PERSONAL BANKRUPTCIES AND THEIR COMPARISON OF REGIONS HRADEC KRALOVE AND PARDUBICE WITH REGIONS OF USTI NAD LABEM AND LIBEREC

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Abstract

This paper focuses on the personal bankruptcies in chosen regions of Czech Republic. The aim of the paper is to describe the structure of all debtors, whose financial situation is forcing them to declare a bankruptcy. Among aspects we have analyzed belong the age of debtors, the amount of debtor's income, their gender, the total amount of debt and the level of achieved education. The research divides creditors into three groups - "Banking institutions", "Nonbanking institutions" and "Others". Each debtor is therefore analyzed whether having one, two or all three groups of creditors among their liabilities (debts). Furthermore this paper aims to compare regions of Hradec Kralove and Pardubice with other two regions of Liberec and Usti nad Labem. We are going to analyze all possible differences that may these bordering regions evince. Mostly we focus on analyzed aspects mentioned above, but we also add the basic characterization of these regions such as the size of the region, the population or the rate of unemployment. The reason for adding such statistical figures is to adequately explain possibly arising differences. All these four regions are located in northern part of the Czech Republic, more accurately north of capital region of Prague.

**Key words:** Personal bankruptcy, Czech Republic, Debt relief, Insolvency

**JEL Code:** G33, K35, M41

Introduction

There might be many reasons for a person to get trapped in to problem with loans, more accurately with repaying them. Basically we can say that problems with repaying loans having people that spend more that they earn.

To explain this statement we take categories of Insolvency (Carter, Auken, 2006) that are meant to explain why some people fall under bankruptcy. They establish three categories that contain lack of financial knowledge, Inaccessibility to debt and economic climate. These

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three categories target a goal to explain why people start have financial problems that cannot solve on their own. When a person does not understand what he actually agreed on in the loan agreement it is the best way to find impossible to repay the loan back. Also these insidious conditions are often used not by banks but by non-banking institutions that are not regulated as banks. To connect on the other category of insolvency we have to state that minimum of those, who ask for debt relief, have only banking institution as a one and only creditor. The meaning of inaccessibility of debt is more likely connected to being refused by banks and being sent towards nonbanks. As banks see these problematic debtors like higher that acceptable credit risk that means stop sign for them, nonbanks take these clients and to cover higher risk they raise the cost of the loan. Nonbanks are great with developing all kinds of way how to increase a cost of loan that will be hard recognizable by debtors. Economic climate as a third category can be assigned to the low interest rates and to the change in considering indebtedness as normal situation in every life.

The whole situation is emphasized by still growing occurrence of advertising the great opportunities what we can loan and how "nothing" we pay for such a loan. The situation that almost every second TV commercial is loan offer was not appropriate before and our analysis of growing numbers in debt relief can easily be linked to this trend. This statement is supported by the figure 1, that shows incredible growing trend every year in amount of debtors that asking for debt relief. This number is always accompanied by related amount of those that have been approved. As we can also quote to support this increase "Personal bankruptcy in the Czech population increases by 30% annually, and personal bankruptcy is a new approach to debt relief." (Paseková, 2013).

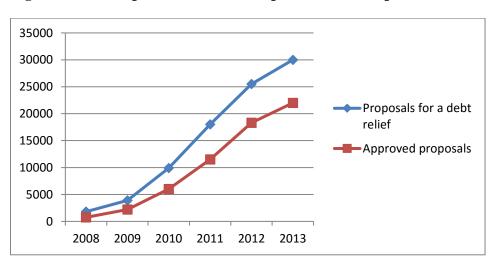


Fig. 1: The development of amount in personal bankruptcies in the Czech Republic

Source: Ministry of Justice, Czech Republic, 2014b

## 1 The hypothesis and aims of the paper

The research also targets a goal to show the current structure of debtors in analyzed regions in order to show the particular groups we selected in order to show the groups of people that become most likely over-indebted, which has mostly significant impact on banks and non-financial institutions that in the end gather the loss out of such defaulted loans (Bařinová, 2014). This paper is a one piece of the whole study that analyzes the changing structure amongst debtors in all region of Czech Republic. Therefore we want to verify the hypothesis that growing numbers of debtors asking for debt relief does not change the relative distribution in the major distributions (according to age, income, total debt and the gender). We assume most people in need of debt relief would be found in age groups that consume more than earn, which means young individuals and families that need to buy homes (age groups under 34 year old). We expect these groups to have very low income (the lowest income groups) and the gender should not play an important role.

