The psychology behind fast loans

-Is there a pattern to who succumbs to the temptation of fast loans?

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Abstract

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Title: The psychology behind fast loans - Is there a pattern to who succumbs to the temptation of fast loans?

Since the first fast loan company entered the market in 2006, there has been an increasing amount of individuals who have become indebted and ended up at Kronofogden because they haven't been able to pay off their loans. Reports have been made by Kronofogden, but only with age as a variable, to shed light on who amongst us take on fast loans.

This thesis will investigate whether it is possible to predict who ends up over indebted by fast loans, and what personal characteristics predict getting into debt and struggling with personal finances. To investigate possible predictions we conducted a survey with questions about willpower, time preferences and reasons why someone has or has not taken fast loans. By examining the answers from the survey and running various regressions, we are able to answer some of our questions. Analyzing our regressions enables us to make suggestions of who is more likely to end up taking a fast loan. We also give advice for further research.

Keywords: fast loan, time preference, self-control, willpower.
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1. Introduction

-“Oliver ended up at Kronofogden after taking fast-loans to enjoy the last year with his mum who was dying in cancer” Today Oliver has three jobs, and lives at the minimum subsistence to survive, while he goes through debt settlement. Hopefully he can manage to keep working as much as he does, to complete the debt settlement in two years time. He explains that when it all started he didn’t think of the consequences, he wanted to spend time with his mum and wanted her to be able to enjoy her last year of life. When he became aware of the situation he had put himself in, he had already lost control and was no longer able to keep up with the payments for the loans. He still receives advertising about taking new loans, from companies he still hasn’t paid off his debts to. (Verklighetern i P3, Sveriges Radio 25-03-2013)

-“Elin, mother of two, bought cats with text-loan” The single mother Elin loves shopping, and she also loves animals. She and her two children live in a house together with two dogs, one bird and five cats. It is expensive to feed and look after everyone. When the money hasn’t been enough some months Elin has solved the problem with fast-loans. She says it’s so easy to get a loan via internet; all you have to do is to press a button. (Lyxfällan, Channel 3, Season 14, episode 2/12)

-“Robert, 45 years old, took fast-loans to go out and socialize, and took new loans to pay off the old ones”. Robert worked as assisting nurse and took his first fast-loan to pay for a night out. That was the start of a vicious circle that would carry on for the next 10 years. When he lost his job he reached the limit of what he could handle, and faced the catastrophe of having to leave his home. (Lyxfällan, Channel 3, Season 14, episode 7/12, Sweden)

When borrowing for a short time, it might be hard to provide the money asked at the settlement date. With high interest rates linked to fast loans, the amount to pay back will probably be a lot more than the original amount. Becoming over-indebted causes major suffering for the individuals concerned, and when borrowing for a longer time with high rates, the amount to pay back would be so large, that it would be questionable if it was worth taking the loan.
The most common micro-credit in Sweden would be what is called a fast loan. A fast loan enables the customer to enter a short-term lending agreement with quick access to the money, without personal contact and minimal investigation of creditworthiness. The cost is normally a high interest.

In Sweden these types of loans were in 2006 well spread under the name of text-loans (in Swedish “sms-lån”). With a text-loan you just send a text message from your cell phone, and within seconds you will get an answer if you’re granted the loan or not. The money will normally reach your account during the same day. Today there are many different ways to get access to these kinds of loans with quick response; therefore the name now most commonly used is ”fast loan” (in Swedish; “snabb-lån”). In the United States and UK, a similar loan is available that goes under the name “payday” loan. A payday loan enables a person to borrow money, if they leave their details, money from their next pay will automatically be available to pay back the loan.

So, why do people take these loans? Is it lack of understanding? Lack of foresight? Lack of willpower or intelligence? Or are people simply in a difficult situation, and taking a fast loan is better than the alternative?

In this thesis we try to find out why people take on fast loans, and which groups are more vulnerable to its siren call. This could help to better target prevention efforts in the future at those who are more vulnerable and who haven't been able to avoid taking on these loans.

We will stick to the word “fast loan” in this thesis.

1.1. Underlying reasons for bad decision making such as taking fast loans
The cases reported to Kronofogden regarding unpaid fast loans increased during 2012 by 62% (Snabblån rapport, 2012). Most people try really hard to not get into Kronofogden’s register and avoid getting a bad credit history; therefore we can be sure that when an individual ends up at Kronofogden, they have already struggled with their finances for a long time.

When cases reach Kronofogden the individuals affected can be classified as over-indebted. Kronofogden has decided for a particular definition to the expression: “Over-indebted is when someone perceives themselves as having recurrent problems with not being able to pay all...
their bills”. Kronofogden concludes in their report *(Kronofogden, 2008)* that the problem is not caused by poverty. Poor people are not in general over-indebted, and over-indebted people are not in general poor. There is a strong correlation of individuals living on small margins and individuals being in debt. Poor people often live on small margins, why many poor people can be found in the group of over-indebted, but the poverty is not the cause.

Except the finding of strong correlation as stated above, it has not been possible to find specific characteristics of individuals being over-indebted. Characteristics as age, education level or family situation have not been proved valid as explanations. With this as starting point, all households could be facing economic issues and end up over-indebted. The situation of someone in debt is almost always very complex, therefore several factors must be put into context to explain why the situation has arisen. The most common underlying cause is an unforeseen happening changing the individual’s life dramatically, without leaving much time for adjustment. Most common happenings causing a dramatic economic change are unemployment, disease or company bankruptcy. Other more personal causes could be a divorce or death in the family. It is often hard to distinguish cause and result in a complex situation. Example: Did the divorce cause the debt-problems, or did the debt-problems cause the divorce? At the same time these individuals often have experienced a negative change in their lives; most people affected by negative changes in their lives don’t end up in debt. This shows that the same type of happening can have totally different effects on different households. *(Kronofogden, 2008)*

Own ability and surroundings strongly affect how people react and deal with their lives. Individual strengths differ and also support from others, like friends and family, differs a lot. The series of events leading up to an individual being over-indebted needs to be seen in a context, and we should always remember that all individuals and situations are unique. To be able to understand and identify why someone is over-indebted, the combination of *events*, *own ability* and *surroundings*, must be taken into account. If someone is vulnerable in all these three areas, this could be an indication of someone at higher risk for being over-indebted. *(Kronofogden, 2008)*

*Own ability* is a wide expression and contains many different aspects of an individual. We are going to dig deeper into this expression, with the intention of distinguishing certain abilities
that can affect whether an individual is more likely to take fast loans and ending up in debt-traps and over-indebtedness.

We will concentrate in three different aspects, which can all count as categories of own ability: self-control, intelligence and time preferences.

Psychologists have suggested that just two personal qualities; self-control and intelligence, quite reliably predict positive life outcomes (Willpower, 2011, p.1). Willpower is defined as “having a great capacity to enforce ones will against others or against ones' own limitations" (Nationalencyklopedin, 2013). The term willpower and self-control are closely linked together. Sometimes it is hard to separate the expressions, often it takes willpower to exercise self-control, and vice versa.

To demonstrate an example, imagine an individual who is trying to give up smoking. To come to the decision to give up smoking, and to stick to it, takes willpower. The individual will then need to exercise self-control to resist the urge of lighting another cigarette. One could also say the individual needs to exercise willpower to continue to refrain from cigarettes, hence the meaning of the expressions are almost identical in this context.

In many different situations in life, the ability to control your self will have a major impact on how one’s situation evolves.

