Firm Performance and Multi-Scale Territorial Resources in Wallonia: Towards a Model using Business Accounting?

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PhD project and aim of this research

Why? In Europe (and in Wallonia), most public policies related to regional development and economic development aim to stimulate/reinforce the ''territorial resources'' in order to improve the competitiveness of the (Walloon, Belgian or European) firms. For instance, in Wallonia, one of the key action of the Marshall Plan (i.e. the main regional strategy in the domain of economic development) aims to "mobilize the territory" (in French, « mobilisation du territoire à destination du développement économique »). In this perspective, our objective is to quantify and analyse the territorial resources that impact the performance of Walloon or Belgian firms, with the final aim to advice the policy makers and to improve the related public policies. This topic is related to questions such as:
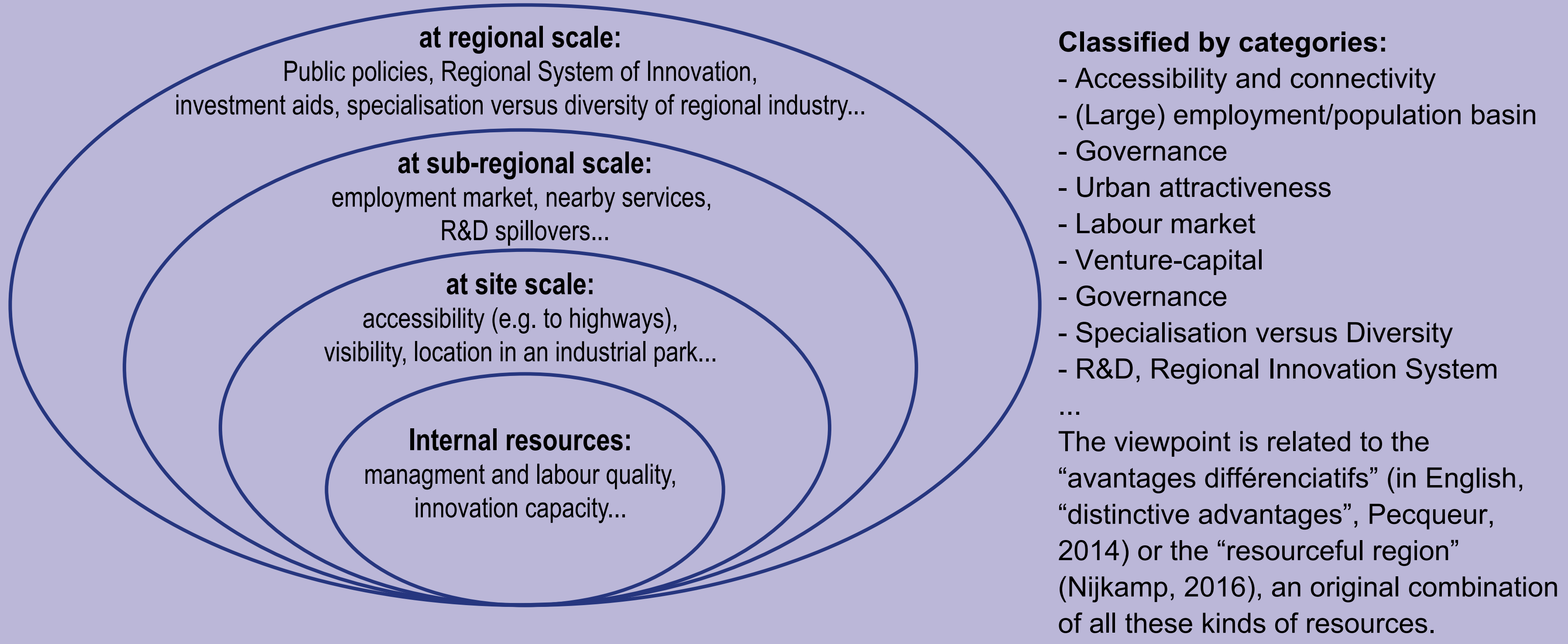- Does a better accessibility of economic estates improve the performance of firms?
- Are cultural amenities (in order to attract talents) and land prices (in order to reduce their costs) strategic competitive advantages for firms?

