THE REGIONAL DIFFERENCES IN SMALL ENTERPRISE IN THE CZECH REPUBLIC

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Abstract: Paper deals with differences in small business activity of entrepreneurs - individuals in the Czech Republic. It covers overall activity assessment as well as the branch structure of small businesses and also interregional variability measured by the variation coefficient.

Keywords: business activity, regional variability, districts, Czech Republic, Bohemia, Moravia,

1. METHODICAL NOTES

The basic source of business activities' data is the Register of economic subjects ran by the Czech Statistical Office (ČSU). It has been regularly updated and it is the public service. The overall data for the whole Czech Republic and the districts are published either in the Statistical Yearbook or in other publications (i.e. Districts of the Czech Republic, District yearbooks, etc.) In 1996, ČSÚ issued an overall publication "The Analysis of the Development of Entrepreneurial Activities" according to the Register of Economic Subjects in 1992 - 1995.

If evaluating enterprise activities, we have to keep on mind that the official statistical data ($\check{C}S\acute{U}$) on the number of entrepreneurs do not express the level of business activities in the region, because:

• Due to the measurement methods, they cover also the entrepreneurs who are not active so far; it is estimated that only about one half of the registered individuals are really active. The regional differences can be significant, but these have not been examined yet;

• Official data are not fully time-compatible on the regional level.

The first mentioned problem is caused mainly by the fact that significant portion of entrepreneurs have run their businesses as the second or even third job. During the selective examination in 1995, the ČSÚ found only 584,000 entrepreneurs - individuals including the co-operating family members, who take their business activities as the only one or main occupation. On the other hand, the official data speaks about 1 million of registered entrepreneurs - individuals. This problem can not be fully restrained; partial solution is brought by the ČSÚ itself - the entrepreneurs who are not active (they do not file a yearly tax return), are erased from the register.

The second problem comes out from the way of collecting the data about the individuals acting according to the trade law. The data are collected at the district Trades Licensing Offices and registration courts. ČSÚ brings the data at the as recent time as possible so it is not "re-counted" according to the time point of view. For example, the data we use for further analyses come from the Register of economic subjects on November 30th, 1998 and most of the districts date the last start-up of the new business units at the end of October or at the start of November 1998, but the districts of western Bohemia only at the end of 1997 (i.e. the district Plzeň-město has had the compatible time row since March 14th, 1997). However, this "not re-counted" data are commonly published by ČSÚ in the Statistical Yearbook or in the yearbooks The Districts of the Czech Republic. The problem can be solved by re-counting of the data according to the date of business founding, so that we receive time compatible data for different regional units. Our data are re-counted for the Czech Republic at the same date - 31st of December 1997. Only the data for Plzeň are undervalued.

2. THE MAIN DEVELOPMENT TRENDS

After the 1989, there was a boom in establishing private firms. There were about 1,2 mil. of entrepreneurs - individuals registered by December 31st, 1997. The most significant growth in private business activities was in 1991, when the number of entrepreneurs grew up to the level of 892,000 within one year. The growth in the number of entrepreneurs continued not so steeply since 1992 (see the table 1). After the change of legislation for private business activities, the number fell down to 752,8 thousand in 1994 (according to the Register of economic subjects in January 1995 re-counted according to the subject's birth); in relative numbers it shows 72,9 entrepreneurs per 1,000 inhabitants. Official ČSÚ data (Statistical Yearbook 1996) speaks about 1044.6 thousand entrepreneurs - individuals by January 1st, 1994. The number, however, probably still included the entrepreneurs who did not re-register themselves (the duty to re-register was set up to December 31st, 1992). This supports the fall in the number of entrepreneurs showed by the statistics in the following years. On January 1st 1996, the Statistical Yearbook 1997 reports 1 mil. entrepreneurs (96,8 to

1000 inhabitants). If we re-count the data according to the date of subject's forming according to the Register of economic subjects from 1997 to the 1st January 1996 state, we will get number of 33 thousand higher (1033,3 thousand which represents 100,1 entrepreneurs to 1000 inhabitants). To be correct we also bring the ČSÚ number at 31st of December 1997 but it is at minimum of 58,5 thousand lower then the real state.