We put high expectations for each research and suppose that having the numbers break down into specific elements may be used to improve the personal bankruptcy law by adjusting it to the actual situation that research showing, helps banks and non-banks to see the independent study of the debtor's structure in Czech Republic. It is very important to mention that there is no comparable study in such scale of the whole country. The only relevant research was made for north east part of country and analyzes similar aspects as our research (Paseková, Bařinová, 2009). There is no comprehensive study that is mapping the structure of debtors nowadays in all region and compares that amongst each other, which brings up the need to do one. In this paper we look closer into northern part of Czech Republic and will evaluate if there are any significant differences amongst distribution of debtors asking for debt relief.

## 2 Debt relief regulation

The debt relief is meant for debtors with two or more creditors and their income does not satisfy repayment plan and they find themselves in more than 30 days overdue with repayments (Smrčka, 2011). When this basic regulation is fulfilled then a debtor is allowed to submit a proposal for the debt relief, which must contain all legal conditions stated by the law of Czech Republic. Amongst these law requests the identification of debtor, debtor's income in last three years, expected income in next 5 years and the method of debt relief accompanied with the list of assets and liabilities. If the debtor fulfils these conditions and shows an honest intention to repay as much as debtor's income allows, then court should permit the debt relief

(Maršíková, 2011). The law that describes all rules for debt relief process knows two methods of getting rid of debt. First method is through a repayment plan that must meet at least the minimum amount of the total debt that is repaid back to creditors, which is set up as a 30% of the total debt. In this case debtor is left with subsistence minimum established by the government and the rest if his income is used to pay back part of his debt. The second possible method is selling out all of debtor's asset and uses its proceedings to pay back the debt.

There is many ways how to regulate personal bankruptcy by law. Countries in Europe are a very good example to see that there can not be one correct approach and it always needs to consider country's specific factors to reach the best suitable law. This decision was ongoing 3 years ago in Romania when they were establishing a new regulation of bankruptcy law and they must have taken all kinds of information from abroad as well as specific situation at home (Ginghina, 2013)

# 3 Analysis methodology

To be able to move to the research by self we need to explain how the used data were obtained and what fundamentals was the research built on. All the data were obtained from the Czech Insolvency Register in time period starting in January 1<sup>st</sup> 2012 and ending on the December 31<sup>st</sup> 2013. The sample was based on 10% sample that was statistically significant enough to ensure truthful informative ability. This was reached by comparing the results in other two regions where the same research was done, but with sample of 100%. Therefore we compared these two researches outputs depending whether we would use smaller sample or not. The 10% sample showed the acceptable standard deviation and therefore it was decided that for all other regions sample 10% will be used in order to analyze all regions in Czech Republic.

To make sure that research reaches accurate results there must have been made other adjustments. The first adjustment was deleting all debtors that were duplicative. Second adjustment was in case of married couple declaring proposal together and therefore their total debt was for two individuals. In this case we have decided to divide this total debt by two to assign relevant total debt for each of the debtor. The third adjustment was directed towards those debtors that proposed their debt relief more than once, which meant they have not been successful first time and only the proposals made before 31<sup>st</sup> of October 2014 were included.

The last adjustment was to remove debtors that became indebted from their business, because the research targets only personal debts.

#### 4 Research

The goal stated for this research is to compare differences between two groups of regions. The first group is composed of Hradec Králové region and Pardubice region (Group 1). The second group consists of Ustí nad Labem and Liberec region (Group 2). The figures for each group are used as aggregated numbers for both regions in each group.

### 4.1 Unemployment rate

This part describes difference in unemployment rates in analyzed regions. The unemployed people are the most inclinable to start having problems with their financial situation (Agarwal, Chomsisengphet, 2011). We believe that there is a connection between being unemployed and becoming indebted, because the consumption systematically outgrow the income. In this moment state aid and welfare system comes along and many studies show that higher state aid lowers the total amount of declared bankruptcies (Fisher, 2005). The Table 1 sums up unemployment rates in analyzed regions.

Tab. 1: Unemployment rates for analyzed regions

Region	Unemployment rate	Women/Men
Hradec Králové	6.36 %	6.24 % / 6.46 %
Pardubice	6.22 %	6.22 % / 6.23 %
Liberec	7.72 %	8.14% / 7.30 %
Ústí nad Labem	10.67 %	10.85 % / 10.49 %

Source: Czech Statistical Office, 2014

The Group 2 shows considerably worse rate of unemployment which by our assumption leads into higher need for debt relief comparing to group 1.