Main goal of PhD project: highlighting the territorial resources influencing the perfomance of Walloon (Belgian) firms in four steps:
1. Litterature review
2. **Analysis of business accounting coupled with indicators of territorial resources (the purpose of this poster)**
3. Hedonic model of property prices for the Walloon firms
4. Survey of the "territorial" needs of business owner
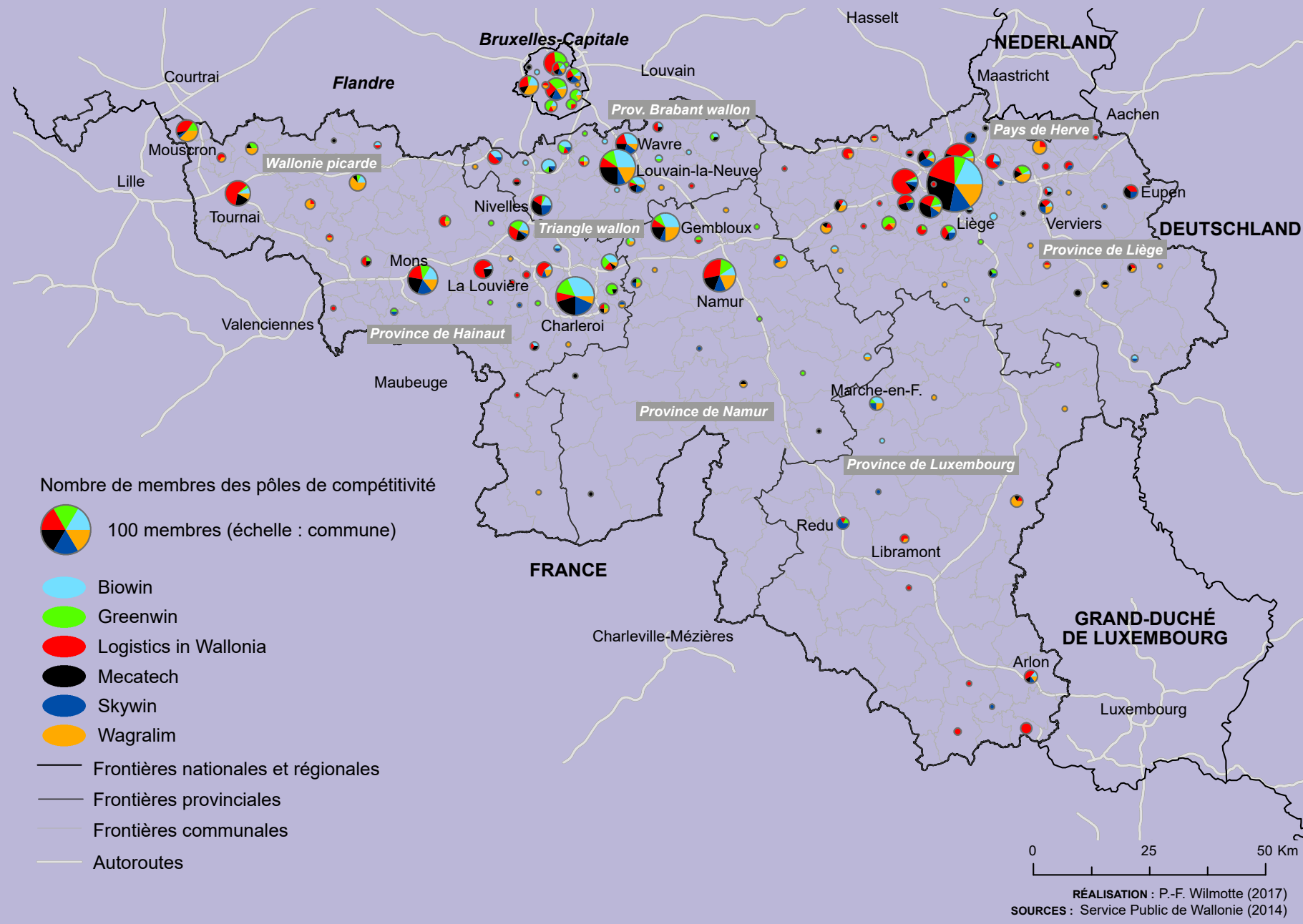
Multi-scale territorial resources?