Another important personal quality is intelligence. An individual’s understanding of the debts they take on could partly be explained by their intelligence. Lack of knowledge could be explained by low intelligence, meaning the individual was unable to understand the commitment they’ve made or the seriousness in a situation, due to low intelligence. A lot of people with low intelligence are successful and don’t make bad decisions in life, while there are plenty of really intelligent people out there who make a lot of bad decisions and are not very successful in life. Psychologists agree that both intelligence and willpower is essential.

Intelligence has been widely studied for decades, yet no discoveries have been made on how to permanently increase intelligence. When it comes to self-control, there has been a lot of progress in the discovery of ways to increase self-control. This fact makes us feel that willpower is an even more interesting ability to focus on than intelligence.
The third perspective we will focus on is time preferences. Time preference is a measure of how an individual value something at an earlier date in comparison to how they value it on a later date (Andersen, 2008).

People who have been closely linked to individuals who have ended up in debts often consider these individuals as having a hard time resisting temptation and to live short sighted (Kronofogden, 2008). Resisting temptation is one crucial effect of degree of willpower, whereas time preference is a measure of how short sighted a person is. A more precise description of time preference is the preference for immediate utility over delayed utility (Frederick, 2002). Time preference and willpower are closely linked together (Bickel, 2003) and therefore it is appropriate to immerse in both.

1.2. Purpose
The aim of the study is to investigate whether it is possible to predict who ends up over indebted by fast loans, and what personal characteristics predict getting into debt and struggling with personal finance.

To do so we run an empirical analysis, where we jointly test seven possible hypotheses;

- H1: Individuals who take fast loans are not aware or misinformed about the underlying costs of a fast loan.
- H2: Individuals who take fast loans are strongly present-biased and therefore discount future repayments to the point that fast loans can become attractive.
- H3: Individuals who take fast loans lack self-control in comparison with those individuals that do not take fast loans.
- H4: Individuals who take fast loans are mostly less educated and less intelligent than those individuals that do not take fast loans.
- H5: Individuals who experience having financial problems; lack self-control in comparison with those individuals that do not. These individuals are also strongly present-biased and mostly less educated and less intelligent than those individuals that do not experience having financial problems.
- H6: Individuals, who would spend the money from a fast loan on other things than bills, are more present-biased, less intelligent and have lower willpower, than those who would spend the money on bills.
- H7: Individuals possessing a credit card can be distinguished by their personal qualities, age, gender and education.
2. Theoretical framework

2.1. Self-Control and willpower
The term willpower was introduced during the Victorian era. When the term was first used, it was to explain some kind of force involved, an internal strength within people (Houghton, 1957). During the nineteenth century several books trying to explain this inner force became best sellers. An example is the international bestseller by American minister Frank Channing Haddock, *The Power of Will*. Haddock described the force as “…an energy which is susceptible of increase in quantity and of development in quality”.

The difficulties with new discoveries are usually not to discover them, but to test them, and prove them, and maybe that is why the interest for Willpower waned at this early time. The social psychologist Roy F. Baumeister got interested in willpower after reviewing results of an experiment, performed by Walter Mischel and his colleagues’ years earlier. The experiment was conducted in order to study how children learn to resist immediate satisfaction (Mischel et al, 1983). Four year old children were left alone in a room with a marshmallow in front of them. They were told that they could eat the marshmallow whenever they wanted, but if they waited with eating it until the experimenter returned; they would get a second marshmallow as well. The kids responded to the temptation differently, some gave in and ate the marshmallow after a while or straight away, whereas some managed to resist and waited so that they got a second marshmallow as well. It certainly took some willpower for the children to wait for a second marshmallow. Years after the experiment Mischel noticed, by a coincidence, that the children who didn't wait for the extra marshmallow, were later in life getting into far more trouble than the other children. (The young test subjects had gone to the same school as his own children). They decided to do a follow up of all the children that had taken part in the experiment to investigate this finding further. The astonishing result showed that the children who had shown the most willpower at age four, by resisting eating the marshmallow, were doing better in life than the ones who had given in to the temptation immediately. This was reflected in all different areas in life. Generally the children who had shown higher willpower turned out to have gotten better high school grades, higher salaries, were more popular by friends and had lower body-mass. Never before had scientists found traits in a child’s behavior that would so strongly predict how they would succeed as grownups.
In *Losing Control (1994)* Baumeister and his colleagues assessed how and why people fail at self-control. The book leads to further experiments, and the development of personality tests that purport to measure self-regulation and self-control. Experimental studies show two consistent results (*Baumeister, 1994*); (*Muraven, 1999*):

1. You have a finite amount of willpower that becomes depleted as you use it.
2. You use the same stock of willpower for all manner of tasks.

This means the same reservoir of self-control is used for all activities: getting work done, doing exercise, resisting sweets, being nice to your annoying neighbor and finishing that essay in time. This effect has shown up in several experiments. By subjecting a person for two unrelated activities, resisting chocolate and working on geometry puzzles, it showed that these two totally unrelated activities drew energy from the same source. Having to resist chocolate either before, or at the same time, as working on a geometry puzzle, made the person perform worse when solving the puzzle. Also, the more depleted their willpower was, the earlier they would give up on solving the puzzle (*Baumeister, 1998*). Another interesting finding of the importance of willpower is that willpower has shown to be a better predictor of college grades than IQ (*Wolfe, 1995*).

Baumeister divides the use of willpower into four broad categories (*Baumeister, 1994*).

1. **Control of thoughts** - Controlling your thoughts is something you do daily, but some thoughts are easy to control and don’t take much willpower whereas some are harder. For example it doesn’t take much willpower to engage your thoughts in a movie, but it is hard to not think of something that bothers you.

2. **Control of emotions** - Most times we try to avoid bad moods and unpleasant thoughts. Sometimes we also try to not feel as happy or cheerful as we do. The controlling of emotions also depletes willpower. Controlling your emotions is a hard task since you can change your way to think of your feelings, but you can’t change your feelings. To test how controlling emotions affects willpower, one group of people were asked to watch a sad movie without showing their emotions. Another group of people were asked to watch the same movie, but with no constraints such as holding back their emotions. The group, who had been asked to not show their emotions during the movie, did much worse when their willpower was measured after the movie.
3. **Impulse control** - This is what people generally think of when thinking of self-control, *ability to resist temptation*. This could be things such as resisting alcohol, giving up cigarettes, avoid eating chocolate or not exceeding speed limits.

4. **Performance control** - This is about focusing your energy on the task in front of you, to have the strength to carry on with something when you’re tired and managing the time in a wise way. This goes for things you are doing at the moment, but also projects that demand long-term commitment and planning ahead.

In 2007 experimenters on self-regulation found out that the amount of glucose in the blood matters for ones amount of willpower (*Baumeister, 2007*). This means that if your glucose levels are low, you will have a harder time controlling yourself in all aspects. Therefore, leave important decisions until after lunch rather than before, and always make sure you eat before your glucose levels are too low. This will prevent you from taking bad decisions or giving in for temptation, and you can save your willpower for when it is really needed instead.

Willpower can be strengthened. This is an uplifting finding since it means that people have the chance to strengthen their willpower and by doing so being able to improve other areas in their lives. The hard part with improving willpower is that it takes willpower to do so. To find ways to strengthen willpower a series of experiments were conducted (*Muraven, 1999*). Students were sent home with different tasks they were to practice daily. Some were asked to work on their posture, some were asked to keep track of what they ate and some were instructed to strive for positive moods and emotions. The results showed that the practice of emotional control does not increase willpower. It is depleting to try to force yourself to be happy. The other two groups in the experiment did strengthen their willpower, and surprisingly the ones who had been working on their posture showed best result.

