LONG-TERM UNEMPLOYMENT IN THE CZECH REPUBLIC AND THE EFFECT OF DISTRAINTS

Tomáš Pavelka

Abstract

Long-term unemployment, i.e. unemployment lasting more than 12 months, is linked to many economic and non-economic effects that negatively affect both the unemployed person and society (economy) as a whole. Long-term unemployment, of course, as well as overall unemployment, is mainly influenced by the economic cycle. In addition to fluctuations in the economy, there are many other factors. This article examines the impact of distraints imposed on non-employed persons. The article deals with data on the total unemployment rate, the long-term unemployment rate and the incidence of long-term unemployment for individual regions of the Czech Republic. It turns out that the rate of distraints in the population is a significant factor causing regional differences in long-term unemployment. The regions with a high share of distraints in the population show higher long-term unemployment. A distraint imposed on a jobseeker reduces his motivation to find work while discouraging some employers from hiring these people. The situations of people affected by distraints are very often worsened, and they fall into a debt trap that prevents them from finding employment. Without significant government interventions, this situation cannot be improved. However, it is obvious that long-term unemployment may have a retroactive effect on the level of distraints in the population.

Key words: economic cycle, distraint, unemployment, long-term unemployment

JEL Code: J64, J68, E32

Introduction

Long-term unemployment, which is unemployment lasting more than a year, is a major macroeconomic problem. That is why considerable attention has been given to the problem of long-term unemployment, both in the works of domestic authors and foreign economists. Pavelka (2011) provides a comprehensive view of unemployment and long-term unemployment in the Czech Republic, and it especially examines the impact of the last economic recession. This publication analyses, among other things, the effect of education levels and age on levels of unemployment and long-term unemployment. It turns out that some

groups of the population are affected by unemployment more (with basic education, younger people) than other groups.

This paper deals with long-term unemployment in the regions of the Czech Republic. In the past Löster and Langhamrová (2011) also analysed the effect of the economic cycle on long-term unemployment in regions of the Czech Republic. The authors, based on a simple statistical analysis, conclude that the long-term unemployment rate depends significantly on the specific region of the Czech Republic.

There are a number of publications that compare the development of unemployment and long-term unemployment among several countries. An extensive study on the development of long-term unemployment in the European Union was published by Duell, Thurau & Vetter (2016). Among the key conclusions of this study is that long-term unemployment remains at very high levels in all countries that have experienced a sovereign debt crisis as well as in some other South and Southeast European countries as opposed to the Nordic countries, Austria, Germany and the UK, which generally register low LTU rates.

Unemployment is, of course, connected with costs or negative impacts, both on the person who became unemployed and on society (economy). In general, with the prolonged duration of unemployment, the economic impact of unemployment deepens. Estimates of unemployment costs for public budgets on real data in the Czech Republic are discussed, among others, in the publication of Čadil, Pavelka, Kaňková and Vorlíček (2011) and more recently in the publication of the Research Institute of Labour and Social Affairs (Jahoda and Godarová, 2016). The publication by Čadil, Pavelka, Kaňková and Vorlíček represents a macroeconomic approach that uses Okun's law to estimate the costs of unemployment. The authors include the costs of paid unemployment benefits and the loss of income tax or indirect taxes due to the lower income of the unemployed person and other economic subjects. Jahoda and Godárová (2016) attempted to comprehensively include all costs per average unemployed person with data from 2014. The authors of the newer publication work with estimates of direct costs (on passive and active unemployment policies) and indirect costs (income tax outages and payments for social and health insurance). Although unemployment in the Czech Republic is relatively low compared to other countries, the conclusions in the two above-mentioned publications suggest that the cost of unemployment is considerable (even without taking into account social impacts). A more comprehensive view of the impact on unemployment, not just economic costs, is captured, for example, in Mareš (1994) "Unemployment as a Social Problem". In this publication debt traps and distraints are mentioned as part of the negative impacts of unemployment.

This paper focuses on long-term unemployment in individual regions of the Czech Republic. In contrast to other articles, the main objective of this paper is to analyse the possible effect of the incidence of distraints on the occurrence of long-term unemployment. Obviously, from the employers' point of view, the employment of persons with distraints is more costly – it is connected with higher administrative costs. At the same time, it is common that employers look at these persons negatively and prefer those who do not have this burden. From the point of view of a person who is affected by the distraints of his income or property, it is often more advantageous not to work, as the income he receives from his employment is largely confiscated for the instalments. Therefore, the motivation to look for a job for persons with distraints is often very low.