Our definition: it means the specific features of the territories that affect the ability of companies to develop their business.
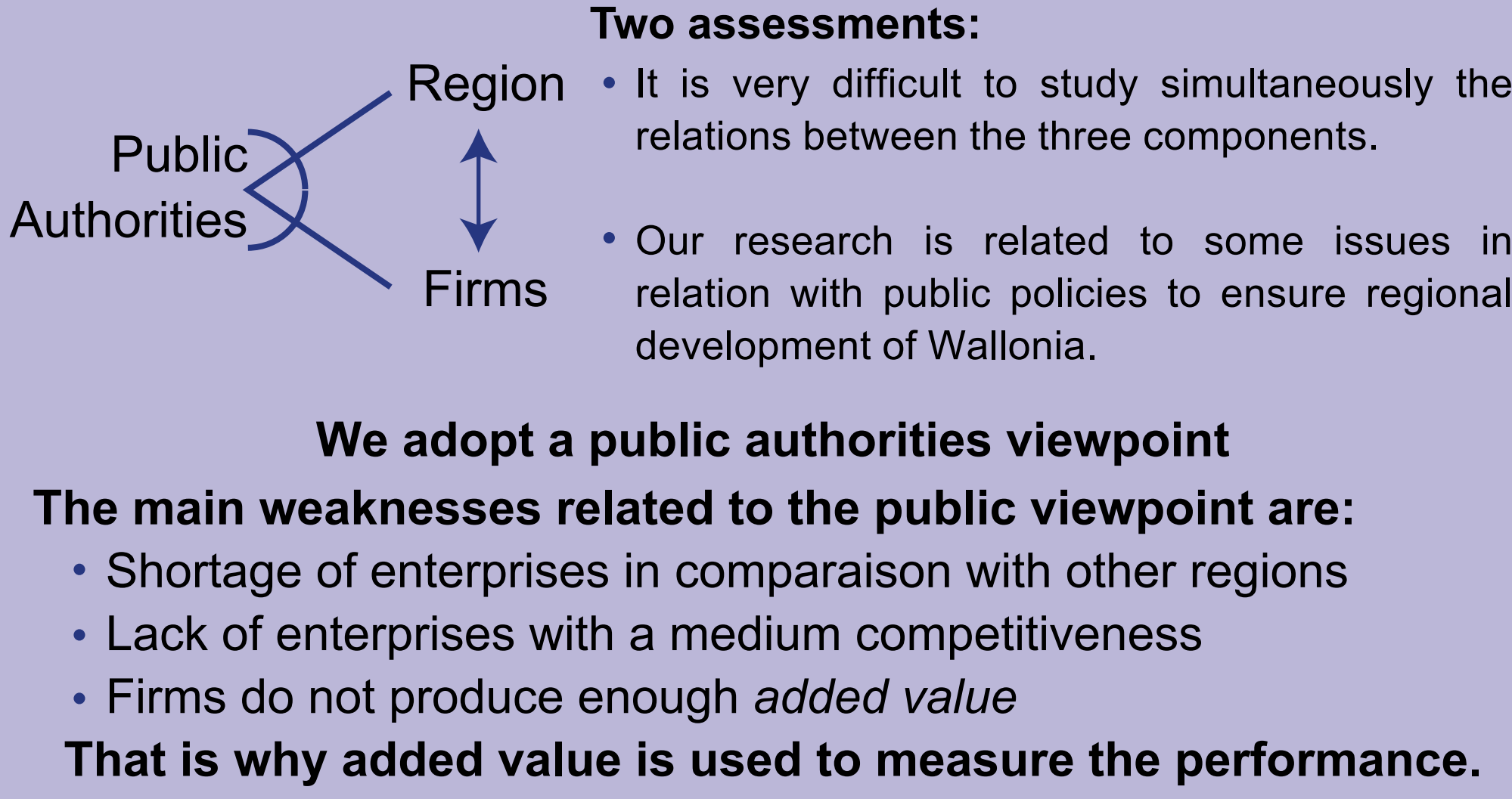
at regional scale:
Public policies, Regional System of Innovation,
investment aids, specialisation versus diversity of regional industry...

