# Default and Personal Credit Rating

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*Abstract.* **In this paper the importance of individuals default evaluation by credit rating is analysed, the concept of personal credit rating and its benefits for the individuals is defined. The aim of the article is to determine importance of personal credit rating for individuals. The accomplished research showed that almost half of respondents fail to fulfil their obligations on time and that majority of respondents do not know what personal credit rating is. Scientific literature, comparative analysis and survey of Lithuanian households were used in the article.**

*Keywords:* **creditworthiness evaluation, credit history, default, personal credit rating.**

## I. Introduction

Rapid increase in credit availability and growth in credit use has been observed over the past decade, but now the countries affected by the recession more frequently speak about the need to help people failing to repay loans. This happens because banks offered wide lending opportunities and people more often make thoughtless lending decisions which can "trap" them later into insolvency. Increase in the number of past due payments, unexpected changes in the economy, enlarged competition among banks are increasingly highlighted the need of persons' default risk management, so financial institutions use a personal credit rating system to assess this risk. Such assessment is one of the most important processes affecting credit management decisions of banks, so the scientists show big interest in credit risk management and persons` default usually associate with credit risk and analyse its importance to creditors. Meanwhile, default significance for person is usually not studied. Personal credit rating depends on person` actions and the risk of insolvency may be reduced only by person himself, therefore, the knowledge of factors influencing default is becoming more and more relevant in dealing with financial problems. So, a person who is able to fulfil obligations in time is appealing to the creditors and also create own financial well-being, while delayed payments cause borrowing difficulties and interfere to reach financial goals.

## II. Factors Influencing Credit Rating

The exact formula for customer credit score is kept secret by every organization that accomplishes rating just like the exact formula for Coca-Cola is a trade secret (Demyanyk, 2010). However, the main 'ingredients' of some credit score are known. Personal rating includes information on an individuals` experiences with credit, leases, non-credit-related bills, monetary-related public records, and inquires about persons` credit history, etc. (Avery et al., 2004). Although hundreds of factors can be set up from credit history records, only those, which are statistically significant in predicting future obligations, are used in calculating credit rating (Saunders, Allen, 2002).

By studying the credit rating factors, Avery et al. (1996) note in their studies that factors and their weights in assessment of creditworthiness may vary depending on the underwriters and their models, but still most of these factors can be grouped into four broad categories (Avery et al., 2004): payment history, personal debts, length of credit history and acquisition of new credit. The most important group of factors in calculating credit rating is one that related to payment history. This fact has already been noticed in 1982 by Capon, later observed by Thomas (2000), and Saunders, Allen (2002) when analysing credit risk assessment methods. Demyanyk (2010), in accordance with Hendriks (2005) classification of rating factors, represent very similar to the mentioned authors factors grouping, however she distinguishes one more factor – type of credit which results in a five groups of factors. All five main factors which have a decisive influence on the calculation of personal FICO[1] credit rating can be seen in Table I.

Thus, not all authors formulate the basic factors in the same way, but as can be seen from the comparisons in all cases authors agree that the group of factors related to the payment history is inevitable in the rating. Therefore, the most important factor in calculating the ranking should be considered the information that comes from personal credit history.

## III. Benefit of Personal Credit Rating for Households

The analysis of scientific literature shows that many authors tend to identify benefits of credit rating just for creditors, but households can also use credit history information for managing their own personal finances.

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[1]The first personal credit scoring models were developed by the Fair Isaac Corporation more than 50 years ago (1956) in Unites States of America. The scores produced by the models, FICO scores, were named after the company and are well-known today and extensive used of worldwide (Demyanyk, 2010).

