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## The effect of Payday loans on financial distress in the UK

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### Abstract

This paper proposes a model to examine the effect of unsecured payday loans to financial distress of low-income households and aims to open a discussion within academics and government on this topic. The theoretical model is based on the evidence from the British Household Panel Survey and interviews done by Consumer Focus which show that the proportion of households in debt problems has increased since 2000 particularly among young, economically active population. The increase in financial distress among British households is in coincidence with increasing revenue of payday loans, particularly after financial crisis. The proposed model aims to investigate the effect of payday loan usage on the financial distress while taking into consideration individuals' economic austerity such as difficulty of paying mortgage, rent and utilities bills; household food insecurity; loss of job; and risk of debt spiral.

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*Keywords:* Payday loans; Financial distress; Debt; Rollover of loans

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### 1. Introduction

Short-term consumer financing is not a new phenomenon and the concept can be traced to the mid-1700s. In the UK, the current payday loan industry developed from an economic vacuum in the short-term credit markets, as sources of short-term credit dried up and accelerated during the financial crisis. Short-term financing that has also a form of payday loans is addressed to people who are in a need to fill in the financial gap between their current financial situation and the next payday. Therefore, these loans are designed as a short-term, easy to apply for, quick loans. The market is growing markedly as according to report published by the Office of Fair Trading (OFT) the payday loans market has grown up from 2008 when it was worth £900 million to £2.0 billion in 2012, and is currently worth £2.8 billion. Nowadays, there are 90 payday lending companies operating in the UK spread in 1238 locations and employing more than 4800 people (Edmonds, 2014). In general, payday loans may be seen in a positive light as helping consumers with short-term shortage of financial ability to cover costs. Since the main age group of customers is represented by

customers aged between 26 – 45 years (53.4%)\*, it may be assumed that the population in a productive age should not have a problem to repay such a loan. Due to the financial crisis, the rate of unemployment within young people increased significantly and payday loans shifted out from being an optional financing for covering the emergency expenses, unexpected bills or recreational spending to more of “daily basics” financing. Payday loan companies are also known for making their products available to low income customers with serious debt problems or bad credit history and encouraging irresponsible lending that leads to a long-term debt spiral. According to Government’s report (2014) in the last 5 years 52% of payday loan customers have experienced debt problems while 38% of payday loan customers had experienced a bad credit rating, 35% had to make arrangements with creditors, 11% had experienced a county court judgment and 10% had been visited by a debt collector. The statistics also show that about 28% of the payday loans issued in 2011 were rolled over at least once and 5% more than four times, accounting for more than 50% of the payday lenders’ revenue.

Although it can be argued that improved access of high credit-risk individuals can ease financial distress by allowing individuals to better smooth income or consumption shocks (Ausubel, 1991). Payday loans can be in benefit of individuals if they are representing a financial advantage over a next best possible borrowing option (Malzer, 2011). An important question to consider in this context is whether improving access to credit, does not create a long-run debt spiral and worsening of financial distress as a consequence of an irresponsible lending of payday loan companies. Economic theory does not provide a sufficient answer to this question thus this paper proposes a model for investigating the effect of payday lending industry, which provides short-term loans at high interest rates to higher credit-risk individuals in order to study the issue of possible financial distress empirically. Employing a measure of payday loan effect on financial distress of high credit-risk individuals, the proposed model estimates the effect of payday loan usage on the different aspects of individuals’ economic austerity: difficulty paying mortgage, rent and utilities bills; household food insecurity; loss of job; and risk of debt spiral.

The paper is organized as follows. The Section 2 discusses the literature review. The Section 3 presents the profile of payday loans consumers and Section 4 outlines the modelling framework and Section 5 contains the main concluding remarks.

## 2. Literature review

The financial distress, which has occurred significantly in the UK over the years, especially during the financial crisis, can be defined as a condition to where individuals cannot or have difficulties with debt repayment (McCarthy, 2011). The characteristics which are usually investigated as drivers of financial distress of households include marital status, age, job security, source and level of household income (Giannetti et al., 2014). The importance of sources of over-indebtedness which leads to financial distress also depends on a country specific. While in developing countries where financial literacy may be among the main reasons (Boakye and Amankwah, 2012), the results of the survey by Livingstone and Lunt (1992) show that the level of education does not play a significant role in the UK. On the other hand, survey by Brown and Taylor (2008) among UK consumers shows that significant role is played by the actual source of income. Other studies on the UK show that also socio-demographic background such as age plays important role highlighting the fact that younger age individuals possess higher risk of over-indebtedness (Bridges and Disney, 2004; Livingstone and Lunt, 1992). The study on financial distress among British households that considers age as important factor has been done by Del-Río and Young (2005) and shows that from 1995 to 2000 there was an increase in indebtedness among the young individuals which led to their increasing debt problems. However, the actual worsening of debt problems among young group cannot be solely considered to be due to a low risk perception but economic circumstances need to be considered as well. As noted earlier, the unemployment among young economically active population has been increasing in recent years and became a systematic problem not only in the

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\* Followed by older customers in age range between 46 – 65 years (23.7%) and nearly equal proportion of younger customers in age range between 18 – 25 years (22.9%).