at sub-regional scale:
employment market, nearby services,
R&D spillovers...

at site scale:
accessibility (e.g. to highways),
visibility, location in an industrial park...

Internal resources:
managment and labour quality,
innovation capacity...

Classified by categories:
- Accessibility and connectivity
- (Large) employment/population basin
- Governance
- Urban attractiveness
- Labour market
- Venture-capital
- Governance
- Specialisation versus Diversity
- R&D, Regional Innovation System
...
The viewpoint is related to the "avantages différenciatifs" (in English, "distinctive advantages", Pecqueur, 2014) or the "resourceful region" (Nijkamp, 2016), an original combination of all these kinds of resources.

Study area

Wallonia because of the availability of data: we can use a Walloon database on firm's accounting information.

The map illustrates the geography of Walloon clusters, reflecting the unequal economic development of the region and we postulate an unequal territorial resources endowment.
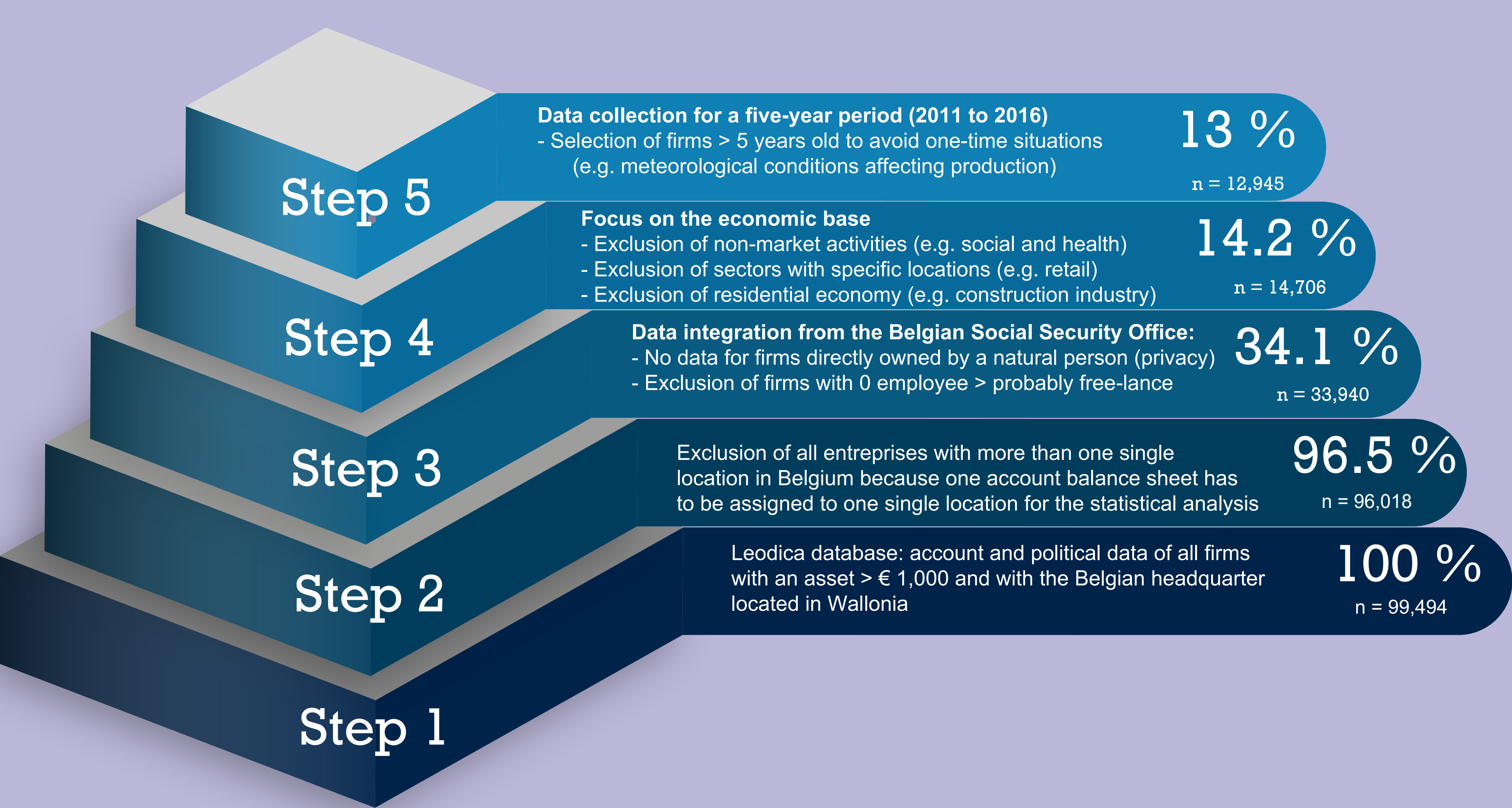

