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THE BOISTEROUS BEHAVIOUR OF SOCIETAS EUROPAEA IN CZECHIA – A PROXIMITY ANALYSIS OF MERGERS AND ACQUISITIONS

Role blízkosti v bouřlivém vývoji Evropských společností v Česku – analýza fúzí a akvizic

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Annotation

Czechia is known for a relatively high number of European Companies (SE) registrations. In order to clarify the enormous popularity, the aim of this study is to describe the behaviour of SE in mergers and acquisitions (M&A) activity and to detect differences from other listed companies. In particular, the emphasis is put on the role of geographical and cognitive proximities between SE and their targets. The empirical assessment using logistic regression benefits from a large dataset comprising of 7,798 deals from years between 2004 and 2017 with an SE as an acquirer. The results show that the majority of deals involving SE are connected to the practice of ready-made companies for sale, while the internationalization is weak and statistically insignificant. The pattern of cognitive proximity effect on M&A provides a strong empirical evidence for the theory of related variety.

Key words

mergers and acquisitions, European companies, proximity, logistic regression

Anotace

Česko se v posledních letech proslavilo vysokým počtem registrací Evropských společností (SE). Cílem této studie je popsat zapojení SE na trhu fúzí a akvizic, odhalit rozdíly oproti jiným právním formám a přispět tak k objasnění jejich enormní popularity. Konkrétně je kladen důraz na význam geografické a kognitivní blízkosti mezi SE a potenciálními dcerami. Empirická analýza využívající logistickou regresi se zakládá na velkém datovém souboru o 7 798 případech mezi lety 2004 a 2017, v nichž figuruje SE jako matka. Výsledky ukazují, že většina obchodů zahrnujících SE je spojena s praxí ready-made společností připravených k prodeji, zatímco mezinárodní rozměr obchodů s SE je malý a statisticky nevýznamný. Význam kognitivní blízkosti pro fúze a akvizice podporuje teorii příbuzné rozmanitosti.

Klíčová slova

fúze a akvizice, evropské společnosti, blízkost firem, logistická regrese

JEL classification: R12, R32, M21

1. Introduction

The introduction of the European-wide legal form called European Companies or Societas Europaea (hereafter SE) in 2004 was intended to reduce the administrative burden for companies operating across the European Economic Area. It is a form of public limited liability company, which can be registered in any Member State and then act across borders without creating national subsidiaries in every country. This intention has been partly met in Germany and France, where the biggest SE are registered. However, the registrations have been soon overwhelmed by Czech firms (Fig. 1) – mostly small “shelf” companies (Cremers, Carlson, 2013).

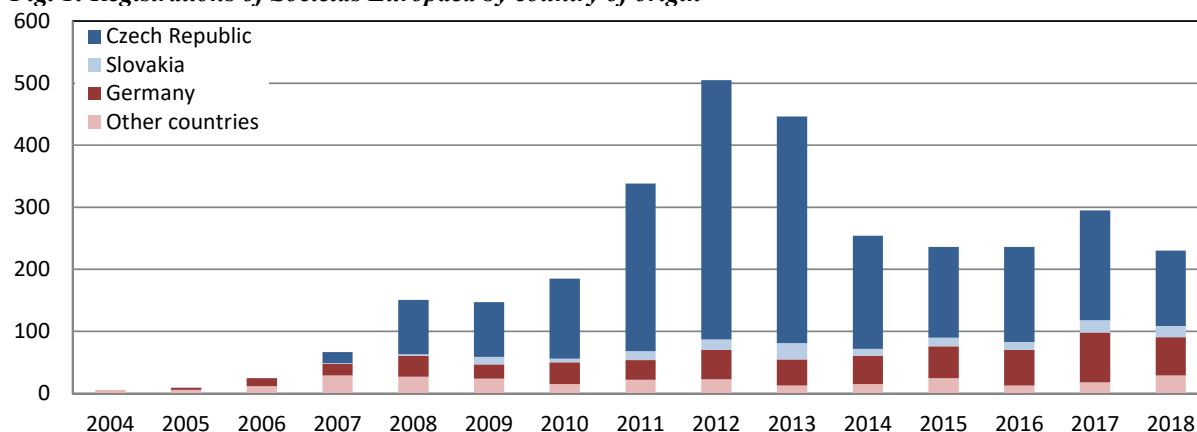
The aim of this article is to unravel the behaviour of Czech based SE by analysing their involvement in mergers and acquisitions (hereafter M&A), especially considering differences to other legal forms. In particular, the emphasis is put on the role of different proximity dimensions between SE and their targets: specifically the