UK but also elsewhere in Europe. The young economically active population is therefore under the pressure of job insecurity, lower risk perception and possibly low precautionary savings. Benito (2006) provides supportive evidence that young households are more likely to be under the pressure of reducing non-durable consumption or delay the purchase of durables due to low or zero level of savings which consequently may lead to taking high interest rate loans. Another study among UK consumers shows that adverse shocks such as loss of job may also lead to over-indebtedness (Disney et al., 2008).

Even though the theory of rational behaviour suggests that the desire of a rational behaving individual to borrow is reduced when there are expectations of instable income, this behaviour has been also proved by study of Bertola and Koeniger (2007), the risk-sensitivity theory and empirical evidence on payday loan consumers suggests contrasting behaviour. The theory predicts that individuals shift from risk-aversion to risk-preference when they are under the pressure of need. The need represents the disparity between an individual's current state and desired state (Ermer et al., 2008; Mishra and Fiddick, 2012). The explanation may not be so straightforward. In the case of payday loans, another source of over-indebtedness and financial distress where theory does not provide sufficient evidence, but may be explanatory, is the factor of self-control. The over-indebtedness or financial distress, which may occurred from rolled on loans, can, as proposed by Strotz (1956), be expected in cases when individual's income is under the pressure of creditors. Once the debt is paid the individual is more likely to incur in another one. The default on debts is therefore a consequence of individual's behaviour, with usually low-income background, that due to low self-control cannot resist taking another loan even though he/she is aware of high risk of a financial distress. According to O'Donoghue and Rabin (1999) the behaviour of individuals can be in contrast to the rational behaving individuals. Individuals may choose to borrow even if the future costs of borrowing significantly outweigh the initial benefits. Due to their lack of self-control and commitment to repay the loan in one period, individuals end up paying interest rate over many periods and because of their systematic underestimation of their ability to repay loans; repeated borrowing reduces their welfare and increases financial distress. The risk-sensitivity theory therefore formally predicts that decision makers shift from risk-aversion to risk-preference in situations of need, where need is defined as disparity between an individual's present state and desired (or goal) state (Ermer, et al., 2008; Mishra and Fiddick, 2012).

In summary, when investigating the problem of financial distress, most of the authors pay attention to socio-demographical or economic characteristics as one of the main factors of increasing trend in over-indebtedness and financial distress among British households. A number of studies have investigated the gaps on the credit market and the role of unsecured debt. However, none of the studies has investigated the actual effect of payday loans on households' financial distress while considering other socio-demographic and economic factors. Therefore the following part presents the profile of payday loans consumers whose behaviour patterns are used for proposing a theoretical model introduced afterwards.

### **3. Profile of payday loans consumers and factors influencing the decision making**

As mentioned earlier, the majority of payday loans consumers belong to low income group with income lower than £15, 499 which is below the mean UK average of £24,492. According to the survey by Consumer Focus (2010) more than 50% of interviewed consumers in South East, London, North England and Scotland have been in a substantial debt at the time taking the payday loan. While some of the consumers described their experience with payday loans as positive, consumers who were already in financial difficulty reported negative experience related to the roll over debts as a consequence. A certain pattern, which however cannot be ruled out, can be observed from the above survey. Even though most of the respondents were from low income group, not all of them experienced worsening of the financial situation as a consequence of taking the payday loan. As discussed in the literature, this may be explained by the level of self-control as well as the upper or lower band of the low income group. It can be therefore assumed that the low income household with income from the lower band is more likely get into cycle of repeating borrowing or accessing loans from several payday loan companies at the same time due to inability of repaying. Significant number of respondents also admitted problems with managing money and had a history of large debts. This finding is in line

with previous research done by Mishra and Fiddick (2012) and shows that over-indebtedness may be an outcome of the risk-preference in situations when households experience financial distress.

The survey also uncovers that the main factor of affecting the decision making is to existence of gap between actual income and level of costs when alternative solutions such as overdrafts and credit cards are unavailable due to poor credit rating or exhausted use of these resources. An observable pattern of lower perception of risk and irrational behaviour of borrowers can be identified from the behaviour of respondents. As respondents in the survey admitted, the problem of repaying the loan accelerated by taking more or higher loan than they would usually do due to increased leisure spending.

An important issue that opens a discussion on the level of payday loan companies' regulation is that repeated payday loans or taking multiple loans is easier since the financial situation or employment has not been check when taking additional loan.

Based on the information about payday loan consumers, next part introduces a proposed theoretical model which encounters the behaviour of consumers.

