### Chapter 25

# Dynamics of Economic Sectors and Human Mobility Before and During COVID-19: The Portuguese-Specific Context

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#### **ABSTRACT**

Considering the specific scenario of the Portuguese framework, it seems interesting to perform a research focused in this context. In fact, the Portuguese economic crisis after 2010/2011 created serious socioeconomic difficulties to the country, but in the recent years, the situation performed significant improvements. This new shock brought to the Portuguese society, again, new challenges and the need of new supports for the policies design by the public institutions and government. In this way, the objective of this research is to assess the Portuguese economic dynamics and, from here, discuss potential impacts from the COVID-19 frameworks, considering data disaggregated at regional and municipal level. For that, it considered the developments from the new economic geography, namely those related with the agglomeration processes and circular and cumulative phenomena. As main conclusions, with the social confinement, a greater economic impact around the Lisbon municipalities than in the north is expected.

#### INTRODUCTION

The dynamics and location of economic activity may be explained by several approaches, where the New Economic Geography (NEG) has its place (Branco et al., 2016). The NEG considers increasing returns to scale at firm level, market size and transport costs to explain why the population and the business sector tend to agglomerate around big poles, such as cities, regions or countries (Krugman, 1996). These agglomeration processes are self-reinforced through circular and cumulative phenomena (Krugman, 2007), because the companies concentrate where there are more population (market size) to save

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transport costs and the population concentrate in places with more companies (more jobs) and higher real wages (Goto & Minamimura, 2019). The public policies are claimed to promote more balanced growths (Chatti et al., 2019). In fact, the NEG highlighted the importance of the space concept for the economic explanations (Krugman, 1998a) and brought the geographical dimensions for the economic theory (Krugman, 1998b). However, the NEG after these years continues as an approach with, still, great potential to be explored (Fujita & Krugman, 2004) in several dimensions (Krugman, 2011). More balanced relationships between the transport costs and the innovation may play a relevant role to promote a more sustainable development (Gonzalez-Val & Pueyo, 2019).

The developments from the NEG have been considered for the explanation of several economic agglomeration processes around the world (Kim & McCann, 2020), since the Thailand (Bui & Preechametta, 2019) and Asian integration (Gopalan et al., 2020) until the European context (Commendatore et al., 2020). The European Union integration context is a particular framework that motivates the scientific community to apply the NEG approaches in the assessment of potential scenarios. The Asian evolution process is another interesting context that aroused curiosity for specific cases, as that related with the relationships among China and Pakistan (Imran et al., 2020) or the specific Chinese framework (Jin et al., 2020), with their particularities (Li et al., 2019). In a sectorial perspective, the NEG developments have been considered for the location explanations of the several sectors, since the industry until some agricultural productions, where it is possible the spatial relocation (Csonka & Fertő, 2019), passing through the production of knowledge (Hinzmann et al., 2019) or Dutch disease (Morales, 2020). The NEG approaches were, also, considered in other assessments, as the implications of the housing prices in the urban contexts (Pengfei et al., 2019), logistics activities in Brazil (Rocha & Perobelli, 2020), Portuguese transport strategies (Teixeira, 2006), capital movement management (Wiberg, 2020) and creation of urban poles in an integrated and multifactorial growth process (Yi & Yao, 2019).

Considered the framework described before, the aim of this study is to analyse the Portuguese economic dynamics and, from this scenario, discuss likely impacts from the Covid-19 contexts, considering data disaggregated at regional and municipal level. For that, it was considered the developments from the New Economic Geography, namely those related with the agglomeration phenomena and increasing returns to scale (in the base of the circular and cumulative processes).

#### LITERATURE REVIEW

The Covid-19 pandemic has had several consequences (Zuev & Hannam, 2021), including economic (Quintino & Ferreira, 2021), in Portugal as has been happening all over the world (Camoes et al., 2021). The health, social and economic implications from the pandemic have affected asymmetrically the sectors and the regions, depending on their vulnerabilities to the more impacted activities. For the example, the tourism sector was one of the most affected economic activity (Martinho, 2021), particularly in regions more dependent on this source of income, as is the case in some contexts of the Azores Archipelago (Couto et al., 2020). These new paradigms created unemployment with consequences for the women, older people and with less qualifications (Lopes et al., 2021). The pandemic also brought heightened concerns about old challenges (Rodrigues et al., 2021) and threats (Sara et al., 2021). In addition, the impact of the Covid-19 cases on the economic variables depends on the structure of the population, health records, population mobility and the structure of the society (Sannigrahi et al., 2020).

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