After this study further experiments took place. It was discovered that if people tried to improve one thing in their lives, for example their physical fitness, studying or management of money, they advanced towards their goals, but they also got better at other things. For example the people who got better at managing their money, also tended to exercise a bit more (*Oaten and Cheng, 2006*). This means that exercising self-control in one area will improve all areas of life. When you want to make a big change in your life, like trying to lose
weight, you might want to prepare yourself by practicing an easier task first, like sitting up straight. One general advice if you want to improve something in your life is to focus at one project at a time. Otherwise your willpower might not be enough, and you will fail in all areas instead of improving in one. Also gradual changes are recommended instead of too radical changes. A radical change can deplete your willpower to the extent that you give up, or end up going back to the initial start after you’ve reached your goal. Striving for long-term success is better.

2.2. Time-preference

Time preference is a measure of how an individual values something at an earlier date in comparison to how they value it on a later date. In microeconomics time preference is commonly explained in the situation of a consumer facing the option of immediate consumption or delayed consumption. Someone with high time preference is focused on his or her well being in the present or immediate future, whereas someone with low time preference puts more emphasis on his or her well being in the further future.

When measuring time preferences it is the individual's personal preference that is measured. This means that someone who would like to save their money for later rather than spend it, but for some circumstances are not able to save the money, is still considered to have a low time-preference. There are no distinctions or absolute values saying what is considered high or low time preference, comparison with others is needed to use this measure (Basic micro theory).

The idea that time preferences is an important factor in economic theory goes back to John Rae who like Adam Smith was trying to answer the question why wealth differed among nations. In his publication “The sociological theory of capital” (1834) he extended Adam Smith’s earlier argument that “national wealth was determined by the amount of labor allocated to the production of capital” (Wealth of Nations, 1776). Rae argued that Smith failed to explain the determinants of this allocation. According to Rae a psychological factor that differed between nations and determined the level of savings and investments within a society had to be taken into account - "the effective desire of accumulation" (Frederick, 2002). Rae invented the subject of intertemporal choice, which means the impact of decisions made today on the type of options that are available in the future, and started the discussions in the subject about psychological motives underlying intertemporal choice. He believed that intertemporal
choice either promoted or limited the effective desire of accumulation. Rae considered two main factors that promoted the effective desire of accumulation: bequest motive (a motive giving an economic justification for gratuitous and generous leavings to the next generation when one dies) and the tendency to exercise self-restraint.

2.3. Loans

2.3.1. Background on credit
Credit was before the 1900-century mostly handled between individuals, where one person would have borrowed from another and then owed that person money. When the banking system was established in the later part of the 1900-century, the credit market became less personal. From then to now, the credit system and the credit markets’ role in society have been highly developed (Fregert, 2003). There are different types of credits and loans available, and three of them are considered to be standard:

1. **Account credit** is a form of credit where an individual who has a checking account can apply to use a credit if they run out of money before the next salary gets transferred into their account. The amount of the credit can extend up to 150 000 SEK, depending on income and bank. There is an interest linked to this credit and it varies depending on which bank you have. The interest is only paid on the amount of credit you use. In addition to this there is also an annual fee, which varies depending on which bank you have (Swedbank.se, 2013, source 1).

2. **Mortgage** is a form of loan that you use to finance a house or apartment. The house or apartment is used as a security (for both bank and buyer) and the interest will tend to be much lower than on other loans. In addition, there is a mortgage cap of 85%, which means that you can borrow up to 85% of the sum and the remaining 15% must be funded by yourself or by a private loan. However, you are never guaranteed to borrow 85%. Most banks tend to give a so called lånelöfte, which is somewhat of a promise by the bank on how much you can borrow to buy a home. This is based on income and situation. (Swedbank.se, 2013, source 2); (Boupplysningen.se, 2013, source 3).

3. **A private loan** is a form of loan intended to finance consumption, for example buying a car or renovating a kitchen. There can be private loans without security, but most large banks require that the applicant is at least 18 years old and have some form of
employment to ensure that the loan can be repaid. Credit checks are carried out, regarding any amount. Banks such as SEB, Swedbank and Nordea provides private loans for amounts between 10 000-350 000 SEK with a payback period of 1-12 years. In addition to the sum to be paid back, there is also interest and amortization on the loan (Nordea.se, 2013, source 4); (Swedbank.se, 2013, source 5).

One of the latest trends when it comes to credit is different types of micro-loans. These types of credits were widely acknowledged when Muhammad Yunus won the Nobel Peace Prize in 2006 for his pioneering in the field. The original idea with micro credits was to help people out of poverty by giving them so called micro-credits that would enable them to start up small businesses, and by doing so helping themselves out of poverty (Chowdhury, 2005). The phenomenon of micro-loans quickly spread to highly developed countries as well, although conditions and purpose of micro-loans available in wealthier parts of the world differs from the ones originally developed.

In any case, the credit society is here to stay. Credits are not only considered to have a positive effect on the economic development, it is also believed to counteract inflation. By controlling credits, valleys and peaks in the economy can be leveled. Households are able to consume when their needs arise, instead of when their economy allows, which was the case before the time of credits (Larsson, 1993). The positive effects of credits should be kept in mind, even if we in this thesis mainly discuss bad effects.

One drawback with credit is that as long as there is credit there will be credit losses. The difficult task of finding a balance on the level of credit losses is a lasting project, and the question is if there is a balance to be found at all. With a too strict credit approach, only people who wouldn’t need to borrow would be granted loans. With a too generous approach towards credits the credit losses would get too high. Also problems in the society with over-indebtedness would rise. This would also lead to higher costs of credits, which would affect the ones who were originally able to carry out their obligations, in a negative way (Kronofogden, 2008).

2.3.2. Micro-credit
The idea of giving micro-credits is to enable people to help themselves out of poverty. People who would not meet the requirements to lend money from a normal bank can, thanks to this
concept, borrow a smaller amount of money in order to start up a business. By doing so they can start to change their lives, and hopefully get out of the vicious circle of poverty.

The Graamen bank in Bangladesh is the pioneer in the field of micro-credits, and the most well known lender of micro credits. The bank started as a result of a research project lead by professor Muhammad Yunus. The bank became an official financial institution in 1983. Yunus thought that one major cause for poverty is the lack of small-scale capital in rural areas (Chowdhury, 2005). The policy of Graamen is to mainly lend out to women, because they are the ones who are most impoverished, and their children will be the ones benefitting from the loans. The bank has several rules that have to be followed in order to get a loan. One of those rules is that the bank requires some kind of security, which means that the poorest of the poor will not be granted these loans (Mahmud, 2008).

The critics argue that micro-credits have not contributed to poverty reduction (Beck, 2007); (Rosenberg, 2010), that gender inequalities have not been reduced thanks to micro-credits (Dichter, 2007), and that micro-credits have contributed to increased “privatization of welfare” (Fafalio, 2007). An interesting argument against micro-credits, which is also closely linked to the topic of this thesis, is that micro-credits lead many borrowers into a debt trap (Dichter, 2007); (Mahmud, 2008); (Adams, 2008). No exceptions are normally made regarding the repayments. This means that all loans have to be repaid, regardless of external circumstances. This has led to the phenomenon that the borrowers who have not been able to fulfill their commitment have taken other loans to even higher interest rates, or have lost basically everything they own. These individual have gone from being in the upper group associated with lower poverty, to becoming the poorest of the poor (Chowdhury, 2005).