geographical and cognitive proximity. The idea is to shed more light into the practices and motivations shaping the Czech SE market, which are strikingly different from other European economies.

The proximity framework allows to describe inter-firm linkages and spillovers (Paci, et al., 2016), while the basic hypothesis is that closer firms tend to be more connected either by direct supplier-customer ties, or by externalities. However, there are various types of proximity, from geographical to cognitive, organizational, institutional or social (Boschma, 2005). The relative importance of these dimensions can explain the structure of local economy and lead to better understanding of the main drivers. One of the processes, which reveal the importance of various types of proximity, is the process of mergers and acquisitions. Studies from Western Europe show the superiority of cognitive (sectoral) proximity over the spatial closeness (Ellwanger, Boschma, 2015; Boschma et al., 2016), while the Czech market is characterized by the opposite (Květoň et al., 2019). As the SE are intended to operate across national borders, we expect their behaviour to be closer to their western counterparts.

At the same time, the boisterous boom of Czech SE registrations from 2008 onwards has caused a “puzzle” for both regional scientists and policy makers (Eidenmüller, Lasák, 2012). The majority of newly established SE in Czechia are not mergers of international companies (as has been expected), but ready-made companies prepared for sale. They are put “on the shelf” and offered to businessmen. As Czechia belongs to countries with high administrative burden when starting a business (WB, 2019), it can save a lot of time to buy a ready-made company and only change its name and board members. Moreover, the firms offering these ready-made companies often provide virtual offices (Smrčka et al., 2017). However, this last argument does not explain the excessive popularity of this legal form in comparison with other countries, for instance Germany, where the score for “starting a business” is almost the same as for Czechia (WB, 2019). Through interviews with founders of SE in Czechia, the popularity has been explained by lower legal requirements (board size, for instance) and the positive image of European brand (Eidenmüller, Lasák, 2012).

Fig. 1: Registrations of Societas Europaea by country of origin



Source: ETUI (2014), European Company (SE) Database, <http://ecdb.worker-participation.eu>

Another explanation can be based on continuation of turbulent market behaviour from nineties during the post-communist transformation. For an illustration, we can describe activity around a few people who founded companies named demonstratively Golden River, Platinum River and Crystal River. According to the public registry, these three companies, based in Prague, have had 1,862 ownership ties (current or past) to other companies. Of these, 200 ties lead to the identical address (Koněvova 2660/141, Prague). Recently, all three companies have been owned by the European Capital SE (held by the same people). Moreover, this SE has had a share in 133 other SE, of which 17 are based at the same address. These four companies accounted for 1.5% of domestic deals in our dataset.

The unique dataset of mergers and acquisitions realized by Czech SE from the beginning of their existence until 2017 allows an in-depth analysis of the outlined topics. Our specific hypotheses are as follows:

- H1: The majority of deals undertaken by SE are connected to the practice of ready-made companies for sale.
- H2: As the SE are intended to be a European-wide legal platform, a significant number of deals leads to foreign partners.
- H3: For the same reason, geographical closeness plays smaller role than cognitive proximity for acquisition decisions of SE.
- H4: Closer firms (in spatial same as cognitive meaning) have higher probability to connect in M&A deal.