Firm performance?

Two assessments:
- It is very difficult to study simultaneously the relations between the three components.
- Our research is related to some issues in relation with public policies to ensure regional development of Wallonia.

We adopt a public authorities viewpoint
The main weaknesses related to the public viewpoint are:
- Shortage of enterprises in comparaison with other regions
- Lack of enterprises with a medium competitiveness
- Firms do not produce enough *added value*
That is why added value is used to measure the performance.

Towards indicators reflecting internal and territorial resources

Value added

Internal resources	Location resources	Human resources
1/ Turnover	1/ Local accessibility : time to reach the nearest highway	1/ Median income
2/ Assets and fixed assets	2/ Regional accessibility : ESPON accessibility index	2/ Activity rate
3/ Property : national or foreign ; public or private	3/ Time to reach the nearest metropolis or main city	3/ Highly educated share in the population
4/ Cash-flow	4/ Location in a business park : yes or no	4/ Liberal vote share as a proxy of entrepreneurship
5/ (Number of) jobs and staff costs	5/ Internet connectivity	5/ Number of Walloon cluster's members nearby
6/ Productivity (related to the NACE sector)	6/ Accessibility by public transport, bike or on foot	6/ Business creation related to the workforce
7/ Age	7/ Urban density close by the firm	7/ Over 65 years old share
		8/ Workforce share in large companies

... at a sub-regional or regional scale to create...

From the Belgian National Bank data to our dataset

Step 5 — Data collection for a five-year period (2011 to 2016)
- Selection of firms > 5 years old to avoid one-time situations (e.g. meteorological conditions affecting production)
13 % n = 12,945

Step 4 — Focus on the economic base
- Exclusion of non-market activities (e.g. social and health)
- Exclusion of sectors with specific locations (e.g. retail)
- Exclusion of residential economy (e.g. construction industry)
14.2 % n = 14,706

Step 3 — Data integration from the Belgian Social Security Office:
- No data for firms directly owned by a natural person (privacy)
- Exclusion of firms with 0 employee > probably free-lance
34.1 % n = 33,940

Exclusion of all entreprises with more than one single location in Belgium because one account balance sheet has to be assigned to one single location for the statistical analysis
96.5 % n = 96,018

Step 2 — Leodica database: account and political data of all firms with an asset > € 1,000 and with the Belgian headquarter located in Wallonia
100 % n = 99,494

Step 1

Main references

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