2.3.3. Fast loans
The phenomenon fast loan was first introduced in Sweden in march 2006 when a company called Mobillån Sverige AB entered the credit market and enabled individuals to borrow a relatively small amount by sending a text message, which was to be repaid in short time, (KFM Rapport 2007:2). Prior to this credit service, the only way to borrow a small amount of money during a short period was through credit cards.

The short time it took to apply for a fast loan, get it granted and wired to your account, this credit service became very popular among young adults in the ages 18-35. At the end of 2006
Kronofogden had collected 1406 cases of unpaid fast loans where 40% had been taken out by people in the ages 18-25. The following year, in 2007, the amount had increased to 25 418 despite a decrease from 40 to 37% regarding the number of young adults who took out these loans (*KFM Rapport 2007:2*).

Since the start of this credit service, there has been a constant increase of unpaid fast loans. In 2008 it went from 25 418 cases of indebtedness related to fast loans to 35 775, and in 2009 it reached a peak of 46 531 unpaid cases. Even though Kronofogden collected more and more debts for each year, the percentage of young adults decreased from 27% in 2008 to 23% in 2009. In 2010 there was a decrease of 60% from the previous year, regarding the amount of unpaid fast loans, and the following year 2011, the amount went from 28 038 unpaid cases to 33 064. Young adults accounted for 19% during 2010 and 2011. During 2012 Kronofogden saw yet again an increase and by the end of the year they had collected their highest amount of unpaid fast loans to date, 53 709 cases, and this time there was in increase among young adults in the ages 18-25. They accounted for 21% (*Snabblån rapport 2012*).

According to Martin Kling from Kronofogden, the age group of individuals consisting of young adults 18-25 linked to taking on fast loans has declined and as of now, other groups have taken over. Those who make up for the biggest amount and who take on these loans are now between the ages of 26-35 and 36-45. Those aged 26-35 is the group with the highest percentage of the total fast loans, according to the latest statistics. In 2012 Kronofogden collected roughly around one million indebtedness cases where 53 709 accounted for fast loans.

In the beginning of 2006, when these companies started to enter the market, the majority of the communication between borrower and lender took place through text messages. Nowadays it is more common to apply for a fast loan through the internet, simply by logging on to a website and applying directly.

Companies that provide financial services to the public or legal persons who operate on credit are required by the act (1996:1006) on the notification regarding certain financial activities to register with Swedish Financial Supervisory Authority (Finansinspektionen). This goes for the category of companies known as "financial institutions" along with such companies who operate with lease business, currency trading and currency exchange. Activities involving
"sms-loans" are thus subsumed into this category of companies and because the law does not distinguish precisely the type of activity, there is not any accurate statistics on the number of physical and legal persons engaged in precisely the "sms-lending activities" (Andreas Barth, legal counselor, Swedish Financial Supervisory Authority).

The Swedish Consumer Agency estimates the number of companies that have been registered with the Swedish Financial Supervisory Authority stating that they would deal with the fast loan business to be 30-50. Their view is that not of all these companies are yet active on the market (Anna Hult, lawyer, Swedish Consumer Agency).

2.3.4. Regulations
On the 23rd of June 2010 the Swedish government presented a new bill (2009/10:242) to the Government regarding the proposition for a new Consumer Credit Act (Konsumentkreditlagen). The proposal aimed to implement a new EU directive regarding debt problems by fast loans and other instant loans. The proposal also included that the creditor has to do a credit check and also provide the correct information in ads regarding the effective rate. Further, the proposal also stated that the consumer shall have the right to cancel the sms-or fast loan. The legislative changes were instituted January 1st 2011 (prop. 2009/10:242 p.1).

It is expressly forbidden in the new legislation to give credit without credit check as per § 12 Consumer Credit Act (Konsumentkreditlagen): Credit check 12 §;

“The trader should consider whether the consumer has the financial ability to fulfill what he or she undertakes in the credit agreement. Credit assessment shall be based on adequate information about the consumer's financial circumstances. The credit may be granted only if the consumer has the financial means to fulfill its commitment.”

Upon an increase of the credit, a new credit check has to be done. The section was amended by Bill 2009/2010:242 and after the change; smaller loans were included, known as instant loans. There are no exceptions for loans of smaller amounts or with a shorter maturity (prop 2009/2010:242 p.35)

There is a Consumer Credit Directive from the EU that does not apply for loans of less than €200. Here, Member States are free to choose control. Sweden has according to Bill 2009/210:242 chosen to regulate fast loans due to the development of more defaults and
notifications to Kronofogden (prop 2009/2010: 242 p.36). According to Bill 2009/2010:242 (pages. 35-36): "Fast loans are also typically exempted from the requirement of a credit check of the 1992 Act. This exception is for one-time credit when the credit period is up to three months and the amount of credit has to be repaid at once, as well as for loans for smaller amounts. The exception was introduced to facilitate payments against invoices but in practice extends to instant loans such as loan terms are designed. The memo suggested that credit checks would also apply for loans of small amounts to be repaid in a short time”.

The Swedish Trade questions, however, about the implementation of the proposal having any impact on the problem of over-indebtedness. The proposal does not only require that a credit check has to be done, it is also clearer in requirements on how the credit should be checked and there is a sanction for poor credit rating. According to the government's assessment, the requirement of credit check is an effective way to prevent consumers who have no ability to repay to enter into agreements for instant loans (prop 2009/2010:242 p.36).

2.3.5. Marketing
To analyze how the marketing is built around these fast loan companies we have selected to take a closer look at four particular examples. The reason for this is that it's simply not possible to analyze all active players on the market since this would take too much time.

The companies we have chosen to look at are the following: Folkia, Snabbfinans, Mobillån and Kundfinans. The minimum amount offered by these companies is 1000 SEK (for all four companies) and the highest amount is 10 000 SEK (Mobillån).

2.3.6. What does the marketing look like?
According to Anna Hult (lawyer at the Consumer Agency) they have an internal list that is from last fall concerning fast loan companies which are registered with the Swedish Financial Supervisory Authority. How reliable this list is right now is hard to say because their opinion is that all these companies are not yet active on the market since some fast loan companies have gone bankrupt, a few have several websites under different names which are linked to the same fast loan company while others have active websites, although not authorized by the Swedish Financial Supervisory Authority.

Since the first active fast loan company entered the market in March 2006, they have always emphasized how easy it should be to be able to borrow money. It should be fast and it should
run smoothly without unnecessary steps. Usually it takes no more than a few minutes to fill out an online application or send a text and the answer regarding your application will often reach you within minutes. If you're granted a loan, the money will in most cases be transferred the same day, if not directly to the specified account. Many of the companies market these instant loans as something you take "when unexpected situations occur in the wrong time" (www.folkia.se). Taking a fast loan can easily solve unexpected travel expenses, dental visits, car repairs and such. (www.folkia.se)

Mobillån Sverige AB, which operates under www.mobillan.se writes on their website that they were the first company in Sweden to lend out money via fast loans through the internet and SMS. They write: "We are the company in Sweden that have the greatest knowledge of sms-loans, and we have the most experience. We know that the most unexpected situations may arise, when you suddenly need a small loan quickly and without fuss." (www.mobillan.se)

According to Folkia's CEO and founder Hördur Bender, he states "Unlike traditional banks, we at Folkia believe that everyone is entitled to good and flexible service and it is the customer's requirements we put in first place. We believe it should be smooth and easy to borrow money while we do not want our customers to borrow more than they need." (www.folkia.se). Many of these fast loan companies give a feeling of being your friend, who’s there to help you through hard times.

