

2ND International Conference on Entrepreneurship, Innovation and Regional Development

**Contribution of location theories for Regional Development:
an empirical study applied to technology-based firms**

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Introduction

- Entrepreneurship, as well as the factors behind its existence and their influence on regional economic development, has been studied by several authors (Birley, 1985; Kirchof e Phillips, 1988; Storey, 1994).

Introduction

- Questions on location theories are inevitably linked to the question of entrepreneurship and its relevance to regional development.
- That is to say, what makes entrepreneurs, who are responsible for the entrepreneurial activity; choose a particular location to set up their business?

Introduction

- Given the importance of regional development and location theories, we shall aim to identify, in the present research, the reasons which lead technology-based firms to set up in a particular region, with particular emphasis on the factors which influenced the decision to locate technology-based firms in the Beira Interior Region (Portugal).

2.Theoretical Views on firms' location

- Location of economic activity can be analysed through three distinct views (Hayter, 1997):
 - (i) the neoclassical
 - (ii) institutional and;
 - (iii) behavioural.
- We chose to follow the theoretical classification advanced by Hayter (1997)

2.Theoretical Views on firms' location

Institutional Factors:

- Business incubator;
- Access to knowledge generated by universities or research centres;
- R&D incentives, firm and job creation;
- Role Model Entrepreneurs;
- Technology Fairs.

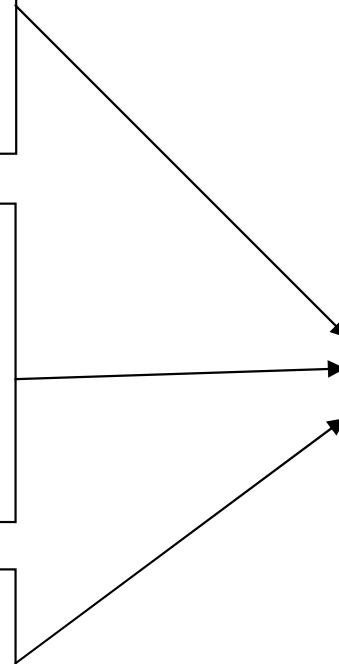
Neoclassical Factors:

Distance from the capital of the municipality;
Road infrastructures;
Level of economic activity in the region;
Costs of industrial property;
Other physical infrastructures;
Specialization of companies in the region

Behavioural Factors:

Founder decides to live in that locality;
Employees wish to live in that locality;
Good housing conditions;
Recreational and leisure opportunities;
Founder was born on that locality;
Community's attitude to business;
Proximity to the residence of the founder

**Location decisions by
technology-based firms**



3. Methodological and statistical procedures

- The classification of technology-based industries includes the OECD (2003) classification for R&D intensive manufacturing industries, given the major contribution that these firms may give to the country in terms of R&D production, wealth and added value.
- Four key categories have been identified: (i) high-technology industries; (ii) medium-technology industries; (iii) medium-low-technology industries; and (iv) low-technology industries.

3. Methodological and statistical procedures

- Based on OECD (1996) criteria, our unit of analysis (Beira Interior region) is rural in all the localities that it comprises, as we shall next demonstrate.
- We used the face-to-face method in our research, in order to obtain the highest possible number of responses.