2. Data and methodology

The empirical assessment in this study is based on a unique dataset provided by the Bisnode company covering all take-overs with at least 50% of the target acquired. Also, the target must be legally based in Czechia, while the acquirer can be international. We have an evidence of 7,798 deals, where the acquirer is SE, and 2,008 deals with SE as a target (1,803 lie in the intersection). This covers all deals since the introduction of SE into the Czech legal system from 2004 to 2017.

These numbers, however, also include all establishments of new companies. If we filter out all “deals”, for which the date of acquisition is the same as the date of foundation of the target (which is freely available from the Registry of Economic Subjects, hereafter RES), we limit the numbers to 1339 deals with SE acquirers and only 202 with SE targets. Similarly, we put aside deals with identical headquarter (HQ) addresses, assuming that it may indicate the use of virtual addresses or an inner branch management (not a real change in ownership). Further, we can consider several other conditions, namely domestic firms only, at least 1 employee according to RES, or deals excluding Prague, assuming that all virtual addresses and other types of artificial businesses tend to concentrate in the capital city (Tab. 1).

Tab. 1: Sampling criteria for deals with SE on the acquirer side

Sampling criteria	Number of deals	
	Single condition	Cumulative
Total M&A (acquirer = SE)	7 798	
Excluding identical HQ address	5 999	5 999
Different date of acq. from the foundation	1 339	860
Domestic deals	7 740	817
At least 1 employee in the target	2 186	270
Excluding acquirers from Prague	2 071	104

Source: author's calculations.

As the information on number of employees is missing for a considerable number of firms in RES and exclusion of Prague might lead to a great loss of valuable information, we decided to continue with 817 domestic deals. On the target side, the numbers are much smaller (Tab. 2). SE are apparently rather active acquirers than popular targets. The number of 68 domestic deals is too small for a further econometric analysis.

Tab. 2: Sampling criteria for deals with SE on the target side

Sampling criteria	Number of deals	
	Single condition	Cumulative
Total M&A (target = SE)	2 008	
Excluding identical HQ address	1 590	1 590
Different date of acq. from the foundation	202	122
Domestic deals	1 939	68
At least 1 employee in the target	441	34
Excluding acquirers from Prague	592	10

Source: author's calculations.

So far, we have collected data for the cases, in which a deal has actually occurred. In order to assess the importance of proximity for the probability of the acquisition, we need also dyads of firms without the mutual link (the zero observations). Therefore, we pick 20 random potential targets for each actual acquisition. These targets are chosen from all firms which have been taken over (by not only SE) in a two year span around the deal. By this step, we limit the extraordinarily broad set of all potential dyads to a reasonable number, which allows the statistical analysis and, at the same time, does not cause any statistical bias (King, Zeng, 2001; Boschma et al., 2016).

In the analysis, we use the Firth-Logit model to avoid a small-sample bias caused by rare events data (Firth, 1993). On the right hand side, we distinguish three types of proximity. Geographical (or spatial) proximity is classified

on four levels: both firms are either located in the same city, same district (okres), same region (kraj), or none of these. For the first three levels we construct binary variables, which are mutually exclusive (i. e. if the dyad is in the same city, it has value 1 for this, but 0 for district and region). An alternative way of measuring spatial proximity is the time distance (by car), used in log inverse.

Cognitive (industrial) proximity is measured analogically. We use four levels of detail, whether the firms' main specialisation classified by NACE (Eurostat, 2008) corresponds or not (NACE3 means the correspondence in 3 digits of the firms' main activities NACE codes). Finally, for organizational proximity we include only one binary variable for the cases, while both acquirer and target are SE.

3. Empirical analysis

Regarding the first two hypotheses, we compare the means of sample for ES with the same defined sample for the alternative legal form, which is listed company (in Czechia called akciová společnost, a.s.). One of the selecting criteria was the case when the date of acquisition was equal to the date of the target formation. If the hypothesis H1 is correct, the mean for this binary variable must be significantly higher in the case of ES than for a.s. (we cannot disentangle the motive to establish ready-made company from other motives, however, we have no reason to assume differences in other motives), which is indeed confirmed by the t-test (Tab. 3).