### 4.2 Statistics of debt relief proposals

In this part we compare the amount of approved proposals that has fulfilled necessary legal requirements and those that has been refused. This research does not further analyze reasons for being refused. The output is shown in the Table 2.

**Tab. 2: The amount of approved proposals** 

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Group	Number of debt relief proposals	approved	refused
Group 1	734	600 (81.7%)	134 (18.3%)
Group 2	926	777 (83.9%)	149 (16.1%)

Source: Insolvency register, own Research

As we do not look for the reason why the proposal was approved or refused so research accompany these numbers to provide an idea of those the amount of proposals that court refuse. To compare these numbers, they do not differ a lot in relative means. To compare the absolute numbers, we need to know that Group 2 population is 1 241.5 thousands and Group 1 population is 1 059.5 thousands (Czech Statistical Office). The Group 2 is therefore bigger by 182 thousand people, which mean 117% of the Group 1 population. Comparing group 2 with almost 200 more proposals (126% of the Group 1) to Group 1 we can see a decent difference. Obviously there are relatively more people asking for debt relief in group 2, which might follow the trend in unemployment mentioned above.

#### 4.3 Indebtedness towards creditors

All debtors were analyzed also whether they owe to one, two or three groups of creditors. The groups of creditors are chosen in order to follow differences among possible creditors as Banking and non-Banking institutions and then other creditors. In the table 3 we find the comparison based on amount of creditors that are debtors obliged to. The only difference to be seen is that group 2 has more than twice as many debtors obliged only towards one creditor.

Tab. 3: Indebtedness towards creditors

Number of creditors	Group 1	Group 2
One group of creditors	12 (2 %)	34 (4.4%)
Two groups of creditors	255 (42.6%)	328 (42.2%)
Three groups of creditors	333 (54.4%)	415 (53.4%)

Source: Insolvency register, own Research

#### 4.4 The gender of debtors

In figure 2 we see the distribution of debtor according to their gender. We analyzed whether male or female is more likely to become indebted. The final results come up with the answer that there is no significant connection between gender and predisposition of becoming over-

indebted. The distribution among males and females is almost perfectly equal for both groups of debtors.

The gender of group 1

The gender of group 2

male
female

female

The gender of group 2

male
female

Fig. 2: Distribution of debtors according to their gender

Source: Insolvency register, own Research

## 4.5 The age of debtors

When we take a closer look on the figure 3 it is easy to see that the largest debtor's are people between 35 and 44 years old or 45 and 54 years old. These two groups cover in both analyzed groups more than half of all debtors. It is interesting output that people under 34 years of age do not get indebted in such a scale even though they should be the age group that start looking for own living and having babies.

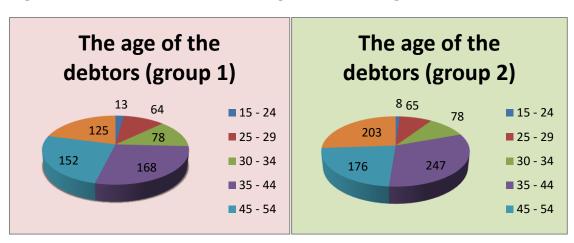


Fig. 3: Distribution of debtors according towards their age

Source: Insolvency register, own Research

One of the possible answers is that people nowadays wait longer in their lives to start having families and having kids. So the expenses wait as well and so does the problems that follow these trends like financial stress and the need of going debt. When comparing group 1 with group 2 it is obvious that group 2 has relatively more of those debtors in age between 35 – 44 and 55 and older. In contrary the group 1 has relatively more of those debtors that are younger (all three age groups in beginning) and the age group 45 – 54. This output shows a slightly different numbers in both compared groups of regions and structure of debtor is not same as the gender was.

#### 4.6 The income of debtors

This part of the research is very important to see how much people actually do earn when having debt problems. It indicates that the first two lowest income classes do not fall into bankruptcy as often as the other two sub-sequential income classes. It is pretty clear that both analyzed groups do not differ in distribution from each other. The charts seem very similar, nevertheless the class in group 1 with income between 15 and 20 thousands CZK is significantly smaller than the related class in the second analyzed group. If there is imbalance in one income class, there must be another one in other income class. When we take a closer look and take into account the difference in sizes of both groups, then we realize that group 1 has the lowest income class slightly bigger comparing to group 2. The same thing happened with the highest income class.