Table 1 The development of number of entrepreneurs - individuals in 1991 -1997 (thousands)

	1.1. 1991	1.1. 1992	1.1. 1993	1.1. 1994	1.1. 1995	1.1. 1996	31.12. 1996	31.12. 1997
Number	124,5	891,9	982,1	1044,6	856,5	1000,4	1103,7	1223,2
Per 1000 inhab.	12,1	86,5	95,1	101,1	82,9	96,8	107,1	118,8

Source: Statistická ročenka ČR 1997 (Statistical Yearbook 1997), own calculations

3. THE GENERAL FEATURES OF INTERREGIONAL VARIABILITY IN THE CZECH REPUBLIC

The actual analysis in assessing the interregional small business activity differences has already been worked out. It covers overall activity assessment as well as the branch structure of small businesses. The business activities are analysed with respect to basic branches of national economy - industry, building industry and services. Relatively large number of small businesses is active in the service sector. Due to the fact that this sector is broadly differentiated, it was necessary to sectionalise it. We chose trade, accommodation and restaurant services, transport industry and production services (here we include real estate activities, leasing and renting, company services etc.), that form significant portion of service sector business activities.

The analyses use the data on the number of entrepreneurs - individuals published by ČSÚ. The data come from the register of companies at the end of 1998 and they are re-counted according to the date of firm's foundation December 31st, 1997 (valid for the whole Czech Republic). In this case, the number covers all the entrepreneurs - individuals, no matter if booked in the Trade Register or not. It is likely that it also covers the subjects that were not active anymore or haven't been discarded from the evidence yet.

The business activity intensity was much higher in Bohemia, in general as well as according to the branches. The crucial difference were in the service sector, especially in the transport industry, accommodation and hospitality. Other sector differences were significant in the building industry branch (see the table 2).

Table 2 Number of entrepreneurs according to the branches related to 1,000 inhabitants (December 31st, 1997)

	The Czech Republic		Bohemia		Moravia	
Branch	Total	Excluding Prague	Total	Excluding Prague	Total	Excluding Brno
Industry	20	19,8	20,9	20,9	18,5	18,4
Construction	15,6	15,4	17,3	17,3	13	12,9
Services	87,2	80,2	94,4	83,7	75,8	71,8
From this:						
trade	44,8	43,5	47,1	45,3	41,3	40,8
accommodation	7,1	7,1	8,4	8,7	5,1	5
transport	5,4	4,8	6,1	5,2	4,3	4,1
Product. services	21,8	17,7	23,9	17,1	18,5	15,4
Total	124,5	117,2	134,5	123,9	108,7	104,7

Source: Register of economic subjects, own calculations

4. REGIONAL DIFFERENTIATION AT DISTRICT LEVEL

The territorial units (districts) we divided into 5 groups according to the relative number of entrepreneurs - individuals per 1,000 inhabitants as follows:

- 1. Highly above-average area units (according to the private business activities)
 - This includes the units characterised by value of the figure higher then average value of sample plus 1 standard deviation value of evaluated area units set
- 2. Above-average area units (according to the private business activities)
 - covers units characterised by value of the figure higher then average value of sample plus 1/3 of standard deviation value of evaluated area units set
- 3. Average area units (according to the private business activities)
 - covers units characterised by value of the figure between ± 1/3 standard deviation value of evaluated area units set
- 4. Below-average area units (according to the private business activities)
 - covers units characterised by value of the figure lower then average value of sample minus 1/3 of standard deviation value of evaluated area units set
- 5. Deep below-average area units (according to the private business activities)
 - covers units characterised by value of the figure lower then average value of sample minus 1 standard deviation value of evaluated area units set

The districts characterised by above-average number of entrepreneurs are mainly situated in Prague and the surroundings and in the area that can be determined by the line Prague - Liberec - Trutnov - Hradec Králové - Prague. These area units reach the above-average values (except from Jičín) and they form the main concentration of

entrepreneurs - individuals in The Czech Republic. The highest intensity is reached in central Bohemia (Prague and the neighbouring districts as well as Nymburk district) and in the Liberec agglomeration (Liberec, Jablonec nad Nisou, Semily).

The other smaller concentrations where can be found the above-average number of the entrepreneurs are:

- České Budějovice and neighbouring districts (Prachatice and Tábor),
- spa districts in north-west Bohemia (Karlovy Vary and Cheb).

The highest values show the districts of Karlovy Vary and Cheb. In Moravia, the above-average values can be found only in the districts of Brno-město, Jeseník and Zlín.

The districts with the lowest business activity are situated in several areas. Here belongs large area of Českomoravská vrchovina (the lowest intensity is especially in the Moravian districts) and the wider surroundings of the Brno agglomeration as well as the districts in north-east Moravia with the lowest intensity in some of the districts of Ostrava agglomeration (Karviná, Frýdek Místek). In Bohemia the districts are mainly the districts in north of Bohemia (Teplice, Most, Chomutov, Ústí nad Labem) and the western and southern surroundings of Plzeň (Domažlice, Plzeň-jih).