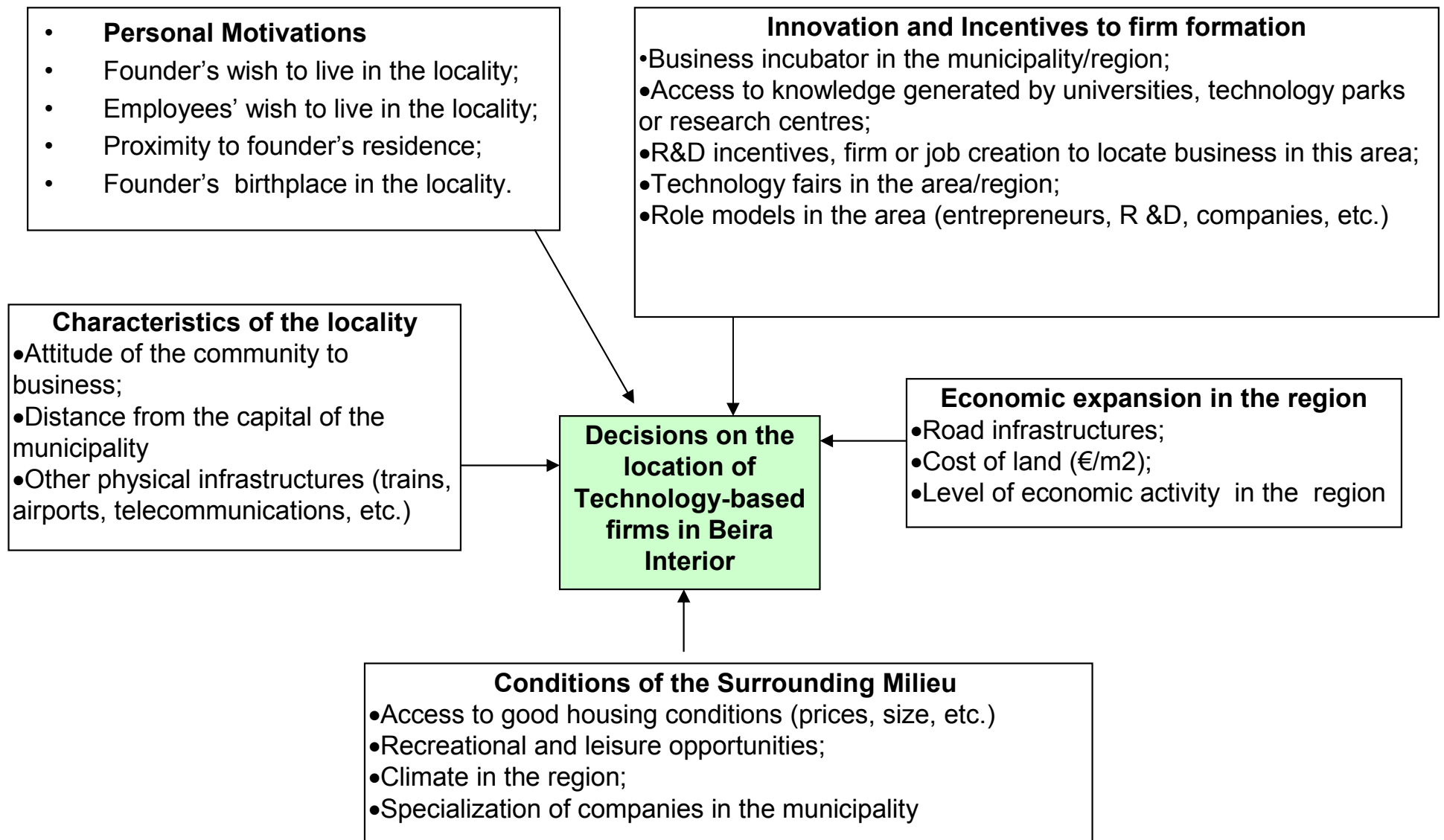
3. Methodological and statistical procedures

- The objectives of our research were to analyse and identify the factors which inform decisions on the location of technology-based firms in the Beira Interior Region (Portugal).
- We aim to:
 - (i) empirically validate the proposed conceptual model on decisions on the location of technology-based firms in Beira Interior;
 - (ii) identify which factors influence the location of technology-based firms in Beira Interior; and
 - (iii) characterize firms according to distinct technology levels and detect eventual differences between levels. In order to identify the location factors of high, medium and low-technology firms in Beira Interior, we carried out a factor analysis on 19 items of the questionnaire

3. Methodological and statistical procedures

- The factor analysis reveals that the proposed conceptual model has a slightly different application when applied to Beira Interior Region, in what concern the aggregation of factors.
- Thus, our empirical model is as follows:

3. Methodological and statistical procedures



4. Final considerations

- It was precisely at this point that we have answer for our research question:
- what are the reasons that make technology-based firms set up in a particular region? And particularly, which were the location factors in the case of technology-based firms in Beira Interior?

4. Final considerations

- According to the results obtained it was possible to identify the following factors which influence the location of technology-based firms in the Region of Beira Interior:
 - (i) the founder's wish to live in the locality;
 - (ii) the employees' wish to live in the locality;
 - (iii) proximity to the founder's residence;
 - (iv) the founder's birthplace;
 - (v) the level of economic activity in the region (this factor only influences high and medium-technology firms).

4. Final considerations

- We can thus conclude that entrepreneurs with firms in Beira Interior region were led by personal reasons when deciding on the location of their firms.
- In other words, they were primordially influenced by behavioural factors.

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Thank you for your attention
Obrigado!

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