Soft Location Factors – Did the Relevance of Soft Location Factors Change Over the Course of Time?

ERSA Congress 2018, 30th August 2018, Cork

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Outline of Presentation

1. Introduction
2. Theory
3. Hypothesis, Research Design and Methods
4. Empirical Results
5. Conclusion
1. Introduction

Interdependent relationship between firms and regions

- Regional location conditions influence firms’ turnover, costs and profits
- Economic situation of firms is an important determinant of regional economic success and welfare

Increasing location competition

- Firms should be satisfied with their location
- The expectations of new firms regarding location conditions should be met
2. Theory

Theory of hard and soft location factors

- **Hard location factors:** traditional location factors, like labor, land, capital and transport infrastructure

- **Soft location factors:** all aspects that can hardly or not at all be expressed in figures or monetary terms, like image, living conditions, leisure or cultural facilities

- Relevance of soft factors could have increased over time:
  - Structural change in the economic sectors
  - Growing importance of technology makes innovations necessary
  - Change in values

Source: Grabow et al., 1995
2. Theory

Studies regarding “hard” and “soft” location factors

• Studies come to the result that “hard” factors are still of the highest importance$^1$

• But if all potential locations provide the same standard of “hard” factors “soft” factors become relevant$^2$

• Although firm surveys show that “hard” factors seem to be more important for the majority of companies, some soft location factors like the regional image are still important location factors$^3$

➢ The relevance of “soft” factors might depend on special conditions, e.g. line of business, size of enterprise$^4$

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$^1$ Sources: Eickelpasch, Hirte, & Stephan, 2016; Hamm, Wenke, Növer, & Werkle, 2013; Love & Crompton, 1999; Murphy & Redmond, 2008

$^2$ Sources: Grabow, 1994, p. 156; Love & Crompton, 1999, p. 219

$^3$ Sources: Eickelpasch et al., 2016.; Hamm et al., 2013

$^4$ Source: Grabow et al., 1995
3. Hypothesis, Research Design and Methods

Hypothesis

‘Soft factors of location have become more important over the course of time’

Research design

- Data from firm surveys to analyze the location conditions of Middle Lower Rhine Area
- Firms evaluate the general relevance and quality of more than 50 location factors on a four-point Likert scale (1 = very important/good; 4 = very unimportant/bad)
- In each of the four surveys more than 1,000 firms participated

3. Hypothesis, Research Design and Methods

Methods: 1. Relevant soft factors were carved out from the current study

- Image & awareness of location
- Housing
- Cityscape
- Safety
- Shopping facilities
- Cultural offerings
- Recreation and leisure facilities
- Supply of general education schools

- Duration of permit procedure
- Smooth cooperation of local authorities
- Portfolio management for local enterprises
- Accessibility/Opening hours of local administration
- Administrative response time

- Inner-city traffic conditions
- Parking
- Parking fees
- City marketing

Sources: 1 Grabow, 1994; 2 Eickelpasch, Lejpras, & Stephan, 2007; 3 Eickelpasch et al., 2016; 4 Love & Crompton, 1999; 5 Landua et al., 2017
2. Cronbach’s Alpha and factor analysis

- Cronbach’s Alpha is at least 0.852 → scales are reliable
- Factor analysis: chosen levels result in one factor

3. Building indices

- Factor analysis → component values
- Component values were used to summarize the location factors into an index
- The authors integrated the weightings of the single location factors in the index formula

- Calculated index values: 0 = very important → 100 = very unimportant

➢ The lower the index value, the more important the level of location factors
4. Empirical Results

Average values by location factor levels over time

V. Level – Hard factors: road and highway access, properties, information and communication infrastructure, public fees and taxes, availability and qualification of workforce, energy costs, water/wastewater taxes and disposal fees
4. Empirical Results