Regional variability can be measured by various methods, for example EUROSTAT uses the regional variability evaluation by the standard deviation divided by the size of the region. Other authors (i.e. Blažek 1996) also recommend application of variation coefficient especially for different figures comparison. In our case, we decided to use variation coefficient because of the significant differences in intensity among the branches and sub-branches of national economy. The second reason is the compatibility with other figures.

The highest interregional variability measured by the variation coefficient can be seen in the accommodation and hospitality and production services. The lowest differences are in trade branch, that reaches relatively high level of business activities and so it determines relatively low variability in all the service sector, partly in the overall business activity which is also determined by other factors, i.e. certain "specialisation" of the districts.

The interregional variability is slightly higher among the Moravian districts then in Bohemian. From the sectoral point of view, it appears that higher variability is in the construction industry and especially in the production services. The district of Brno shows one of the highest intensity of figure (but still not as high as Prague) but the less intensive districts are especially Moravian districts. On the other hand, the most significant differences in transport sectors are in Bohemia.

Variation coefficient allows the mutual comparison of business activity with other factors. It also allows to discover what causes the interregional differences, if the business activity itself or the other factors. We chose the data concerning the unemployment level (Ministry of Labour data), average wage per month and the total tax yields of municipalities (Ministry of Regional Development, data are available for the year 1994). These factors are commonly used to evaluate regional disparities (see i.e. Blažek, 1996). Interregional variability of the overall business activity can be seen as

relatively low. The evaluated factors showed lower value of variation coefficient only in the case of average wage per month figures (see the table 4).

Table 3 The level of interregional variability in the Czech Republic according to the business activity - districts

	Česká republika		Bohemia		Moravia	
Banch	Total	Excluding Prague	Total	Excluding Prague	Total	Excluding Brno
Industry	23,4	23,5	23,4	23,7	22,4	22,9
Construction	25,8	26	22,4	22,6	27,5	28,1
Services	19,9	18,2	18,4	16,1	20	16,8
from this:						
trade	15,2	15	13,6	13,5	15,8	16
accommodation	48,1	48,4	43,1	43,2	41,6	42,5
transport	31,2	29,6	31,1	29,3	25,4	25,1
product, services	47,1	40,9	44,5	34,2	53,4	35,2
Total	17,9	17,1	16,4	15,5	17,1	15,9

Source: Register of economic subjects, own calculations

Table 4 Interregional variability in the Czech Republic according to selected factors

Business tivity		Unemployment rate		Average wages		Tax yields	
1993	1997	1993	1997	1993	1997	1994	1997
18,3	17,9	49,6	44,9	8,6	8,8	30,7	38,1

Source: Czech Statistical Office, Ministry of Labour and Social Affairs, Ministry for Regional Development, own calculations

References

Analýza vývoje podnikatelských aktivit podle stavu Registru ekonomických subjektů v letech 1992 až 1995. ČSÚ, Praha 1996.

Blažek, J. (1996): Meziregionální rozdíly v České republice v transformačním období. Geografie, 101, č. 4, Česká geografická společnost, Praha, s. 265-277.

Maryáš, J. (1997): Regionálni rozdíly v podnikatelské aktivitě v České republice. In: Zborník z medzinárodnej konferencie Aktuálne problémy regionálného rozvoja. Inštitút rozvoja obcí, miest a regiónov, Banská Bystrica.

Okresy České republiky. ČSÚ, Praha 1993-1996.

Statistická ročenka České republiky. ČSÚ, Praha 1993-1997.

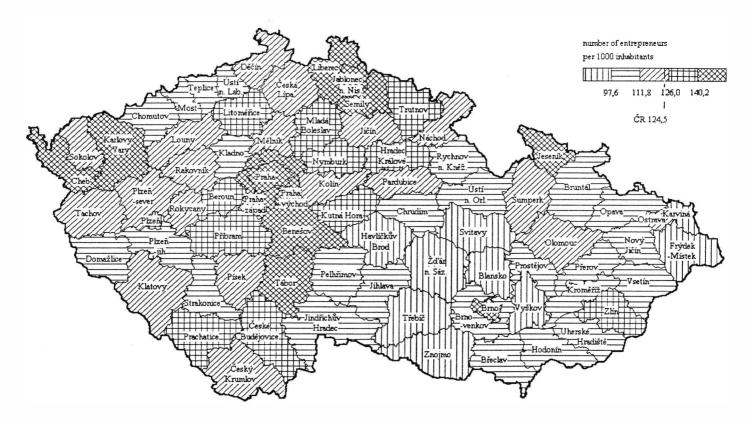


Fig. 1 Regional differences in small enterprise (1997)