The article deals with data from the project "Over-indebtedness in the Czech Republic", in which a map of distraints was published for individual regions and cities. The data used in the map of distraints originates from data of the Executor Chamber of the Czech Republic. According to the latest data (2016), more than 834 000 people were affected by the distraints in the Czech Republic, with about half of them being subject to 4 or more distraints. The total principal exceeds CZK 325 billion (Mapaexekucí, 2017).

All data on unemployment, unless stated otherwise, are based on the Czech Statistical Office database and are used by the Eurostat methodology (ILO).

1 Basic information about distraints in the regions of the Czech Republic

Table 1 presents basic data on distraints in individual regions of the Czech Republic. The highest proportion of distraints in the adult population are reported by the Ústecký, Karlovarský, Liberecký and Moravskoslezský regions. Three of these regions, Ústecký, Karlovarský and Moravskoslezský, are considered by the Czech government to be structurally affected regions and thus prepared a special action program of support for them (Government, 2017). Oppositely, the regions with the lowest shares of the population with distraints are the Vysočina region and the Zlín region.

Table 2 contains information from the Ministry of Labour and Social Affairs of the Czech Republic about the number of registered persons at the Labour Office who have been unemployed for more than one year. Additionally, this table also provides an expert´s estimate of how many of these people were subject to distraint. It is clear from these administrative sources that the highest rates of distraints for the long-term unemployed were in the Karlovarský and Ústecký regions, and the lowest were in the Zlínský and Plzeňský regions.

Tab. 1: Details of distraints in the regions of the Czech Republic

	population aged 15 or over	population with distraints	share of population in distraints (in %)	number of distraints	principal of distraints (in CZK)	average of principal of distraints (in CZK)
Prague, the Capital City	1 078 617	87 264	8,09	669 197	78 033 863 778	116 608
Středočeský Region	1 100 672	95 103	8,64	489 133	39 470 988 778	80 696
Jihočeský Region	539 867	47 018	8,71	280 520	19 701 337 361	70 236
Plzeňský Region	490 218	45 680	9,32	253 555	15 227 956 150	60 058
Karlovarský Region	253 446	40 068	15,81	207 517	11 512 428 222	55 477
Ústecký Region	692 613	115 090	16,62	613 498	28 793 452 227	46 933
Liberecký Region	370 233	43 092	11,64	227 235	14 829 805 631	65 262
Královehradecký Region	467 864	37 351	7,98	180 666	12 473 535 329	69 042
Pradubický Region	436 834	30 920	7,08	157 776	10 593 381 305	67 142
Vysočina Region	432 753	24 118	5,57	136 418	9 650 414 777	70 742
Jihomoravský Region	996 104	78 522	7,88	478 484	50 055 151 961	104 612
Olomoucký Region	538 834	49 257	9,14	249 929	16 330 774 777	65 342
Zlínský Region	499 024	28 456	5,70	146 058	13 579 455 359	92 973
Moravskoslezský Region	1 033 048	110 920	10,74	602 913	35 052 520 585	58 139

Source: own creation from data www.mapaexekucí.cz

Tab. 2: Long-term job-seekers and distraints (September 2016)

	total job-seekers (more than 12 months)	with distraints	
		job-seekers	% out of job-seekers
Prague, the Capital City	12 161	2 428	19,3
Středočeský Region	14 853	2 455	16,0
Jihočeský Region	5 206	3 407	22,6
Plzeňský Region	5 219	766	14,1
Karlovarský Region	5 366	2 095	37,6
Ústecký Region	21 509	6 873	31,4
Liberecký Region	6 105	1 688	26,8
Královehradecký Region	4 720	1 500	26,9
Pradubický Region	4 195	1 190	27,2
Region Vysočina	6 642	1 456	21,3
Jihomoravský Region	20 269	4 420	21,4
Olomoucký Region	10 138	2 583	25,0
Zlínský Region	6 904	976	13,7
Moravskoslezský Region	30 986	4 935	15,7
Czech Republic	154 273	34 577	21,9

