic Modelling, 15*(4), 501–517.

Geiger-Oneto, S. (2007). Elite brands and their counterfeits: a study of social motives for purchasing status goods. [Dissertation] Houston: University of Houston, The Faculty of the College of Business Administration.

Hirsch, F. (1976). *Social Limits to Growth.* Cambridge, MA: Harvard University Press.

Hoch, S. J. & Loewenstein, G. (1991). Time-inconsistent preferences and consumer self-control. *Journal of Consumer Research, 17*(4), 492–507.

Hopkins, E. & Kornienko, T. (2004). Running to keep in the same place: consumer choice as a game of status. *American Economic Review, 94*(4), 1085–1107.

Iannaccone, L. R. (1989). Bandwagons and the threat of chaos. *Journal of Economic Behavior and Organization, 11*(3), 431–442.

Immorlica, N., Kranton, R., Manea, M. & Stoddard, G. (2015). Social status in networks. Available at http://economics.mit.edu/files/9910 (accessed September 24, 2016).

Kovács, K. (2015). The effects and consequences of simultaneously arising different network externalities on the demand for status goods. *Metroeconomica: International Review of Economics, 66*(3), 375–396.

Leibenstein, H. (1950). Bandwagon, snob, and Veblen effects in the theory of consumer's demand. *Quarterly Journal of Economics, 64*(2), 183–207.

Lin, N. (1990). Social resources and social mobility: a structural theory of status attainment. In Breiger, R. (Ed.), *Social Mobility and Social Structure* (pp. 247–271). Cambridge: Cambridge University Press.

Lin, N. (1994). Action, social resources and the emergence of social structures. In Markovsky, B., Lawler, E., O'Brien, J. & Heimer, K. (Eds.), *Advances in Group Processes* (*11*: 67–85). Greenwich, Conn: JAI Press.

Loewenstein, G. (2000). Emotions in economic theory and economic behavior. *American Economic Review, 90*(2), 426–432.

Mason, R. (1981). *Conspicuous Consumption: A Study of Exceptional Consumer Behaviour.* Farnborough, Hants: Gower.

Mason, R. (1992). Modelling the demand for status goods. In Rudmin, F. W. & Richins, M. (Eds.) *SV – Meaning, Measure, and Morality of Materialism* (pp. 88–95). Provo, UT: Association for Consumer Research.

Mazali, R. & Rodrigues-Neto, J. A. (2013). Dress to impress: brands as status symbols. *Games and Economic Behavior*, *82*, 103–131.

O'Donoghue, T. & Rabin, M. (1999). Doing it now or later. *American Economic Review, 89*(1), 103–124.

Ordabayeva, N. & Chandon, P. (2011). Getting ahead of the Joneses: when equality increases conspicuous consumption among bottom-tier consumers. *Journal of Consumer Research, 38*(1), 27–41.

Rauscher, M. (1993). Demand for social status and the dynamics of consumer behavior. *Journal of Socio-Economics, 22*(2), 105–113.

Rege, M. (2008). Why do people care about social status? *Journal of Economic Behavior & Organization, 66*(2), 233–242.

Scitovsky, T. (1976). *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction*. London: Oxford University Press.

Trigg, A. (2001). Veblen, Bourdieu, and conspicuous consumption. *Journal of Economic Issues, 35*(1), 99–115.

Veblen, T. (1899/1979). *The Theory of the Leisure Class.* Harmondsworth: Penguin Books.

Weiss, Y. & Fershtman, C. (1998). Social status and economic performance: a survey. *European Economic Review, 42*(3-5), 801–820.