Since the amendment of the Consumer Credit Act (Bill 2009/10:242), which came into effect January 1st 2011, it also stated a higher requirement about the rules that would apply to marketing made by these fast loan companies. Nowadays, companies who engage in this type of activity are required to provide information about the effective rate in their marketing in a clear way. This will, in turn, help the consumer in the question to decide whether one should take on a loan agreement or not, since the effective rate is the total cost of the loan (prop 2009/10:242, page 35).

According to the report written by Kronofogden in 2007 there was an aggressive advertising from one fast loan company's direction, but their ads and marketing however, lacked information on both the duration and cost of the loan which made it difficult for the consumer to form an idea of what kind of agreement they were signing up for. It went so far that the Consumer Agency chose to sue the company in question in Marknadsdomstolen (KFM Report
Before the amendment of the Act (Bill 2009/10:242) came into force, there was no requirement that the companies involved in this type of lending activity had to carry out a credit check because in the old Consumer Credit Act from 1992 there were exceptions for small short-term loans. Nowadays, there is a requirement applying to all companies which engage in fast loan activities to carry out a credit check regardless of the amount they choose to lend out (prop 2009/10:242, page 35).

When you look at the conditions for obtaining a loan, regarding requires, Snabbfinans for example demands that whoever applies for a fast loan has to be registered in Sweden and meet the demands for repayment, Kundfinans and Folkia make the same requirements. As for Mobillån, they demand the following for all their loans; you have to be at least 18 years old, have a declared income of over 50 000 SEK, be registered in Sweden as well as being a Swedish citizen. They also have other requirements for additional loans of 4000 and 6000 SEK. These are: two previously paid loans on time and at least 100 000 SEK in declared income. Would you like to borrow a higher amount, the additional requirements are: three previously paid loans on time and at least 150 000 SEK in declared income.

2.3.7. Who takes on these loans?
With the statistics available on fast loans and how many unpaid credit debts that Kronofogden handles during a year, we don’t know with certainty who amongst us in society is more likely to take on a fast loan.

According to Martin Kling, a communicator at Kronofogden who’s working preventively to reduce indebtedness, they have initiated a collaboration with fast loan companies that will extend to 2014, and a part of this collaboration is to gain greater understanding of how the industry looks like and how many loans have generally been granted. Kronofogden wants to bring the share of unpaid credits in comparison with the number of loans granted, because it is really through that comparison that they can interpret their own figures. Generally, one can see that the turnover in the industry is growing, so therefore it’s not strange that cases with unpaid credits also has increased within Kronofogden.

Kronofogden has through their work and different reports only focused on age and gender as a variable, choosing not to take other variables such as education, marital status or ethnicity into account. Through this new project and collaboration with fast loan companies, depending on
outcome regarding information and the direction Kronofogden chooses to examine, they will hopefully gain greater insight of who is more likely to end up taking on fast loans. As for now, with only two existing variables, they cannot give more information regarding the characteristics of those who take on fast loans. (*Martin Kling, communicator Kronofogden*)

Kronofogden uses the media twice a year where they go out with their statistics and are very accessible with television interviews, radio, and newspapers and such. They provide information about their mission and what they do about this issue but they have no specific studies that are aimed towards people taking on fast loans. (*Martin Kling, communicator Kronofogden*)

In the current situation, Kronofogden does not have much contact with those who take fast loans, but they have other types of ways to communicate and reach out with their message or to retrieve information. They have interaction with fast loan companies but also they have their own statistics available linked to fast loans. (*Martin Kling, communicator Kronofogden*)

### 3. Method

In order to answer our research questions and investigate our hypotheses, we conducted two different studies, one quantitative and one qualitative. The quantitative study is what we consider the most important one. The qualitative study was made to confirm what we found out in the quantitative study, and also to fill the gaps of what could not be explained by the quantitative study. Except these two studies performed, we also depended highly on earlier research made. This has been found in literature, articles and earlier papers.

#### 3.1. Quantitative study

The study was conducted in Gothenburg, Sweden during the 26th of April to the 15th of May. In order to answer our main thesis questions we decided to implement a quantitative study. This was needed since the specific field has not been studied before and so there would be no way to find answers to our specific questions. We conducted the quantitative study by sending out an online survey using Surveygizmo.com. All answers were anonymous. Our goal was to get 300 participants, and by the least 100 participants. The participants were chosen as randomly as possible, and we tried to reach out to different target groups.
3.1.1. Problems along the way
Regarding the demarcations of the survey we were first thinking to only look at people in the ages ranging from 18-35 since they account for roughly 50% of people with payment difficulties due to fast loans (from earlier reports made by the Swedish Kronofogden). We believed that this age group would be easier to test and therefore enable us to see if there is a correlation between individuals’ willpower and their willingness to take on fast loans. In the report from 2012, individuals in the ages from 18-35 stood for 50% of the 53 709 unpaid credit debts that Kronofogden got in.
After having sent out the survey to students at Handelshögskolan i in Gothenburg, and also getting responses from Chalmers (we were able to advert the link to the survey through their “studentportalen” making it possible for students at Chalmers to participate), we realized the target group was too narrow and we needed more variance in the answers. Therefore we decided to abandon our plan to look at people between 18-35, instead we collected answers from all age groups. We also soon realized that people taking fast loans or having debt issues are not really represented in universities like Handelshögskolan and Chalmers, and we mainly had people answering the survey who said they have not taken any fast loans. Our aim was to reach out to all different kinds of people, also those with debt problems and experiences of taking fast loans. Again we widened our target group. We decided to try to get as many different people as possible to answer the survey, in the hope of reaching out to a more diverse target group. We posted posters all over the inner city of Gothenburg with a direct link to the survey accessed by a QR-code, where people could scan the code and directly start to answer the different questions.

3.1.2. Structure of the survey and measures used
The first part of the survey was devoted to experiences and attitudes towards fast loans and indebtedness. The questions were multiple choice questions, and were aimed to investigate habits and attitudes towards fast loans. We also allowed for comments for most questions in this section, to get additional information regarding people’s views on fast-loans. Depending on what the answer on the first question would be, (Have you ever taken a fast loan, yes or no?) the person would be forwarded into different directions for suitable follow-up questions.

In the second part, personal information regarding age, education and income level was requested. Income level was not mandatory. We also allowed for comments in this section. This was mostly because there are so many different variations when it comes to people’s occupation and level of education, that we couldn’t have all options available in the multiple
choice answers, and many individuals want to state the answer that specifically corresponds to them.

The third part consisted of a personal test to measure self-control (Baumeister, 2004) (For full self-control test, see Appendix 3). The reader picks answers on a likert scale; the result can be measured in a self-control scale. We decided to include 36 of these questions in the survey.

Fourth part was a quick cognitive test. The participants were asked to answer three questions as quick as they could, the answers could also be left blank. With this part we intended to find indications on differences in IQ. The questions were classic IQ questions, but most people have never confronted them before. The questions are easy to understand in the sense that the questions are simple and straightforward. The answers are also easy to understand when explained, but the reader is required to think ahead of the immediate impulse, to come to the right answer (Frederick, 2005); (For full cognitive test, see Appendix 4).

The last part of the survey tested time preferences. Our questions were based on “Payoff table for 6 month time horizon in the discount rate experiment” (Andersen, 2008); (For full time preference test, see Appendix 5).

3.1.3. Additional hypotheses
When we started to receive the first answers from the survey we decided to add additional hypotheses. The hypotheses are not depending on whether the individual has taken fast loans, instead we used attitude as a base to distinguish differences instead, and all observations were used in the regressions (See hypotheses 5-7, in section 1.2 Purpose).

