

# Entrepreneurial Conditions and Economic Growth

Subjects: **Business**

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Scientific consensus agrees that entrepreneurial activity is related to economic growth. The impacts of entrepreneurial framework conditions on economic growth based on the level of economic development in transition-driven economies and innovation-driven economies are assessed. By applying the generalised method of moments (GMM) estimation, researchers found that R&D transfer has a negative impact on economic growth that is innovation-driven, but positively impacts transition-driven economies. The results further highlighted that regardless of the level of development of the country, business and professional infrastructure do not positively impact economic growth. However, taxes and bureaucracy and physical and service infrastructure were shown to positively impact only innovation-driven economies, as in transition-driven economies, they were shown to have negative impacts on economic growth.

entrepreneurship

framework conditions

Global Entrepreneurship Monitor (GEM)

transition economies

transition-driven economies

innovation-driven economies

economic growth

## 1. Introduction

Entrepreneurship is currently widely recognised as a source of national and regional economic growth and is being increasingly studied by academics ([Acs 2006](#); [Carree and Thurik 2010](#); [Lopes et al. 2018a](#)).

In this context, entrepreneurship has contributed to regions' development and economic growth ([Urbano and Aparicio 2016](#); [Acs et al. 2012](#); [Audretsch and Keilbach 2004](#)). It is a topic under constant discussion and accepted as pertinent study due to the constant changes resulting from globalization.

The results of studies vary with regard to the impact entrepreneurship has on economic growth. This is because there are different types of entrepreneurs, and the characteristics of the macroeconomic environment in which economic growth occurs are also different ([Stoica et al. 2020](#); [Stam and Van Stel 2011](#)). Economies show constant variations in entrepreneurial activity rates, and it is important to study the reasons why this happens ([Díez-Martín et al. 2016](#)).

The constant variations in entrepreneurial activity rates can be influenced by the individual attitudes of current and future entrepreneurs, and by the contextual factors of their economic environment ([Acs et al. 2018](#)). The

combination of the contextual factors of the economic environment is called the entrepreneurship ecosystem ([Lopes and Franco 2019](#); [Sitaridis and Kitsios 2020](#); [Steigertahl and Mauer 2021](#)). Entrepreneurial ecosystems are defined as unique sets of contextual and individual actors that stimulate the exploration and discovery of entrepreneurial market opportunities through competitiveness and innovation to achieve economic growth ([Cavallo et al. 2019](#)).

In this context, the Global Entrepreneurship Monitor (GEM) project presents a set of structural conditions of entrepreneurial activity that are called entrepreneurial framework conditions (EFC) ([Farinha et al. 2020](#); [Amorós et al. 2013](#)). According to [Bosma et al. \(2008\)](#), the variables present in the EFC are the vital oxygen of incentives, resources, markets, and institutions to support the growth of new enterprises, and as such, catalysts of economic growth. Thus, regions and countries are expected to have dissimilar 'rules of the game' or EFCs, which may positively or negatively affect entrepreneurial activity's inputs and outputs ([Amorós et al. 2013](#)). However, the literature points to the need for more studies that have larger samples and examine the effect of entrepreneurship on economic growth at the national level ([Farinha et al. 2020](#); [Stoica et al. 2020](#)). There is a lack of studies comparing transition and innovation-driven economies ([Crowley and McCann 2018](#)). According to [Crowley and McCann \(2018\)](#), it is important to distinguish between economies because the processes associated with entrepreneurial innovation in richer developed economies compared to transition-driven economies are different; they operate in very different competitive, innovative, and institutional environments.

## 2. Entrepreneurship and Economic Growth

Scientific consensus agrees that entrepreneurial activity is related to economic growth. However, the role of entrepreneurship in economic growth can be strongly influenced by the quality of governance or the business environment in which economic growth occurs ([Khyareh and Amini 2021](#); [Gu et al. 2021](#)).

[Marshall \(1961\)](#) and [Krüger and Meyer \(2021\)](#) see entrepreneurship as the spirit of adventure, the refoundation of the entrepreneur, giving him the capacity for the innovation necessary to maximize profits through identifying new market opportunities, surrounded by an inevitable level of risk and uncertainty.

The relationship between entrepreneurship and regional economic growth has always been a hot topic among academics. However, the conclusions of this intense debate do not always converge in the same direction. Entrepreneurship often has a direct positive contribution to economic growth, but in some geographic areas, it may not necessarily be positive, as in the cases of some lagging or peripheral regions ([Xu et al. 2021](#)).