1 TABLE.
FACTORS AFFECTING FICO CREDIT RATING

| Factor affecting FICO | Portion of score | Explanation |
|---|---|---|
| Payment history | 35% | Lenders are interested in: payment history on all accounts; the length of positive credit history; severe unpaid debts; the number of delinquencies in credit history. |
| Amount owed | 30% | Too many credit accounts and a high ratio of credit balances to credit limits can affect credit score. The amount of debt on each account affects credit rating. |
| Length of credit history | 15% | Longer credit histories result in higher scores. Factors incorporated into credit scores are: length of credit history, length of time specific accounts have been opened, and the duration of time since each account was last used. |
| How much new credits have | 10% | Credit scores track persons who suddenly overtake a new debt and potentially overextend themselves. Creditors check to see when the last time a person opened credit account and how many accounts were opened and how many inquiries on the credit reports were made. |
| Type of credit | 10% | The type of credit plays an important role in determining credit score. A "healthy mix" of instalment loans and revolving credit from banks is considered better for one's score. |

**Source**: adapted accprding Hendriks, 2005 and Myfico.com, 2012.

Fuller, Dawson (2007) argues that people can use this information for better understanding of their own credit risk. Personal credit rating can help to determine whether a person can afford certain purchases or apply for credit and so on.

According to Barefoot (1995) and Burns (2010), the credit rating system reduces the need for human intervention in creditworthiness assessment, i.e. the cost of credit is reduced through the elimination of expensive manual underwriting processes. Burns (2010) says that thanks to this system consumers receive credit offers that are better matched to their risk profile, providing better protection from overextension of credit and ensure fairer credit pricing. Moreover, the author points out the most important thing that credit scores deliver an incentive for borrowers to adopt better financial habits in order to receive the best borrowing terms and conditions. Credit scoring systems provide benefits for all economy. According to the Federal Reserve Board (2007), personal credit scoring systems has increased the share of applications that are approved for credit, reduced the costs of underwriting and soliciting new credit, increased the speed of decision making, moreover, credit scoring increases the efficiency of credit markets by helping creditors to establish pricing that is more consistent with the risks and allows lenders to offer lower interest rates.

As Fuller, Dawson (2007) note, another important use of credit scores is for individuals to check on the possibility that they have been a victim of identity theft. If someone has used another person's identity to apply for loans, this information will appear in the credit report. Nowadays when identity theft cases are increased, ability to check credit history and rating is a huge advantage of this system (Burrell, 2007).

A good credit history is an important tool to get a loan, cheaper insurance, lease or other services. A good rating provides opportunity to borrow money from lending sources easier, to agree on more favourable insurance terms or other suppliers services (Barefoot, 1995). So, a good credit history is one of the most important factors in maintaining the financial well-being, also having a good credit history means much more than just access to favourable loan terms - it represents the persons` purchasing power, because the higher the rating, the more you can buy. Various foreign authors also highlight the main advantages of high credit rating such as:

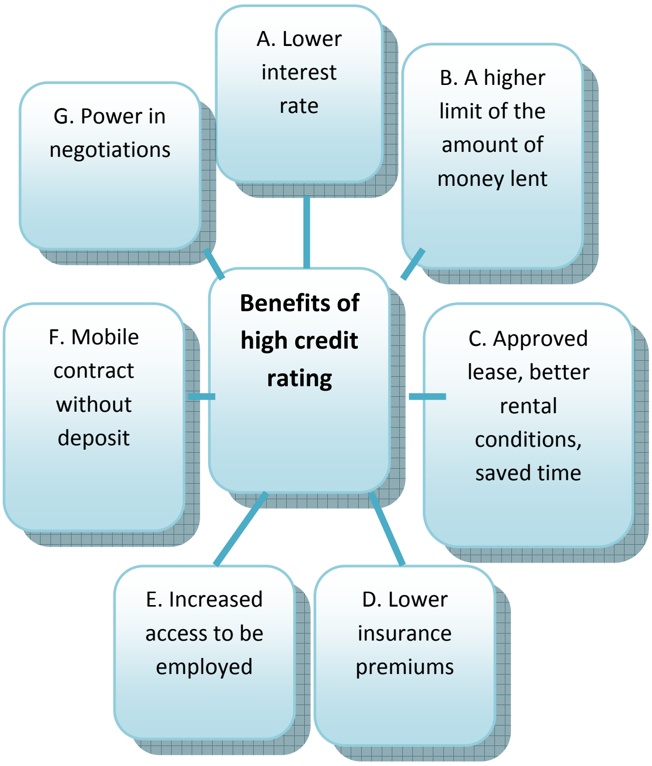


Fig. 1. Benefit of credit rating for individuals

A. Lower interest rate for mortgage loans, credit cards, leasing; B. A higher limit of the amount of money lent; C. Approved lease, better rental conditions, saved time and efforts looking for such owner who is less interested in bad credit history; D. The higher credit rating is expected the less probability that unexpected event will take place; therefore the lower insurance premium is set; E. Increased access to be employed. Employers could verify credit history to evaluate individuals' responsibility and plausibility; F. For clients with bad credit history renders of mobile services could not sign a contract, contrary clients with good ratings do not pay additional deposit and get discounts for purchase of phones together with a contract; G. More power in negotiations as creditors are interested in highly rated clients and they tend to negotiate.

Summarising, authors agree that credit rating accord measured benefit for households. The credit rating is accurately calculated according valid credit history information thus limiting possible subjectivity form evaluators' side (Burns, Quinn, 2010). Authors perceive such evaluation system stimulate consistency of decision making process as each credit history is fixed according the same valuation formula without any exceptions and thus possibility of any discrimination is reduced. Scientific literature distinguishes that rating helps creditors to make more accurate, effective and more usable in sense of time for customers lending decisions. However supreme advantage of credit rating system is that it insists individuals to follow up good financial practice that will help to manage own finances and sooner reach financial satisfaction in future.

## III. INVESTIGATION OF INDIVIDUALS LIABILITIES NON FULFILMENT

An investigation of Lithuanian employable adults was accomplished on purpose to identify individuals' attitude to non fulfilment of financial liabilities and factors influencing it by using structured questionnaire, delivering 23 questions for respondents. 284 respondents were interviewed placing the questionnaire in the internet page www.apklausos.lt. Statistical reliability of accomplished investigation is standard 94.3 proc.[2], thus it could be stated that the investigation is sufficiently representative and according its results may judge about general aggregate.

Firstly, investigation was designed to clarify whether individuals pay all their bills in time as this could cause possibility of risk of non fulfilment of liabilities and the need to manage such risk. After answering this question it was proved that slightly more than half respondents manage to meet own obligations in time and 41.9% have overdue payments from 1 week to 3 months, Fig. 2.

As it is showed in the diagram, majority of respondents that overdue payments are late to pay for 1-2 weeks, and least indicate that they have unpaid bills more than 3 months. Delay more than 90 days is such point over which the client is appreciable as not being in a fit state to fulfil its financial obligations and this information is recorded in the credit history.

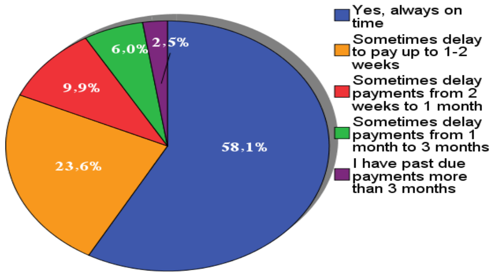


Fig. 2. Individuals, meeting and not meeting liabilities in time (shares in percentage)

Overdue for more than 2 weeks is a signal of inadequate obligations management and possible non fulfilment of liabilities in the future. As any overdue even short term is unacceptable it could be concluded that 41.9% of respondents (119 individuals) could be considered as not fulfilling liabilities in time. Such situation means that nearly half persons should be chewed about accurate obligations management.