Source: Ministry of Labour and Social Affairs, 2016

2 Long-term unemployment and distraints – statistical analysis

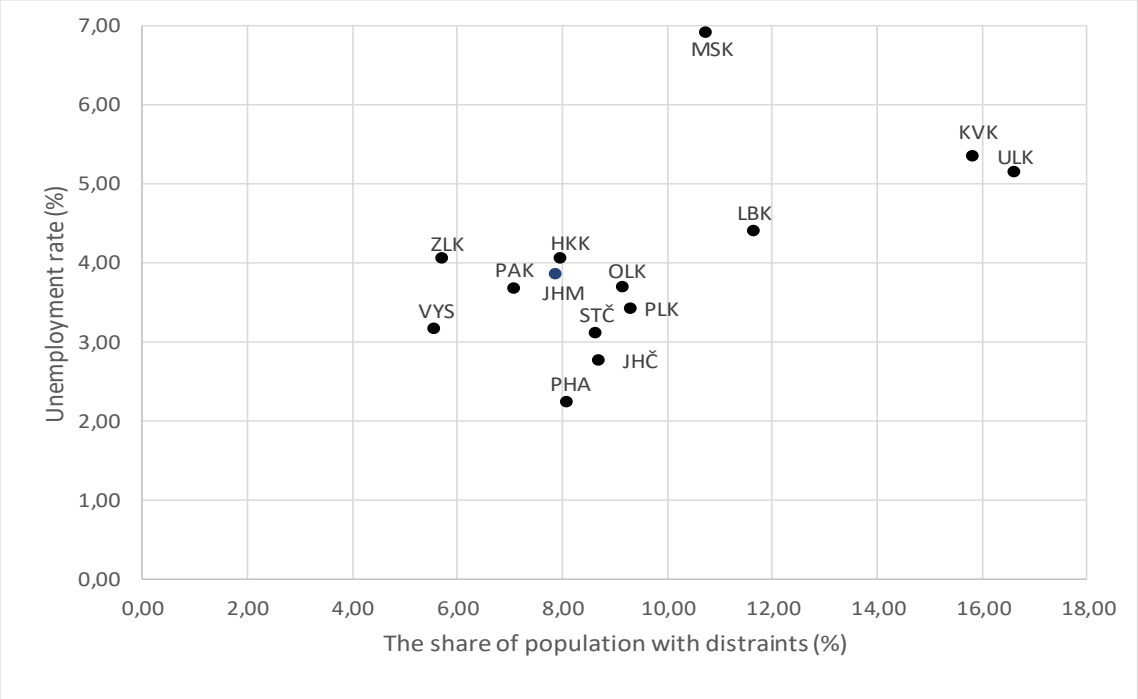
In this part of the article, it will be verified whether the proportion of distraints in the adult population affects the total unemployment rate, the long-term unemployment rate and the incidence of long-term unemployment. The data on the share of distraints in the population

comes from the data in Table 1. The data on unemployment comes from the Labour Force Survey (carried out by the Czech Statistical Office). The data describes the situation in 2016.

2. 1 The total unemployment rate and the share of population with distraints

It is already evident from Figure 1 that regions with a high rate of distraints in the adult population also show a high rate of total unemployment, such as in the Karlovarský, Ústecký, Moravskoslezský and Liberecký regions. In the case of the Moravskoslezský region, it is obvious that it differs slightly from the trend as it shows significantly higher unemployment. This region has its own specificities associated with mining and heavy industry. A certain deviation from the trend is also reported by the Capital City of Prague, which is characterized by a relatively low unemployment rate compared with the share of distraints in its population.

Fig. 1: The relationship of the total unemployment rate and the share of population with distraints in the regions of the Czech Republic (data for 2016)[1]



Source: Own creation from data of the Czech Statistical Office and www.registrexekuci.cz

[1] Prague, the Capital City (PHA), Středočeský region (STČ), Jihočeský region (JHČ), Plzeňský region (PLK), Karlovarský region (KVK), Ústecký region (ULK), Liberecký region (LBK), Královéhradecký region (HKK), Pardubický region (PAK), Vysočina region (VYS), Jihomoravský region (JHM), Olomoucký region (OLK), Zlínský region (ZLK) and Moravskoslezský region (MSK).

