DIFFERENCES IN THE CZECH BUSINESS DEMOGRAPHY: REGISTERED VS ACTIVE ENTERPRISES

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Abstract

The article explores the differences between the registered and economically active enterprises in the Czech Republic. Data from the Czech Statistical Office covering 2000-2023 are used to explore the phenomenon. The results from the paired t-tests clearly show that there is a considerable gap between registered businesses and those officially registered but inactive. This finding calls for the careful interpretation of the official statistical data, which overestimates the Czech entrepreneurial activity. Based on the conclusions obtained, the average difference between the registered and active enterprises was over the studied period 46%, and the difference was driven mainly by the natural (physical) persons. The study calls for a more careful interpretation of the publicly available business demography data and for future discussion on the business register and its administration.

Key words: entrepreneurial activity, business demography, entrepreneurship, Czech Republic

JEL Codes: L26, R11

Introduction

Scholars continuously study and quantify the effects of entrepreneurship on economic growth, with the ambition to determine the effects of entrepreneurial activity on the gross domestic product, employment and added value (Dvouletý, 2017; Pradhan et al., 2020; Carayannis et al., 2020). Yet the discussion on measuring and selecting the proper indicators approximating entrepreneurship is still ongoing, and selecting a particular indicator can significantly influence the findings. The most extensive measures in this manner are data on the registered businesses with valid permission to conduct economic activity within a particular country. Yet, even this approach towards measuring entrepreneurship has its disadvantages and limitations. Specifically, not all registered enterprises need to be economically active anymore, and as a result, they may overestimate the size of entrepreneurship, as Marcotte (2013) noted.

In this study, we revisit the recent development of entrepreneurship in the Czech Republic, a country with above-European-average values of entrepreneurial activity (Dvouletý,

2019; 2021), and provide an overview of its growth over the years 2000-2023. In particular, we expand the existing knowledge by considering the differences between registered and economically active enterprises by using data from the Czech Statistical Office. We quantify the differences between active and inactive enterprises and provide recommendations to the local policymakers, who should be mindful of these differences within the Czech context.

1 Empirical Approach and Data

In this research, we exploit the data from the Czech Statistical Office (2024) to understand Czech entrepreneurial activity and the differences between active and inactive registered businesses. Following Marcotte (2013) and Dvouletý (2017), we take the registered approach towards understanding business demography, which has the advantage of mapping all economically active enterprises. Still, these do not need to be doing any regular operations. Also, this approach does not include individuals who are in the early stages of their business endeavour and have not registered yet. The Czech Statistical Office at least attempts to check whether the businesses are economically active, and based on the Register of Economic Subjects (i.e., RES), it provides annual statistics on the complete number of registered entities and another one, including only those in activity.

We extracted available data and used them to quantify the differences between registered and active entities. The collected data includes the time series of the total number of registered and economically active enterprises from the year 2000 onwards. Then, we have also exploited data for the two main categories of the business demography statistics, i.e., natural persons (individual entrepreneurs with valid business licences) and business companies, i.e., legal entities. For these two groups, the data are, however, available only from the year 2005 onward. The last available year is, for all types of enterprises, 2023. The methodological approach relies on constructing the graphical time series development and then on the series of paired-t-tests, aiming to determine the gap between the registered and active enterprises.