Tab. 3: Two sample t-tests for equal means between ES and listed company (a.s.)

Tested binary variable	mean		t-test
	ES	a.s.	Pr(T=t)
Date of acq. equal to foundation (acquirer = ES/a.s.)	0.828	0.495	0.000
International M&A (acquirer = ES/a.s.)	0.050	0.141	0.000
International M&A (target = ES/a.s.)	0.443	0.472	0.484

Source: author's calculations.

By the same reasoning, the hypothesis H2, telling that ES is prone to internationalization, can be rejected. There is no statistical difference when considering ES or a.s. as targets; and in the case of acquirers, the difference is statistically significant, but reversed: it is by far more likely that foreign listed company (non-SE) would enter the Czech market as an acquirer than it would be the case for foreign SE. The most frequent acquirers among listed companies are from Slovakia (361), Luxembourg (253) and Switzerland (178). The majority of foreign SE acquirers are from Slovakia (34).

The main proximity analysis is provided in two steps. Firstly, we employ only SE as described in methodology. In the next step, we run the same for the alternative listed companies again, as a benchmark. All models cover M&As since 2004 to 2017. In Tab. 4, the results are presented separately for spatial and industrial proximity and for the full model, which is further differentiated for two alternative ways of measuring spatial proximity. All models include fixed effects for different industrial sectors (sections in NACE classification, i. e. 1-digit codes), for years (assuming possible shifts in behaviour in time), and also for regions. Especially controlling for Prague (which is classified as a "region") is statistically significant and influencing the other coefficients. At the same time, the explanatory power of the models is very weak (according to the pseudo R-squared), however, the purpose of the model is not to explain the decision making about M&A, but to assess the relative importance of different proximity dimensions. It is not surprising that the key factors for decisions about M&A are not exhausted only by the firm closeness.

Tab. 4: Logit results for mergers and acquisitions with SE as an acquirer

	2004-2017	2004-2017	2004-2017	2004-2017
Spatial proximity				
Time distance (log inverse)				0.647(0.040 **) *
Same region (NUTS3)	1.681(0.230 **) *		1.726(0.231 **) *	
Same district	1.035(0.100 **) *		0.999(0.101 **) *	
Same city	2.048(0.116 **) *		1.991(0.117 **) *	
Industrial proximity				

Same section (NACE1)		0.641(0.152 **) *	0.613(0.155 **) *	0.587(0.155 **) *
Same division (NACE2)		0.353(0.164 **)	0.326(0.166 **)	0.341(0.166 **)
Same group (NACE3)		-1.424(1.007)	-1.450(1.012)	-1.398(1.009)
Same class (NACE4)		0.854(0.106 **) *	0.753(0.108 **) *	0.745(0.107 **) *
Organizational proximity				
Both SE			1.332(0.270 **) *	1.435(0.267 **) *
Sector dummy	yes	yes	yes	yes
Year dummy	yes	yes	yes	yes
Region (NUTS3) dummy	yes	yes	yes	yes
Pseudo R Sq.	0.05	0.01	0.06	0.06
Obs.	16 871	16 853	16 853	16 813

Source: author's calculations

The results for both spatial and industrial (cognitive) proximity are robust for adding other dimensions. Surprisingly, it does not hold that with decreasing distance between firms the probability of take-over gradually increases, as it is the case in other studies (Boschma et al., 2016; Ellwanger, Boschma, 2015). It is still true that the probability is highest within the same city and decreases, when the distance is higher. However, the same region demonstrates much higher tendency for the deal than the same district. A similar pattern is in the case of industrial proximity. The highest probability is revealed for the tightest similarity in specialisation (4-digits NACE), but it is negative and insignificant for 3-digits NACE. Comparing various dimensions of proximity, the relative importance is highest for geographical dimension.