Resume

Regionální rozdíly malého podnikání v České republice

Po roce 1989 nastal bouřlivý rozvoj soukromého podnikání a k 31.12.1997 bylo v ČR registrováno 1,2 mil. soukromých podnikatelů - fyzických osob. Rozhodující nárůst soukromého podnikání byl v roce 1991, od roku 1992 se počet podnikatelů zvyšoval už podstatně mírnějším tempem. Pro hodnocení regionálních rozdílů v drobném podnikání byla provedena analýza současné situace podnikatelské aktivity, a to jednak celková podnikatelská aktivita, jednak odvětvová struktura malého podnikání. Podnikatelské aktivity jsou analyzovány podle základních odvětví národního hospodářství - průmysl, stavebnictví a služby, které jsou dále členěny na obchod, pohostinství a ubytování, dopravu a výrobní služby. Pro analýzy používáme údaje o počtu podnikatelů - fyzických osob uváděné ČSÚ, které vychází z registru organizací z konce roku 1998, které jsou přepočteny podle údajů o datu vzniku firmy pro celou ČR k 31.12.1997.

Intenzita podnikatelské aktivity byla podstatně vyšší v Čechách, a to jak celková tak i ve všech odvětvích. Velmi významné rozdíly byly v obslužné sféře, především v dopravě a v pohostinství a ubytování, z ostatních odvětví je poměrně velký rozdíl ještě ve stavebnictví. Okresy s nadprůměrným počtem podnikatelů na 1000 obyvatel jsou soustředěny v zázemí Prahy a dále v území, které můžeme zhruba vymezit linií Praha Liberce - Trutnov - Hradec Králové - Praha, kde většina okresů dosahuje nadprůměrných hodnot (kromě Jičína) a tvoří hlavní soustředění podnikatelů - živnostníků v České republice. Nejvyšší intenzity jsou dosahovány v metropolitní oblasti Čech (v Praze s okolními venkovskými okresy a v okrese Nymburk) a v okresech liberceké aglomerace (Liberce, Jablonce nad Nisou, Semily). Na ostatním území Čech jsou dále dvě menší soustředění okresů, kde počet podnikatelů dosahuje nadprůměrných hodnot: České Budějovice s okolními okresy (Prachatice a Tábor) a lázeňské okresy v severozápadních Čechách (Karlovy Vary a Cheb) a dále okres Plzeň-město. Na Moravě patří mezi nadprůměrné pouze Brno-město, Jeseník a Zlín.

Okresy s nejnižší podnikatelskou aktivitou jsou soustředěny do několika oblastí. Patří sem rozsáhlé území na Českomoravské vrchovině (s nejnižšími intenzitami především v moravských okresech) a širší zázemí brněnské aglomerace, a okresy severovýchodní Moravy s nejnižšími intenzitami v některých okresech ostravské aglomerace (Karviná, Frýdek-Místek). V Čechách jsou to především okresy severních Čech (Teplice, Most, Chomutov, Ústí nad Labem) a západní a jižní zázemí Plzně (Domažlice, Plzeň-jih).

Meziregionální variabilita měřená variačním koeficientem je nejvyšší v pohostinství a ubytování a ve výrobních službách. Nejnižší je v obchodě, který relativně vysokými hodnotami podnikatelské aktivity ovlívňuje i relativně nízkou variabilitu ve službách celkem a částečně i v podnikání celkem, kde však zřejmě působí i jiné vlivy, jako je např. určitá "specializace" okresů. Z mezoregionálního hlediska je mírně vyšší variabilita mezi moravskými okresy než mezi okresy v Čechách.

Variační koeficient nám dovoluje i vzájemné porovnání podnikatelské aktivity s dalšími ukazateli a zjistit jestli tyto ukazatele diferencují okresy vice než podnikatelská aktivita. Vybrali jsme údaje o míře nezaměstnanosti, průměrnou měsíční mzdu a celkovou daňovou výtěžnost obcí, tedy ukazatele, které jsou obvykle používány pro hodnocení regionálních disparit. Meziregionální variabilitu celkové podnikatelské aktivity lze považovat za relativně nízkou a z hodnocených ukazatelů měl nižší hodnotu pouze variační koeficient průměrných měsíčních mezd.