Tab. 3: Statistical analysis - The relationship of the total unemployment rate and the share of the population with distraints

Model: OLS, using observations 1-14
Dependent variable: unemployment rate

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	1.99927	0.849765	2.353	0.0365	**
shareofdistraints	0.209795	0.0848917	2.471	0.0294	**

Mean dependent var	3.991125	S.D. dependent var	1.188913
Sum squared resid	12.17775	S.E. of regression	1.007379
R-squared	0.337289	Adjusted R-squared	0.282063
F(1, 12)	6.107449	P-value(F)	0.029422
Log-likelihood	−18.88901	Akaike criterion	41.77803
Schwarz criterion	43.05614	Hannan-Quinn	41.65971

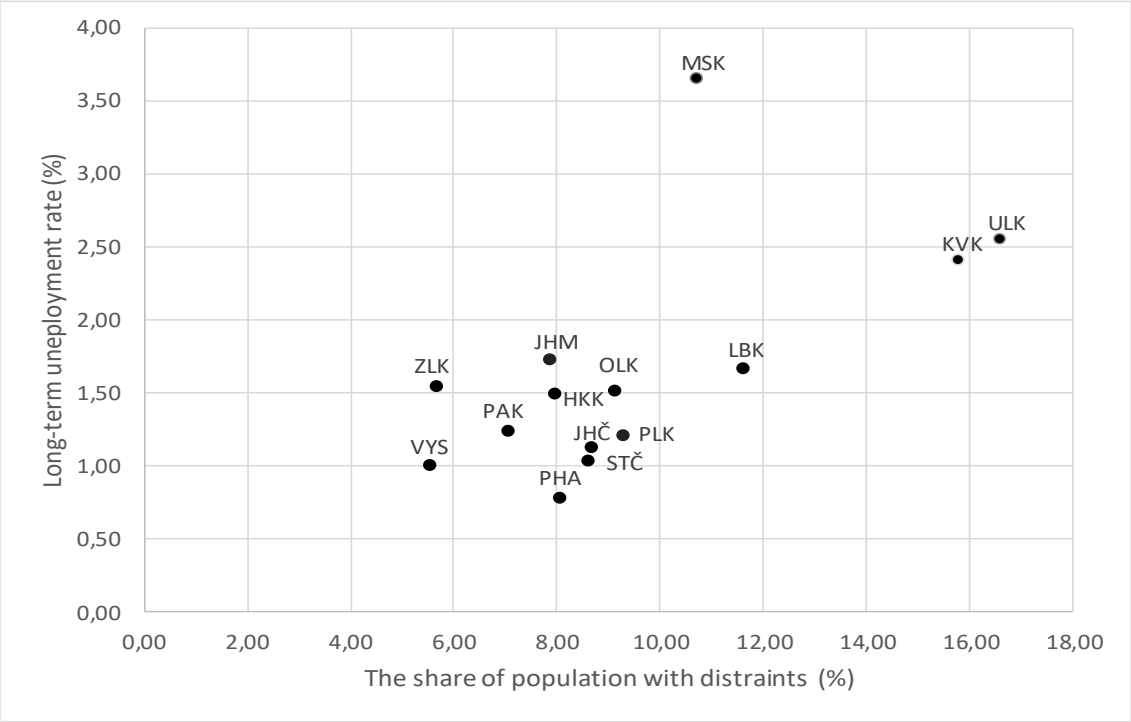
Source: Own (using the Gretl program)

Table 3 confirms the conclusions reached from Figure 1. An increase in the share of distraints in the population by one percentage point is associated with an increase in the total unemployment rate by 0.2 percentage point. The model explains about 33% of the value variability. It is clear, therefore, that the share of distraints in the adult population is a significant factor affecting the overall unemployment rate, but as other publications suggest (e.g. Pavelka, 2011), the main factor is the economic cycle.

2. 2 Long-term unemployment and the share of the population with distraints

As with total unemployment, a similar conclusion can also be made in the case of the long-term unemployment rate and the share of distraints in the population. Again, regions with a higher share of distraints in the population show a higher rate of long-term unemployment, which represents the percentage of people unemployed for more than one year on the labour force. This is particularly true for the Karlovarský and the Ústecký regions. The Moravskoslezský region and the Capital City of Prague also show some specificities; the former has a relatively high rate of long-term unemployment, and the latter has a relatively low rate of long-term unemployment.