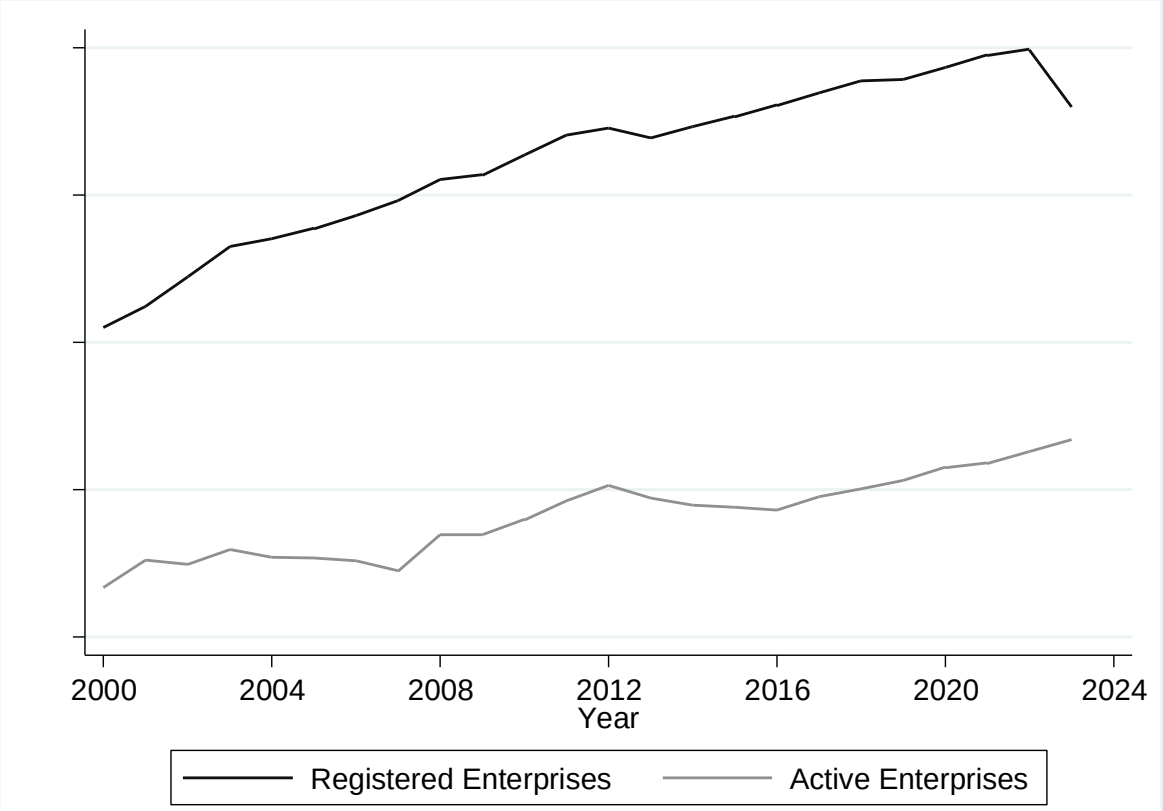
2 Findings and Results

Entrepreneurial activity develops significantly over time and across regions, and thus, it should be continuously monitored (Celbiş, 2021; Povolná et al., 2022). The last complex overview of the Czech entrepreneurship development was done by Dvouletý (2019), who pointed out the gender, age and educational structure of the Czech business demography by looking at the years 2005-2017. This study extends the prior findings by examining the differences between

registered and active enterprises. In addition, it illustrates recent developments, including the global pandemic followed by the energy crisis and the Russian-Ukraine military conflict (Dvouletý, 2021; Zahra, 2022).

Figure 1 provides insights into the development of the total number of registered businesses and a comparative time series of only active ones. It is important to understand how the activity develops over time and to observe its size and fluctuations. There is an ongoing growth trend, which is very similar to both series, with minor declines after 2012 but a major decline after 2023. In 2022, the total number of registered businesses reached 2,996,841, decreasing to 2,800,294 in 2023. However, this 7% decline was not visible among the economically active enterprises, which, even between the years 2022 and 2023, grew from 1,629,262 to 1,668,516.

Fig. 1: Development of the registered and active enterprises over the period 2000-2023