3.2. Qualitative study
The qualitative study consists of an interview with two experts on the field of fast loans, Martin Kling and Elin Sundeman, who both work at Kronofogden. Kronofogden is an impartial authority whose mission is to create balance between payers and the ones getting paid. Martin Kling is communicator at a department working preventively to reduce indebtedness. Elin Sundeman is project leader for an ongoing project about fast loans. Martin and Elin work close together and are aiming to identify problems and find solutions in order to reduce today’s growing problems with fast loans.
4. Results

The survey was conducted in both English and Swedish and consisted of a large number of questions; we will not provide diagrams to every single one since that would result in a very large thesis. Furthermore we will test and present our hypotheses in different tables using OLS-regressions and probit-regressions to see if we are able to predict who ends up over indebted by fast loans, and what personal characteristics predict getting indebted and struggling with personal finances. If one wishes to immerse further in the diagrams, which sum up the answers to all of the questions, they can be found in Appendix.

Out of 253 individuals, only 4 respondents stated that they had taken fast loans, which was a lower number than we expected. The low number of fast loan takers, meant we could not make regressions with "taken fast loan" as the dependent variable, since it would be wrong to base the result on such a small number of individuals. Instead we made regressions basing our dependent variables on the following questions:

1. "Do you have problems affording your monthly expenditures?"
2. "If you were to take a fast loan, what would you use it for?"
3. "Do you have a credit card?"

Our survey resulted in 253 complete questionnaires. The participants were aged between 18 and 59. We got an even gender distribution, females were 49% and males stood for 51%. All levels of education that was available as options in the survey are represented, except PhD-level. The lowest willpower measured is 1.76, and the highest is 4.68. You find the summary statistics below.
## Summary statistics

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<th>Variable</th>
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</tbody>
</table>

For variable explanations, see Appendix.

### 4.1. Result from the online-survey

Out of the 253 respondents that conducted our online-survey, 130 were men, which accounts for 51% and 123 were women, which account for 49%. The youngest participant was 18 and the oldest 59 years old.
Four individuals, or 2%, stated that they had taken a fast loan while the rest of the respondents stated that they had not.

*Since we only got four individuals who answered yes to the question if they had ever taken a fast loan, we have chosen to explain their answers rather than showing graphs. If one wishes to immerse further, graphs can be found in Appendix:*

Out of the four that had taken a fast loan, two females and two males. Two respondents that had taken a loan stated that they experience having financial problems at the end of the month, while one stated very rarely and one stated sometimes.

When answering the question regarding the main reason was for taking a fast loan, three respondents stated that they took the loan to buy material things while one stated that it was to pay for a trip or leisure. Out of the four who had taken a loan, two individuals stated that they don’t regret their decision to take on a fast loan. One didn't regret the fast loan while one partly regretted taking the fast loan. Two respondents had high school as their highest achieved level of education, while one stated having a Bachelor’s degree and one having a Master’s degree.

Out of the four respondents who had taken a fast loan, the majority didn’t own a credit card and two stated that they had taken between 1-2 loans. The last two stated that they had taken between 3-4 and 4-5 loans in total. All respondents also stated that they had calculated beforehand the total amount they had to pay back. Regarding the effective rate, two stated that they were aware of it, while two stated that they were partly aware of it. The majority didn’t have problems paying off the fast loans and half of the respondents could consider taking a
fast loan again. All of the participants also stated that they found it easy or very easy to get a loan.

Those who answered no to the question if they had ever taken a fast loan (249 individuals), moved on to answer different questions than those who answered yes (Graphs can be found in Appendix):

The 249 respondents answered the following when asked about having problems affording their monthly expenditures; 49% stated that they never have problems, and 36% very rarely experienced problems affording their monthly expenditure. 11% stated that they sometimes have problems and 4% said that they frequently or most months struggle with affording their monthly expenditures.

The 249 respondents that had never taken a fast loan stated that if they were to take one, they would use the loan to do the following things; 73% stated that they would use the loan to pay bills, 11% stated that they would buy clothes, electronics or other material things. 10% would use the money to pay for a trip or leisure while 6% would pay off another loan.

Out of the 249 respondents almost half of them stated that they had a Bachelor’s degree and 33% stated that their highest level of education was a high-school degree. 15% had a Master’s degree and 5% stated elementary school (accounted for respondents with a higher age). For those 2% who stated other, they had attended Yrkeshögskola, which is a form of education, which combines theoretical studies with practice, yet still higher level of education.

Out of the 249 respondents who had not taken a fast loan, the majority stated that they owned a credit card and the majority also stated that they had student loans when asked if they had any debts or loans. Some also stated that they had mortgage loans.

46% state that they were neutral when asked how easy they feel it is to get a loan, while 30% stated that they found it easy and 20% stated that they found it very easy.

4.2. Regressions

Probit model is a model for binary responses where the response probability is the standard normal cdf (cumulative distribution function) evaluated at a linear function of the explanatory variables. The dependent variables can only take on values of either 0 or 1. We have computed marginal effects after running the probit regression in order to get the figures in percentage values (defined by: Wooldridge, 2008).
Since only a few individuals in our survey say that they have taken fast loans, we have chosen to make regressions using our last three hypotheses as basis (H5-H7). Therefore we have made regressions using three different dependent variables. In the first regression we used OLS (Ordinary Least Squares), in the other two probit.

In table 1 we have tested if individuals who consider they have problems affording their monthly expenditures can be explained by: degree of willpower, time preferences, IQ, age, gender or education. If the dependent variable take on the value 1 it means the individual never experience having problems with their monthly finances, and if the dependent value takes on the value 5 it means the individual do experience having problems with their monthly finances most months.

\[ moneyprob = \beta_1 willp2 + e \]
\[ moneyprob = \beta_1 tpref2 + e \]
\[ moneyprob = \beta_1 iq + e \]
\[ moneyprob = \beta_1 willp2 + \beta_2 tpref2 + \beta_3 iq + e \]
\[ moneyprob = \beta_1 willp2 + \beta_2 tpref2 + \beta_3 iq + \beta_4 age + \beta_5 gender + \beta_6 educ + e \]

<table>
<thead>
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<th>Table 1: What affects having problems affording monthly expenditures?</th>
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<td><strong>OLS regression</strong></td>
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***P<0.01, **P<0.05, *P<0.10
From Table 1 we can see that there is a strong correlation between willpower and having difficulties with personal finances. Low willpower indicates more problems, while individuals with high willpower seem to have fewer problems. The effect is large, moving from highest to lowest increases money problems by almost two standard deviations.

Time preferences also seem to have an effect on whether an individual has financial problems or not. Money problems seem to increase when time preferences increase, meaning that an individual with financial problems seems to put more emphasis in the present or immediate future, rather than the further future. The effect of time preferences is not as strong as for willpower, and the result is not as significant.

IQ is only statistically significant when no other variables are included, this indicates that the result is biased from omitted variables, and we can see that the effect of IQ on money problems is not statistically significant.

Age does not seem to affect whether an individual has personal financial problems. The effect of age on money problems is therefore not significant.

It seems that women tend to have more problems affording their monthly expenditures than men. This result is significant at 10% level.

Education is not significant, but seems to have a small negative effect on having financial problems. This means that a higher level of education seems to lower the level of having financial problems, but the effect is quite small, and cannot be considered as statistically significant.