Fig. 2: The relationship of the long-term unemployment rate and the share of the population with distraints in the regions of the Czech Republic (data for 2016)



Source: Own creation from data of the Czech Statistical Office and www.registrexekuci.cz

Tab. 4: Statistical analysis - The relationship of the long-term unemployment rate and the share of the population with distraints

Model: OLS, using observations 1-14
Dependent variable: long-term unemployment rate

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	0.280042	0.532574	0.5258	0.6086	
shareofdistraints	0.143012	0.0532043	2.688	0.0197	**

Mean dependent var	1.637840	S.D. dependent var	0.767783
Sum squared resid	4.783329	S.E. of regression	0.631356
R-squared	0.375820	Adjusted R-squared	0.323806
F(1, 12)	7.225238	P-value(F)	0.019743
Log-likelihood	−12.34770	Akaike criterion	28.69539
Schwarz criterion	29.97351	Hannan-Quinn	28.57708

Source: Own (using the Gretl program

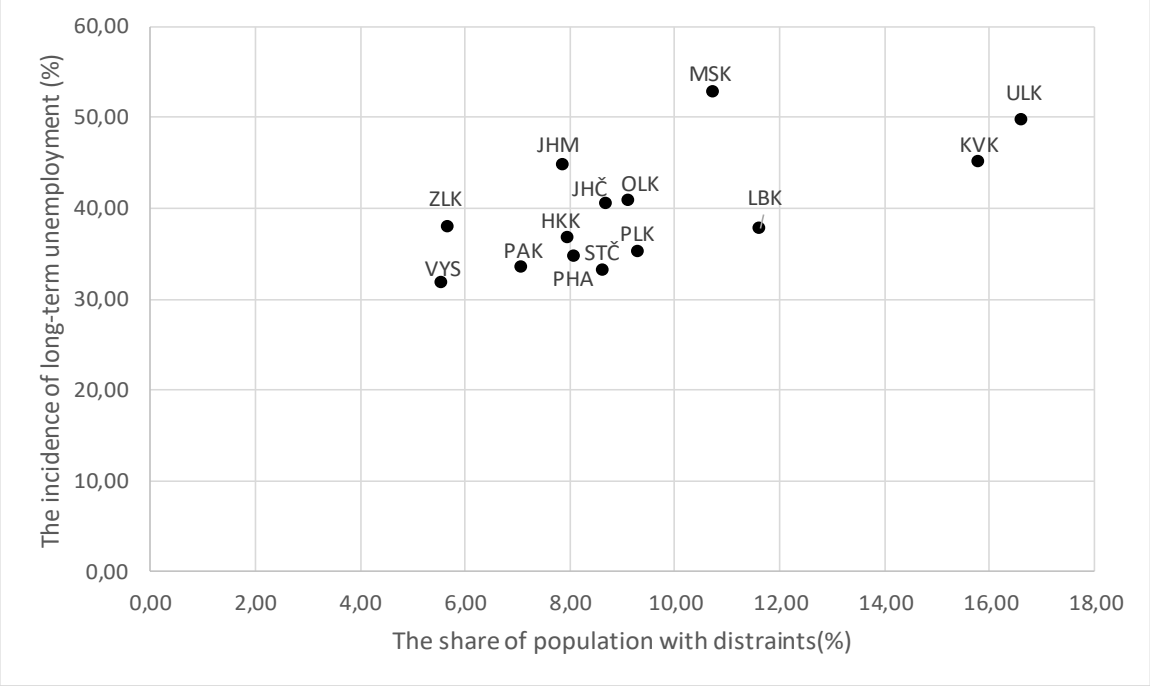
Table 4 shows that an increase in the share of distraints in the population by one percentage point is associated with a higher rate of long-term unemployment of 0.14 percentage points. The model explains about 38% of the variability of the values. Thus, it is clear that the share of

distraints in the adult population is a significant factor influencing the long-term unemployment rate, but as other publications suggest, such as Pavelka (2011), there are also other factors which influence the long-term unemployment rate, especially the economic cycle.

2. 3 The incidence of long-term unemployment and the share of the population with distraints

The incidence of long-term unemployment is the percentage of long-term unemployed in the total number of unemployed. Figure 3 illustrates the relationship between the rate of long-term unemployment and the proportion of distraints in the adult population. The highest rate of long-term unemployment is recorded by the Moravskoslezský region. The Ústecký and Karlovarský regions have lower incidences of long-term unemployment but significantly higher shares of distraints in the population.