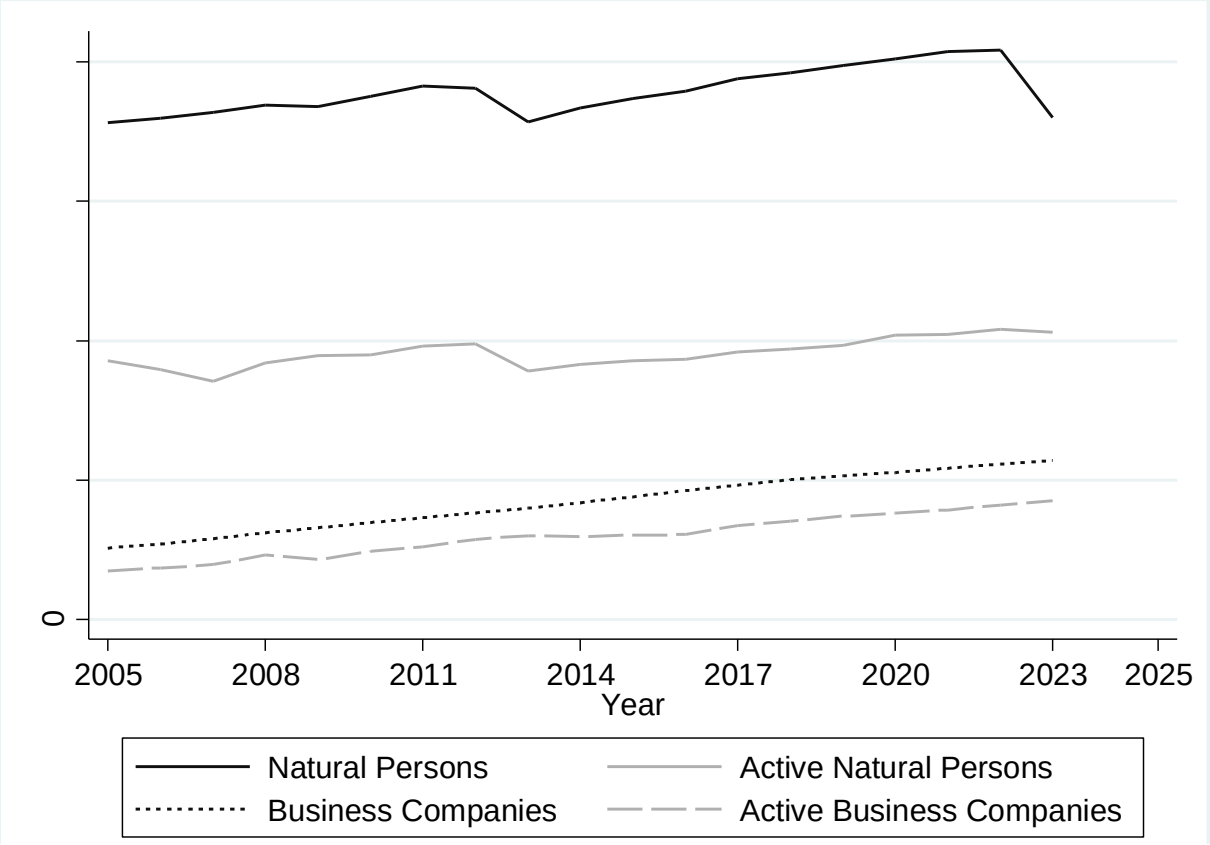


Source: Own elaboration based on the Czech Statistical Office (2024) data

To better understand this change, we present Figure 2, plotting a time series of both natural persons and business companies. Despite the difference between the number of registered and active business organisations, the more significant gap is visible in the time series of natural persons, represented mainly by solo self-employed individuals, as noted by Dvouletý (2019).

Notably, even here, between the most recent years, 2022 and 2023, there is a significant drop in the registered natural persons, i.e., from 2,040,751 to 1,799,930. Such a significant decline is most likely associated with the ongoing digitalisation initiatives of the Czech Government (Pisár et al., 2022), which has imposed a duty on all registered entrepreneurs to communicate with public sector institutions via newly set-up digital mailboxes (in Czech, Datová Schránka), which made some individuals to either close their business officially due to inactivity or leave official business to shadow economy. The accurate data on the motivation of those who quit the business is not obviously available, but one can assume that the highest proportion was the first group, represented by people with limited computer skills. Inevitably, this was the most significant decline in the history of the Czech business activity, which has cleaned out the official business register.

Fig. 2: Development of the registered and active persons and companies (2005-2023)



Source: Own elaboration based on the Czech Statistical Office (2024) data

In Table 1, we have more formally quantified the already observed differences between the registered and active enterprises to see the gaps between both groups. The results of the paired tests have supported the visual differences from Figures 1 and 2. The average difference

between the total registered and active enterprises is statistically significant, and the difference is considerable, representing an average of 1,212,483 enterprises, which is 46% of the registered business activity. The difference is driven by the natural persons, as shown in Figures 1 and 2. The proportion of inactive but registered entrepreneurs is 50.5%. The difference between the active and registered business organisations is, on average, 121,086 business companies (29%), which is significant if we consider the total of all organisations but much lower compared with the total business demography.

Tab. 1. Results of the paired t-tests comparing registered and active enterprises

Enterprises (Total)	**mean**	**standard error**	**observations (N)**	**t-statistics**
Registered Enterprises	2,621,187	55,433.19	24	38.248
Active Enterprises	1,408,704	28,584.86	24	**p-value (H_1: Difference≠0)**
Difference	1,212,483	31,700.34	24	0.000
Natural Persons	**mean**	**standard error**	**observations (N)**	**t-statistics**
Registered Natural Persons	1,890,804	19,480.47	19	68.056
Active Natural Persons	955,555.1	11,782.00	19	**p-value (H_1: Difference≠0):**
Difference	935,248.5	13,742.45	19	0.000
Business Companies	**mean**	**standard error**	**observations (N)**	**t-statistics**
Registered Business Companies	419,643.9	23,314.40	19	19.441
Active Business Companies	298,557.5	17,832.83	19	**p-value (H_1: Difference≠0):**
Difference	121,086.4	6,228.50	19	0.000

Source: Own elaboration based on the Czech Statistical Office (2024) data

Conclusion

Looking at the official business demography data at the Czech Statistical Office, our research has shown that Czech entrepreneurial activity is very overestimated if we consider the finding that 46% of officially registered businesses are not economically active. We discuss that the global COVID-19 pandemic did not cause the most significant decline in the development of Czech entrepreneurship but was most likely caused by the digitalisation initiatives of the Czech government, reminding Czech citizens that they have a valid business licence and that they

should communicate with the public sector institutions via the electronic mailbox. This opens up a relevant question for Czech policymakers and politicians: to what extent the validity of the business licence and presence in the Czech business register, i.e. RES, should not be conditioned to economic activity and upon continuous inactivity, for example, for the five years of inactivity, the business licence should be automatically terminated and removed from the register. This policy action and legislation change could clean out RES and deliver data on entities actively contributing to the development of the Czech economy.

Until this happens, the stakeholders need to be reminded to check and observe statistics with monitored activity and not the total number of registered subjects, which is overestimating the reality. Thus, from the perspective of ongoing research, we recommend scholars observe key milestones in the business demography development and its changes but also use additional indicators, such as those obtained from the surveys of the economically active population, including those focusing on entrepreneurship engagement, such as Global Entrepreneurship Monitor or Global University Entrepreneurial Spirit Students' Survey mapping also early-staged entrepreneurship not included in the official statistics or specific types of entrepreneurship, such as social entrepreneurship (Marcotte, 2013; Sadílek et al., 2022; Kročil et al., 2023).

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