#### 4. The theoretical model

To provide a theoretical explanation for the effect of payday loans on financial distress, this part introduces a model which describes the behaviour of individuals. Assume that lower income individuals or households' consumption decreases below a certain level thus they are experiencing payment problems. Due to a bad credit history, or simply due to the fast availability of finance offered by payday loan companies, they decide to take a payday loan. Then the payment problem which may lead to financial distress and roll over of loans can be expressed as:

$$c_t^i = y_t^i + Pl_{t+1}^i - (1 + i_t)Pl_t^i \tag{1}$$

Where  $c$  represents consumption of the individual (household),  $y$  is the total individuals' or household's income (in a case of dependents, this also includes benefits),  $Pl$  is the amount of payday loan,  $i$  represents the interest rate on payday loan. The individual's (household's) consumption at the time having a payday loan can be written as:

$$y_t^i - i_t Pl_t^i \tag{2}$$

Since the total income of the households had been low before the payday loan was taken and when considered that the usual  $i$  (interest rate) is high it represents an extra pressure on households' budget and consumption. Thus, assume that individual or household starts experiencing a debt problem. When the available amount of consumption is low however household can still manage to go through till the next payday without taking another payday loan:

$$y_t^i - r_t Pl_t^i > \tilde{c}_t^i \tag{3}$$

where  $\tilde{c}_t^i$  is a certain level of individuals' affordable consumption and can be expressed as:

$$\tilde{c}_t^i = (1 - \alpha_t^i + \mu_t^i)Y_t^i \tag{4}$$

where  $(1 - \alpha_t^i)$  stands for individuals income that is sufficient to satisfy a certain level of consumption and  $\mu_t^i$  stands for specific characteristics of individuals discussed later and  $Y_t^i$  is individuals income without payday loan. Thus, the equation (3) represents a case when individuals or households experience lower affordable consumption due to the payday loan; however the level of affordable consumption is not low enough to make them to take another payday loan. The fact that there is no need for another payday loan may be explained by an income in upper band of low income category, the actual amount of payday loan and interest rate or flexibility in changing the patterns in short-term consumption. However, if individuals' income is from lower band of low income category or is not able to make any short-term changes in patterns of his/her short-term consumption; the level of affordable consumption may be too low and individuals experience a financial struggle:

$$y_t^i - r_t Pl_t^i < \tilde{c}_t^i \tag{5}$$

It is assumed that this lead to taking another payday loan in order to fill in the income gap and raise the level of affordable consumption. What in a short-term looks like an increase in affordable consumption can turn into long-term debt spiral.

As noted, the distinction between the above situations is made by specific factors of individuals and their flexibility in changing consumptions patterns as well as the size of payday loan. The size of taken payday loan relative to

individuals' income also reflects the level of risk perception which is influenced by a number of factors such as age or number of dependents. This specific factor which makes a distinction in these two situations can be written as:

$$\mu_t^i = \beta_t^i + \epsilon_t^i \quad (6)$$

where  $\beta_t^i$  represents individuals' consumption which covers monthly basic costs and  $\epsilon_t^i$  represents individuals' specific characteristics that determines their debt risk perception but cannot be observable such as previous experience, personality, urgency etc.

Thus it is assumed that individual or household is likely to go through the short-term period without need of another payday loan and avoiding the future long-term debt spiral and financial distress if:

$$H_t^i = i_t \frac{P_t^i}{y_t^i} + (1 - \alpha_t^i) \left( \frac{y_t^i - y_t^i}{y_t^i} \right) + \mu_t^i \left( \frac{y_t^i - y_t^i}{y_t^i} \right) + \beta_t^i + \epsilon_t^i < \alpha_t^i \quad (7)$$

but are more likely to be in a situation when they take another payday loan and increase the likelihood of over-indebtedness and financial distress if:

$$H_t^i = i_t \frac{P_t^i}{y_t^i} + (1 - \alpha_t^i) \left( \frac{y_t^i - y_t^i}{y_t^i} \right) + \mu_t^i \left( \frac{y_t^i - y_t^i}{y_t^i} \right) + \beta_t^i + \epsilon_t^i > \alpha_t^i \quad (8)$$

where  $H_t^i$  represents the household's situation which can be expressed as the ratio of the interest paid on payday loan, individual's income before taking a payday loan relative to the income after taking a payday loan followed by specific factors which influence individual's behaviour and risk perception, and also the unobservable factors that determine individual's behaviour.

## 5. Conclusion

This article proposed a theoretical model of payday loans consumers' behaviour based on the patterns identified in their profile and factors influencing their decision making processes. The aim was to introduce a model which can be used for empirical analysis of the effect of payday loan on financial distress among British households. Although several studies have investigated the problem of unsecured debts there is a lack of literature on the effect of payday loans.

While typical factor contributing to lower risk perception of unsecured debts is considered to be education, this has not been found as significant in the case of British households. In contrast to previous research on unsecured debts, the theoretical model proposed in this paper encounters for individuals' economic austerity such as difficulty of paying mortgage, rent and utilities bills; household food insecurity; loss of job; and risk of debt spiral. Nevertheless, further research and empirical analysis is needed to fully complete the picture suggested by this model.

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