In Table 2 we have tested what the individuals would use the money from a fast loan for, and if that can be explained by: degree of willpower, time preferences, IQ, age, gender or education. If the dependent variable takes on the value 1 it means the individual would use the money from a fast loan to pay bills, and if the dependent variable takes on 0 it means the individual would use the money from a fast loan to spend on other things than bills (Other things such as: clothes, electronics, other material things, trips, leisure or t pay off another loan).
In the survey all participants were asked what they would use the money for, if they were to take on a fast loan. We wanted to see if there was a difference between who would use the money to pay bills (which could be considered a more responsible way to use the money) and who would use the money for other things (buy clothes, electronics or other material things/pay for a trip or leisure/pay off another loan). To be able to conduct a probit regression we coded "pay bills" as 1 and the other alternatives as 0.

Gender seems to matter for what individuals would use the money for from fast loans. Women are more likely to spend money from a fast loan on other things than bills.
In Table 3 we wanted to see if there are explanatory variables affecting if an individual possesses a credit card. We wanted to see if we could find any interesting differences between individuals having a credit card and those who don't have credit card.

\[
P(\text{credit card} = 1|x) = \phi(\beta_1 \text{willp2} + e) \\
P(\text{credit card} = 1|x) = \phi(\beta_1 \text{willp2} + \beta_2 \text{timepref} + \beta_3 \text{iq} + e) \\
P(\text{credit card} = 1|x) = \phi(\beta_1 \text{willp2} + \beta_2 \text{timepref} + \beta_3 \text{iq} + \beta_4 \text{age} + \beta_5 \text{female} + \beta_6 \text{educ} + e)
\]

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***P<0.01, ** P<0.05, *P<0.10

Having a credit card seems to be highly dependent on how old the individual is. This result is significant at 1% level. The older the individual is, the more likely it is that they possess a credit card. This is understandable, since it is difficult to have a credit card until one reaches a certain income level. It seems like more males than females tend to possess credit cards.

IQ is not significant but seems to have a small effect on whether an individual possess a credit card. Higher level of IQ seems to lower the chance of the individual possessing a credit card.
In regression 2, the effect of IQ is even lower, which could indicate omitted variables. This could be interesting to investigate further.

The other variables don't seem to be correlated with possessing a credit card.

The fact that people have credit cards for different reasons makes this result hard to interpret. Some people might use their credit card frequently, which could indicate that they do not think much of the consequences of spending. Other people might rarely use their credit card, they might just have it as a security for unexpected events, which could indicate that they are very good at planning ahead and do think of consequences of spending.

5. Analysis

We have experienced that it is hard to reach out to people who have taken fast loans. This is not surprising, others before us have experienced the same problem. We cannot be certain why this is the case, but we believe that there are two main reasons. First of all, since it is not possible to describe a typical person who takes fast loans, it is hard to know where to look for these individuals. Secondly, we believe that many people who have taken fast loans are not proud of it, and therefore they rather not speak about it. There is a possibility that individuals who have debt problems feel that they have more important things to worry about, than to participate in a voluntary survey.

The proportion of individuals who have taken fast loans is lower in the group of individuals who have participated in our survey than the average population. More than 70 % of the participants in our survey are students (approximately 57 % were university students, and 19 % were high school students). We can therefore make the conclusion that the group taking fast loans is not usually students. This does not mean that we cannot find students within this group, but it seems higher education tends to reduce the risk for taking fast loans. We believe it takes willpower and self-control to get through high school or university to obtain a degree. This corresponds to our discoveries that students with higher levels of education are not representative for the group of individuals taking fast loans.

We have not found any proof for the hypothesis stating that individuals who take fast loans are unaware or misinformed about the underlying costs of fast loans. Most individuals seem very aware of the high costs associated with fast loans, and most individuals participating in our survey agree that fast loans should be avoided to the highest possible extent. We do see a
tendency that IQ affects if people feel that they have problems affording their monthly expenditures. A higher IQ decreases financial problems. This could indicate that people who experience having problems with their monthly expenditures, are not fully aware of their economic situation. Even if we cannot say anything for sure, we believe that people who take on fast loans have been informed about the underlying costs, but they may not be fully aware of the total costs associated with fast loans, or the fact that one might end up at Kronofogden if repayments are not made.

Our result shows that individuals experiencing problems affording their monthly expenditures are more present biased than people who are not experiencing financial problems. This suggests that it is better to plan your finances, and take future happenings in account, in order to prevent yourself from getting problems affording your monthly expenditures.

We have found that individuals with high levels of self-control tend to experience fewer problems with their personal finances. This result suggests that individuals who take fast loans may also lack self-control in comparison with those individuals that don't. Since we do not have enough individuals statistically represented that have actually taken fast loans, we can only state this as a suggestion, and not a final conclusion.

We cannot say that individuals who take fast loans are mostly less educated and less intelligent than those individuals that do not take fast loans. What we can say is that individuals who have problems with their monthly expenditures tend to have a lower level of education and also a lower on the quick cognitive test. As stated earlier, we find that students in general are not representative for the group of individuals taking fast loans. If we assume that the individuals taking fast loans are to be found within the group of individuals who experience having financial problems, we can also make the same guess as above. This is only an assumption, and one should remember that according to earlier research; what distinguishes who takes fast loans is complex and does depend on the surroundings and circumstances, as well as the own ability.

6. Suggestions for future research

We believe our research could be used for further studies. The challenge would be to find a large group of individuals, who have taken fast loans to ensure the hypotheses and to be able to make accurate tests and conclusions. We believe it is important to test for other variables
than age in order to understand who succumbs to the temptation of fast loans. We believe accurate figures from larger studies will be necessary to immerse in specific questions.

Here are some concrete ideas for further studies:

• Conduct a larger study on individuals with higher education, to confirm that our result is statistically significant.
• Conduct a comparative study, comparing low-educated individuals with high-educated individuals.

Since this field of study is basically unexplored, additional investigations will also have to be evaluated before being able to conduct deeper studies. We believe willpower is an interesting variable to include. If the effect of willpower is consisting in further investigations, actions can be taken to improve willpower for those who are at greater risk for taking on fast loans without being able to fulfill the commitment of paying back the loan.
Literature


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• Nordea.se, (2013), source 4: http://www.nordea.se/privat/lan/lan+och+krediter/privatlån/204974.html

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• http://www.svd.se/naringsliv/nyheter/sverige/en-halv-miljon-svenskar-har-fastnat-i-skuldfallan_7000269.svd
• http://www.svd.se/opinion/brannpunkt/sa-ska-skuldfallan-tacklas_7056405.svd

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• http://www.riksdagen.se/sv/Dokument-Lagar/Utredningar/Kommittedirektiv/Strategi-for-att-motverka-over_DIR2012;31/

Öppen utfrågning i riksdagen om snabb-lån (Governments open hearing on fast-loans):

• http://www.riksdagen.se/sv/Utskott-EU-name/Civilutskottet/Oppna-utfragnings/Oppen-utfragnings/?did=H0C220130219ou1&doctype=samtr

Statistics from kronofogden:

• http://www.kronofogden.se/9018.html
# Appendix

## Appendix 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>moneyprob = Money problem</td>
<td>Do you ever have problems affording your monthly expenditures?</td>
</tr>
<tr>
<td>moneyp = probit Money problems</td>
<td>Do you ever have problems affording your monthly expenditures?</td>
</tr>
<tr>
<td>tpref = Time Preferences</td>
<td>Ten questions used to produce a number to describe the persons time preference.</td>
</tr>
<tr>
<td>tpref2 = (tperf-min)/(max-min)</td>
<td>Description: By using the formula stated we made the answers for time preferences into numbers between 0 and 1.</td>
</tr>
<tr>
<td>age</td>
<td>Participants were asked to state their age.</td>
</tr>
<tr>
<td>gender</td>
<td>What gender are you?</td>
</tr>
<tr>
<td>educ</td>
<td>What is your highest achieved level of education?</td>
</tr>
<tr>
<td>iq</td>
<td>Participants were asked 3 questions which will indicate their cognitive reflection level, or iq level.</td>
</tr>
<tr>
<td>willp = Willpower / Self-control</td>
<td>20 questions which would give an indication of the participants self-control were asked.</td>
</tr>
<tr>
<td>willp2 = (willp-min)/(max-min)</td>
<td>Description: By using the formula stated we made the answers for willpower into numbers between 0 and 1.</td>
</tr>
<tr>
<td>credit card</td>
<td>Do you have a creditcard?</td>
</tr>
<tr>
<td>creditcard = probit credit card</td>
<td>Do you have a creditcard?</td>
</tr>
<tr>
<td>Pay bills = If you took on a fast loan...</td>
<td>If you were to take on a fast loan, what do you think the main reason would be?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Answers</th>
<th>Answer coded as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Very rarely</td>
<td>2</td>
</tr>
<tr>
<td>Sometimes</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Most months</td>
<td>5</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td>Very rarely</td>
<td>0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td>Frequently</td>
<td>1</td>
</tr>
<tr>
<td>Most months</td>
<td>1</td>
</tr>
<tr>
<td>High number indicates high time preference, which means the person is focused on the present or the immediate future. Low number indicates low time preference, which means the person puts more emphasis in the further future.</td>
<td>Numbers 1-11.</td>
</tr>
<tr>
<td>Same as above.</td>
<td>Numbers between 0-1</td>
</tr>
<tr>
<td>All ages stated were recorded.</td>
<td>Numbers 17-57</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
</tr>
<tr>
<td>Elementary school</td>
<td>1</td>
</tr>
<tr>
<td>High School</td>
<td>2</td>
</tr>
<tr>
<td>University, Bachelor level</td>
<td>3</td>
</tr>
<tr>
<td>University, Master level</td>
<td>4</td>
</tr>
<tr>
<td>Each correct answer gives 1 &quot;point&quot;, maximum score is therefore 3, and minimum score is 0.</td>
<td>Numbers 0-3</td>
</tr>
<tr>
<td>All questions had answers on a likert scale from 1-5. An average of all questions will give a number on a self-control scale. The higher score the better self-control.</td>
<td>Any number between 1-5</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>No, but planning to get one</td>
<td>2</td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>No, but planning to get one</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>To buy clothes/electronics/other material things</td>
<td>0</td>
</tr>
<tr>
<td>To pay for a trip or leisure</td>
<td>0</td>
</tr>
<tr>
<td>To pay off another loan</td>
<td>0</td>
</tr>
<tr>
<td>To pay bills</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix 2.
For those who answered yes to the question if they had ever taken a fast loan, the following diagrams present their answers:

Do you ever have problems affording your monthly expenditure?

- Never: 50%
- Very rarely: 25%
- Sometimes: 25%

What was the main reason that you took a loan?

- To buy clothes / electronics / other material things: 25%
- For pay for a trip or other leisure: 75%
- To pay bills: 25%
For those who answered no to the question if they had ever taken a fast loan, they moved on to answer similar questions to those who answered yes:
If you were to take on a fast loan, what do you think the main reason would be?

- To buy clothes / electronics / other material things: 6%
- To pay bills: 11%
- For pay for a trip or other leisure: 10%
- To pay off another loan: 73%

What is your highest achieved level of education?

- Elementary school: 45%
- University / College, Bachelor: 33%
- University / College, Master: 15%
- PhD: 5%
- High-school: 2%
- Other: 2%
Appendix 3.
Self-control test
All questions were answered using a likert scale:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

1. I am good at resisting temptation.
2. I have a hard time breaking bad habits.
3. I am lazy.
4. I say inappropriate things.
5. I never allow myself to lose control.
6. I do certain things that are bad for me if they are fun.
7. People can count on me to keep on schedule.
8. Getting up in the morning is hard for me.
9. I have trouble saying no.
10. I change my mind fairly often.
11. I blurt out whatever is on my mind.
12. People would describe me as impulsive.
13. I refuse things that are bad for me.
15. I keep everything neat.
16. I am self-indulgent at times.
17. I wish I had more self-discipline.
18. I am reliable.
19. I get carried away by my feelings.
20. I do many things on the spur of the moment.
21. I don’t keep secrets very well.
22. People would say that I have iron self-discipline.
23. I have worked or studied all night at the last minute.
24. I’m not easily discouraged.
25. I’d be better off if I stopped to think before acting.
27. I eat healthy foods.
28. Pleasure and fun sometimes keep me from getting work done.
29. I have trouble concentrating.
30. I am able to work effectively toward long-term goals.
31. Sometimes I can’t stop myself from doing something, even if I know it is wrong.
32. I often act without thinking through all the alternatives.
33. I often act without thinking through all the alternatives.
34. I often interrupt people.
35. I sometimes drink or use drugs to excess.
36. I am always on time.
By receiving a number between 1 and 5 on each question, an average can be calculated which indicates the individual's degree of self-control, or willpower. A high number means high willpower. Note that some answers have to be reversed before calculating.

Appendix 4.

The Cognitive Reflection Test (CRT)

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? _____ cents</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? _____ minutes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? _____ days</td>
<td></td>
</tr>
</tbody>
</table>

We gave the individuals 1 point for each correct answer. The lowest score was therefore 0 and the highest score was 3.

Appendix 5.

<table>
<thead>
<tr>
<th>Payoff Alternative</th>
<th>Payment Option A (Pays amount below in 1 month)</th>
<th>Payment Option B (Pays amount below in 7 months)</th>
<th>Annual Interest Rate</th>
<th>Annual Effective Interest Rate</th>
<th>Preferred Payment Option (Circle A or B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3000 DKK</td>
<td>3075 DKK</td>
<td>5</td>
<td>5.09</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>3000 DKK</td>
<td>3152 DKK</td>
<td>10</td>
<td>10.38</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>3000 DKK</td>
<td>3229 DKK</td>
<td>15</td>
<td>15.87</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>3000 DKK</td>
<td>3308 DKK</td>
<td>20</td>
<td>21.55</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>3000 DKK</td>
<td>3387 DKK</td>
<td>25</td>
<td>27.44</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>3000 DKK</td>
<td>3467 DKK</td>
<td>30</td>
<td>33.55</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>3000 DKK</td>
<td>3548 DKK</td>
<td>35</td>
<td>39.87</td>
<td>A</td>
</tr>
<tr>
<td>8</td>
<td>3000 DKK</td>
<td>3630 DKK</td>
<td>40</td>
<td>46.41</td>
<td>A</td>
</tr>
<tr>
<td>9</td>
<td>3000 DKK</td>
<td>3713 DKK</td>
<td>45</td>
<td>53.18</td>
<td>A</td>
</tr>
<tr>
<td>10</td>
<td>3000 DKK</td>
<td>3797 DKK</td>
<td>50</td>
<td>60.18</td>
<td>A</td>
</tr>
</tbody>
</table>

We observed when the individual switched preference, from getting paid 3000 SEK in a months’ time, to a preferred alternative 7 months ahead. This means numbers ranging from 1-11 were possible outcomes. The lowest number, 1, means the individual would always prefer getting paid the higher amount 7 months ahead. The highest number, 11, means the individual would always choose to get paid 3000 SEK in one months’ time.