Accomplished survey shows that respondents who do not manage their finances commonly are not in a fit state to pay their bills. 62.2% of 119 respondents who do not fulfil their liabilities in time do not manage their finances. Thus managing personal finances calculating when and what amount of money is needed, preparing financially for unforeseen situations could help to avoid possible non fulfilment of liabilities, Fig. 3.

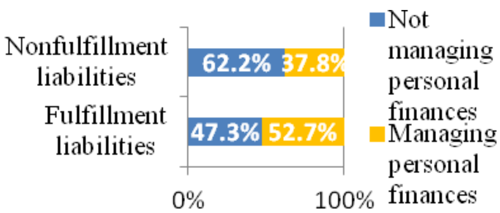


Fig. 3. Fulfilment of liabilities due to personal finance managing (%)

Thus it is useful for every person to control and plan own financial cash flows (income and outcomes). Finance management ensures not only positive results but is riskless meeting obligations.

It was interesting to find out do respondents know that their creditworthiness is evaluated by credit rating using personal credit history data. Such evaluation of meeting obligations stimulate people to follow up own financial liabilities, thus it was analysed do they know what credit rating is and do they understand it correctly. Accomplished survey revealed that 70% of respondents do

[2] Reliability of accomplished questionnaire is evaluated using I. Paniotto formula:

$$p = 1 - \Delta = 1 - \sqrt{\frac{1}{n} + \frac{1}{N}} = 1 - \sqrt{\frac{1}{284} + \frac{1}{172480}} = 0{,}943;$$

*here* p – reliability degree;
Δ – bias;
n – amount of respondents;
N – amount of aggregate members.

not know what credit rating is, and the rest 84 persons (30%) affirm knowing, Table II.

TABLE II.
UNDERSTANDING OF PERSONAL CREDIT RATING DUE TO AVAILABLE FINANCIAL LIABILITIES

| | | Do you have loans or other financial liabilities | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | Mortgage loan | Studies' loan | Consumer loan | Fast credit companies' loan | Leasing | Credit card limit | No, don't have | |
| Do you know what credit rating is? | Yes | 15 | 4 | 13 | 1 | 6 | 6 | 39 | 84 |
| | No | 10 | 10 | 19 | 15 | 8 | 11 | 127 | 200 |
| Total | | 25 | 14 | 32 | 16 | 14 | 17 | 166 | 284 |

61 people from latter presented a correct definition of credit rating while 26 people defined it incorrectly; they mostly explained credit rating as personal loan rating, as ratio of person's debts or ratio of income and expenses. Respondents who properly understand credit rating definition are: 26-35 years old, with higher education, citizens of bigger cities and having a mortgage loan. Probably such people know what credit rating is as they faced their own creditworthiness evaluation before raising a credit. It is beneficial for a person to know his own credit rating as this informs him how he managed his liabilities and how he succeeded his loans.

## IV. CONCLUSIONS

The needs of people are increasing even with lack of money in contemporary world. Thus persistent growing of borrowing alternatives solves the problem of supply and demand on behalf of consumption needs. But this could become a financial burden if not managing to fulfil obligations in time without estimation of possible financial sequences. Such default probability becomes more important for both – creditors and consumers thus the personal credit rating is used to evaluate and manage such risk. The scientific literature defines credit rating as digital measure of a person to fulfil its own obligations in time, which is based on credit history and analysis of covering of current liabilities. The credit rating system enables creditors to increase the amount of granted credits, reduce credit costs and decision making process, to grand more loans that is more consistent with the risks and above all the rating stimulate people to follow respectable financial habits.

The benefit of credit rating for people is that they could use this information to better understand their own credit risk, credit rating could help to decide to purchase or not some buy. In addition knowing his own credit rating one could better recognize how he manages to range his debts. Non fulfilment of liabilities that causes low credit rating is no beneficial neither to person himself nor to creditor. So appropriate liabilities management could help not only to embrace the best lending conditions, to reach financial goals, develop financial wealth but also to avoid default risk.

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