The income of debtor The income of debtor (group 1) (group 2) 20 g 22 3 -25 < 5K < 5K 134 ■ 5 - 10K ■ 5 - 10K 100 182 279 ■ 10 - 15K ■ 10 - 15K ■ 15 - 20K ■ 15 - 20K ■ 25 - 35K ■ 25 - 35K 312 261 ■ > 35K ■ > 35K

Fig. 4: Distribution of debtors depending on their income

Source: Insolvency register, own Research

To explain the distribution we assume that the lowest income classes would actually demand loans, but they can not be satisfied with such a negligible income. These people do not even have a chance to get a loan, so they do not become over-indebted to need debt relief. These low income groups have high credit risk, which was also increasing in past years (Coufal, 2014). In the other hand we have higher income classes and there is usually no need for debt relief. For both group the most vulnerable income classes are people with earnings starting around 15 thousands CZK and not crossing more than 25 thousands CZK. These people do need loans to satisfy their consumption, especially when building family and having other significant life expenditures. Banks do accommodate this demand and when they realize there is a repaying problem, these people very often go to non-banking institutions and get a loan there. Then it is a very common situation among analyzed debtors, because another step is to declare a bankruptcy due to impossibility of refinancing the loan.

#### 4.7 The total debt of debtors

The last thing this research targets is to see how significant debt is a debtor able to develop before stops being able to repay its installments. Comparing group 1 to group 2 does not evince that these two regions would much differ from the other two regions. A little difference can be found in each class, but the research points out that both analyzed groups have mostly debtors with the total debt between 200 thousands CZK a 1 million CZK. In this boundary we see two total debt classes that cover more than two thirds of the whole chart, not depending which analyzed group we are looking at.

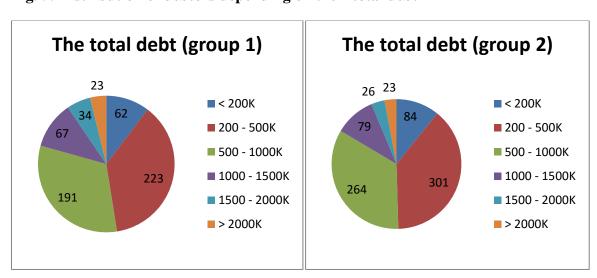


Fig. 5: Distribution of debtors depending on their total debt

Source: Insolvency register, own Research

Explanation for this is inseparably connected with the amount of income that people have. Understandably people with higher income do not fall under bankruptcy with a low total debt, but they are able to grow the debt longer and primarily higher before crashing. Therefore the research indicates a very close connection of the income (figure 4) and the total debt (figure 5), which shows that either banking or non-banking institutions have their loan limits and risk management very alike to each other.

### **Conclusion**

The both groups of regions that were analyzed do not show significant differences in the structure of debtors that ask for debt relief in matter of their age, gender, income and total debt. The regions are bordering each other and the only significant difference is in the rate of unemployment, which mirrors in the amount of proposals in group 2 with higher numbers. The research confirmed our hypothesis, that there is no certain reason to expect a person asking for debt relief based on gender in both analyzed regions and therefore there is no need to handicap a person when taking a loan (in means of high interest rate) based on the gender. Oppositely the research did not confirm our expectation about the age and income of debtors. The research ended up by showing that most indebted age group is not the group under 34 years, but these are groups right above 34 years of age. This trend is recognizable in all four analyzed regions and therefore we state that the relative distribution of debtors is different than our expectations would be.

Our hypothesis was partially fulfilled in means of debtor's income. More than 80% of people in each analyzed group work with income starting at 10 thousands CZK up to 20 thousands CZK and it is not the lowest income group as we were expecting, but this income is far away from the average income. This is easily explainable by the fact that a very low income blocks a person to get a loan at all and therefore can not get indebted. Furthermore the research insists on stricter conditions for non-banking institution when providing loans to people that have already been refused by banking institutions. It is desirable to set up strict rules for such institutions like upper boundary for interest rates to avoid usury.

This research adds another very important part into the puzzle of the whole study of all regions in Czech Republic. Output of this comparison between regions in northern part of Czech Republic can be already used by banks and non-banks as a most recent study of distribution among selected debtor's group and could be a reflecting factor to individualize the price of the loan based on specific person.

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