**T-tests**

<table>
<thead>
<tr>
<th>Level</th>
<th>Year</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Level – Quality of life</td>
<td>2002</td>
<td>49.48</td>
<td>5.31</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>44.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Level – Inner-city factors</td>
<td>2002</td>
<td>48.88</td>
<td>4.30</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>44.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Level – Governmental services</td>
<td>2002</td>
<td>41.89</td>
<td>0.79</td>
<td>0.489</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>41.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Level – Consulting offerings</td>
<td>2002</td>
<td>50.59</td>
<td>-1.28</td>
<td>0.343</td>
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<td></td>
<td>2017</td>
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<td>V. Level – Hard factors</td>
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<td></td>
<td>2017</td>
<td>32.71</td>
<td></td>
<td></td>
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<tr>
<td>V. Level – Hard factors without information and communication infrastructure</td>
<td>2002</td>
<td>32.43</td>
<td>-2.53</td>
<td>0.001</td>
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<td></td>
<td>2017</td>
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- **First hint for an increasing importance of soft location factors**
- **Especially in opposition to the relevance of hard factors, which stagnated or even decreased (without the factor information and communication infrastructure)**
4. Empirical Results

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Due to the significant changes, the quality of life and inner-city factors are in the focus of the following analysis.
## 4. Empirical Results

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<th>Mean Difference</th>
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</thead>
<tbody>
<tr>
<td>Image and awareness of location</td>
<td>2.26</td>
<td>2.18</td>
<td>.081</td>
<td>.051</td>
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<tr>
<td>Housing</td>
<td>2.75</td>
<td>2.64</td>
<td>.106</td>
<td>.007</td>
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<tr>
<td>Cityscape</td>
<td>2.37</td>
<td>2.14</td>
<td>.232</td>
<td>.000</td>
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<tr>
<td>Safety</td>
<td>2.28</td>
<td>2.07</td>
<td>.215</td>
<td>.000</td>
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<td>Shopping facilities</td>
<td>2.42</td>
<td>2.26</td>
<td>.157</td>
<td>.000</td>
</tr>
<tr>
<td>Cultural offerings</td>
<td>2.75</td>
<td>2.58</td>
<td>.169</td>
<td>.000</td>
</tr>
<tr>
<td>Recreation and leisure facilities</td>
<td>2.74</td>
<td>2.47</td>
<td>.271</td>
<td>.000</td>
</tr>
<tr>
<td>Supply of general education schools</td>
<td>2.26</td>
<td>2.24</td>
<td>.016</td>
<td>.722</td>
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<td>II. Level – Inner-city</td>
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<td>2.34</td>
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<td>.103</td>
<td>.016</td>
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<tr>
<td>Parking</td>
<td>2.25</td>
<td>2.07</td>
<td>.182</td>
<td>.000</td>
</tr>
<tr>
<td>Parking fees</td>
<td>2.63</td>
<td>2.45</td>
<td>.178</td>
<td>.000</td>
</tr>
<tr>
<td>City marketing</td>
<td>2.72</td>
<td>2.61</td>
<td>.109</td>
<td>.011</td>
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5. Conclusion

Results

- Hypothesis can be confirmed for the quality of life and inner-city factors
- It could not be confirmed for governmental services and consulting offerings
- Importance of hard factors stagnated or even decreased (without information and communication infrastructure)
- But hard factors are still of higher importance for the majority of firms

Recommendations

- Soft factors, like the image or the recreation and leisure facilities, can be influenced by the local government to a great extent
- The local government should pay attention especially to the quality of life factors to attract highly-skilled and creative people and companies with a demand for these employees.
5. Conclusion

Study is still a work in progress

• Many questions are still open and need to be analyzed in more detail, e.g.:
  • Do conditions like line of business, type of company, type of location decision, size of enterprise, share of high skilled or the location in different city sizes have an influence on the evaluation of soft location factors?
  • Does the evaluation differ for example between companies of the manufacturing industry and companies of the creative class?
  • Why are the majority of location factors evaluated worse in 2012?
  • …
THANK YOU FOR YOUR ATTENTION!
Literature


