

The boisterous behaviour of Societas Europaea in Czechia – A proximity analysis of M&A

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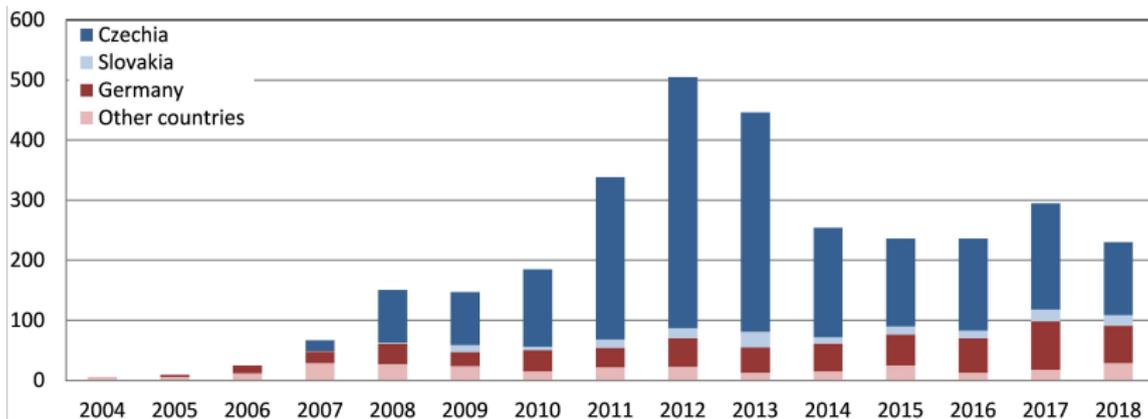
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Boisterous behaviour?

Registrations of Societates Europaeae by country of origin



Outline

1. Motivation: European companies in Czechia
2. Data and methods: Logit
3. Results
4. Discussion

A step aside – M&A proximity analysis

- ▶ Who acquires whom?
- ▶ Geographical proximity, industrial relatedness, organizational closeness shape the M&A market.



Ellwanger, N. & R. Boschma (2015)

Who Acquires Whom? The Role of Geographical Proximity and Industrial Relatedness in Dutch Domestic M&As between 2002 and 2008

Tijdschrift voor economische en sociale geografie, 106(5), 608-624

The main idea

- ▶ Are there differences in M&A behaviour between SE and other listed companies (a.s.)?

Hypotheses

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1. More frequent practice of ready-made companies.
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3. More important cognitive than geographical proximity.
4. Increasing probability of a deal with decreasing distance.

Data

- ▶ Source: Bisnode.
- ▶ Czech company as a target.
- ▶ At least 50 % of the company acquired.
- ▶ Time span: 2001–2017
- ▶ 126 169 deals

Data

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.

Data

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.

Logistic regression

- ▶ Firth logit (rare events data)
- ▶ LHS: occurrence of a deal (for every deal 20 random chosen potential targets)
- ▶ RHS: Dummies for the same:
 - ▶ region/district/city (geographical);
 - ▶ NACE section/division/group/class (cognitive);
 - ▶ legal form (organizational proximity).

H1, H2: more frequent ready-made and international deals

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 |

Note: Welch's approximation for unequal variances used

Source: author's calculations.

H4: proximity matters

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.

H3: more important cognitive proximity

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.

Conclusions

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- ▶ More internationalized? Rejected.
- ▶ Less dependent od spatial closeness? Rejected.
- ▶ SE deviates from the pattern of increasing probability of a deal with decreasing cognitive proximity – in line with the concept of **related variety**.