Fig. 3: The relationship of the incidence of long-term unemployment and the share of the population with distraints in the regions of the Czech Republic (data for 2016)



Source: Own creation from data of the Czech Statistical Office and www.registrexekuci.cz

Table 4 shows that an increase in the share of distraints in the population by one percentage point is associated with a higher incidence of long-term unemployment by 1.27 percentage points. The model explains about 43% of the value variability. It is clear, therefore, that the share of distraints in the adult population is a significant factor influencing the incidence

of long-term unemployment. Similarly to total unemployment and long-term unemployment, it is obvious that other factors also affect its level.

Tab. 5: Statistical analysis - The relationship of the incidence of long-term unemployment and the share of the population with distraints

Model: OLS, using observations 1-14
Dependent variable: incidence of long-term unemployment

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	27.5804	4.25624	6.480	<0.0001	***
shareofdistraints	1.26742	0.425200	2.981	0.0115	**

Mean dependent var	39.61358	S.D. dependent var	6.395364
Sum squared resid	305.5081	S.E. of regression	5.045692
R-squared	0.425422	Adjusted R-squared	0.377541
F(1, 12)	8.884901	P-value(F)	0.011470
Log-likelihood	−41.44557	Akaike criterion	86.89114
Schwarz criterion	88.16926	Hannan-Quinn	86.77283

Source: Own (using the Gretl program

Conclusion

Long-term unemployment is a major social and economic problem. As the conclusions of some other publications confirm, long-term unemployment is affected by a number of factors. The main factor is, of course, the economic cycle. During a recession, the number of the unemployed rises and they gradually become long-term unemployed. Other factors include the age structure or educational structure of the population or the setting of the social system.

This paper examined whether the share of distraints in the population could be among the main factors affecting long-term unemployment. The analysis does indeed show that the share of distraints in the population is a significant factor affecting the overall unemployment rate, the long-term unemployment rate and the incidence of long-term unemployment. The regions with a high share of distraints in the population also show higher levels of unemployment and long-term unemployment. Persons subject to distraint are less motivated to find employment and are not as attractive for employers. However, the problem of distraints is more complex and it is obvious that unemployment itself can lead to people getting into the debt trap that is linked to the imposition of distraint.

Acknowledgment

This article is provided as one of the outputs of the research project of the Faculty of Business Administration IP 300040 „Competitiveness “.

References

Čadil, J., Pavelka, T., Kaňková, E., & Vorlíček, J. (2011). Odhad nákladů nezaměstnanosti z pohledu veřejných rozpočtů. *Politická ekonomie*, *59*(5), 618-637.

Duell, N., Thurau, L., & Vetter, T. (2016). Long-term Unemployment in the EU: Trends and Policies. *Bertelsmann Stiftung, Brussels*.

Jahoda, R., & Godarová, J. (2016). *Odhad nákladů veřejných rozpočtů vynakládaných na jednoho nezaměstnaného*. VÚPSV, vvi.

Pavelka, T. (2011) *Dlouhodobá nezaměstnanost v České republice. 1. vyd. Slaný: Melandrium.* ISBN 978-80-86175-76-8, str. 10.

Löster, T., & Langhamrová, J. (2011). Analysis of long-term unemployment in the Czech Republic. *International Days of statistics and Economics*, *5*(1), 307-316.

Mareš, P. (1994). *Nezaměstnanost jako sociální problém*. SLON-Sociologické nakladatelství.

Mapa Exekucí. (2017). Retrieved May 01, 2017, from http://mapaexekuci.cz/

Vláda (2017). Souhrnný akční plán strategie restrukturalizace Ústeckého, Moravskoslezského a Karlovarského kraje 2017 – 2018. Retrieved May 1, 2017, from https://www.vlada.cz/assets/media-centrum/aktualne/Restart_1.pdf

Ministry of Labour and Social Affairs. (2016). Analýza nabídky a poptávky na trhu práce. Říjen 2016.

Contact

Tomáš Pavelka
University of Economics, Prague
W. Churchill Sq. 1938/4
Prague 3
130 67
pavelkat@vse.cz