Tab. 5: Logit results – comparison with listed companies (a.s.)

	ES	a.s.
Spatial proximity		
Same region (NUTS3)	1.726(0.231) ***	1.666(0.055) ***
Same district	0.999(0.101) ***	0.982(0.033) ***
Same city	1.991(0.117) ***	2.333(0.038) ***
Industrial proximity		
Same section (NACE1)	0.613(0.155) ***	0.218(0.052) ***
Same division (NACE2)	0.326(0.166) **	0.69(0.05) ***
Same group (NACE3)	-1.45(1.012)	1.243(0.078) ***
Same class (NACE4)	0.753(0.108) ***	0.958(0.043) ***
Organizational proximity		
Same legal form	1.332(0.27) ***	0.543(0.029) ***
Sector dummy	yes	yes
Year dummy	yes	yes
Region (NUTS3) dummy	yes	yes
Pseudo R Sq.	0.06	0.08
Obs.	16 853	172 883

Source: author's calculations.

In a comparison with listed companies, the role of spatial proximity is comparable, but the industrial proximity differs (Tab. 5). In the case of listed (non-SE) companies, it behaves much more according to the expectations (increasing probability with decreasing distance), although there is a little incongruence between 3- and 4-digits NACE. On the other hand, organizational proximity plays much bigger role for ES acquirers.

4. Conclusions

The strikingly protuberant behaviour of Czech Societas Europaea in terms of number of registrations calls for a deeper examination. In this article, we have provided a proximity analysis of mergers and acquisitions involving SE especially as an acquirer. There have been approximately four times more cases with SE as an acquirer than as a target. Moreover, the latter are acquired with vast majority by SE again.

It has been described in previous studies that the extensive number of SE registrations in Czechia is driven by the practices of ready-made companies for sale (Cremers, Carlson, 2013). This finding has been supported by our evidence. 83% of deals recorded in the unique database of M&As from 2004 to 2017 involving SE as an acquirer have the same date as the date of the target formation. For other listed companies, this share is 50%, which is significantly lower. It shows that the Czech market is still relatively turbulent in the sense that it is common to trade with companies (it was not the aim of this article to unravel motivations for this behaviour). This situation is much more pronounced in the case of SE than in the rest of the economy.

The main intention for introducing this legal form into the European legal system was the support of international companies operating across the European Economic Area. It would be reasonable to assume that in the M&A market, SE are prone to enter the international deals more than the other legal forms. However, we have rejected this hypothesis. Both SE and other listed companies (a.s.), which have become a target of any acquisition in the past 15 years, have been from nearly 50% acquired by foreign company. Therefore, there is no statistical difference between the legal forms. Regarding the side of acquirers, 15% of listed companies acquiring a firm in Czechia have been international, whereas the same holds only for 5% of SE.

Similarly, the assumption that the geographical proximity should be less important for SE acquirers was not confirmed. For both, SE and other listed companies, the cognitive proximity is less influential in deciding about M&As than the spatial closeness. This is in line with findings for the whole Czech economy (Květoň et al., 2019), while it opposes the situation in western markets (Boschma et al., 2016). Therefore, we can conclude that there is no structural difference between SE and the rest of the economy in terms of the geographical proximity relevance. However, there is a difference for the cognitive proximity, as it deviates from the usual pattern. It assumes that decreasing distance should lead to increasing probability of an acquisition. SE, unlike other listed companies, demonstrate high probability of a deal for the closest companies (the same class) and then for still related, but already diverse (the same section). The two levels in between exhibit by far lower probabilities. This finding is well in line with the recent theory of related variety (Frenken et al, 2007). This theory tells exactly that it is beneficial for regions to diversify rather than specialise into too narrow field, but that the diversification must still orientate to the mutually related activities. The fact that SE demonstrate this principle more than traditional listed companies can be explained by their relative progressivity, as they have been established mostly within the last 10 years.

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