[Wennekers and Thurik \(1999\)](#), in their article entitled 'Linking Entrepreneurship and Economic Growth', argued that economic growth is a key issue both in economic policymaking and economic research. In their study, they investigated the relationship between entrepreneurship and economic growth, summarising that both creating innovation and increasing competition are important for economic growth. This economic growth will be more robust the greater the network of entrepreneurial activity and business density. This mosaic is the state of growth and competitiveness in regions and nations ([Stoica et al. 2020](#)).

In modern, open economies, entrepreneurship matters, and it is more important for economic growth than it has ever been ([Audretsch and Thurik 1998](#)).

The performances of regional economies vary, particularly in terms of wages, salary growth, employment growth, and the ability to protect and commercialise industrial property rights associated with innovation, namely, through patents ([Porter 2003](#); [Lopes et al. 2022](#)).

In traditional location theory, there is a distinction between factors of production for which costs differ significantly between locations, on the one hand, and production inputs that are, in practice, available everywhere more or less at the same cost ([Peris-Ortiz et al. 2018](#); [Valliere and Peterson 2009](#)). According to [Shane \(1993\)](#), and [Liñán et al. \(2013\)](#), the social and cultural norms influence the performance of entrepreneurial activity, resulting in wealth creation and economic growth.

Shared trust and localised capability are present today in the so-called 'learning regions', where inter-organisational cooperation and the formation of sectoral clusters predominate, allowing synergy in terms of supply, production, promotion, and market response capacity ([Farinha et al. 2020](#); [Porter 2000](#)). According to [Martínez-Fierro et al. \(2016\)](#), it is in less developed or less competitive countries that government policies and internal market dynamics are more impactful.

In these regions, the emergence of complex networks between regional economic agents is more intense, not only at the level of inter-company relations, but in higher education institutions, RD&I laboratories, technological interface centres, collaborative laboratories, and digital innovation hubs, among others ([Maskell and Malmberg 1999](#); [Queiroz et al. 2020](#)).

Data analysis using the GEM and the Global Competitiveness Report (GCR) highlighted significant differences in the factors contributing to economic growth between emerging and advanced economies ([Valliere and Peterson 2009](#); [Farinha et al. 2018](#)). According to [Farinha et al. \(2018\)](#) and [Falciola et al. \(2020\)](#), competitiveness can be defined as the ability of an economy to compete in the global market, its aptitude to attract capital, its ability to generate wealth, its job creation, and its social welfare, thereby depending on its capacity to produce and market high value-added solutions. As a key to success, competitiveness based on innovation factors represents a new impulse built based on the knowledge economy. The transition to the so-called 'advanced economies' stage implies the presence of 'opportunity-driven' entrepreneurship, capable of generating stable and successful companies, which pay good salaries and have solid contributions to the GDP per capita ([Farinha et al. 2017](#); [Civera et al. 2021](#)). The authors argue that in countries in Asia and Oceania, the 'factors of innovation and sophistication' stand out in the 'conditions of national framework'. In turn, 'taxes and bureaucracy' stand out in the context of 'conditions to support entrepreneurship'. In Europe, 'innovation and sophistication factors' are also the most significant item of the 'National Framework Conditions', and 'physical and service infrastructure' and 'funding for entrepreneurs' are important aspects of 'conditions to support the entrepreneurship'.

As previously verified, some literature relates entrepreneurship to economic growth ([Xu et al. 2021](#); [Khyareh and Amini 2021](#); [Farinha et al. 2020](#)). [Crowley and McCann \(2018\)](#) examined firm-level productivity and innovation in Europe's transition-driven and innovation-driven economies. The authors pointed to the need to study further the processes associated with entrepreneurial innovation in transition-driven economies and innovation-driven economies. [Crowley and McCann \(2018\)](#) indicated that transition-driven and innovation-driven economies are distinct because they operate in very different competitive, innovative, and institutional environments. The authors pointed to the need to further study the processes associated with entrepreneurial innovation in transition-driven economies and innovation-driven economies. Thus, no studies have simultaneously related entrepreneurial framework conditions with the degrees of development of economies, specifically transition-driven and innovation-driven economies.

[Farinha et al. \(2020\)](#) and [Stoica et al. \(2020\)](#) indicated that they should do more to examine the effects of entrepreneurship on economic growth at the national level. The authors recommend that these new studies have larger and more diverse samples.

### **3. Global Entrepreneurship Conditions**

The GEM is a research program that focuses on entrepreneurship as one of any nation's main engines of economic growth. From Porter, based on the Global Competitiveness Index, the GEM Conceptual Framework has had some evolution over time, reinforced by the recent influence of the COVID19 pandemic. Today, the model presents different 'entrepreneurial phases' and GEM entrepreneurship indicators ([Reynolds et al. 2005](#)).

The conceptual model is based on a wide range of factors associated with the contextual characteristics of the countries' entrepreneurial activity. At the base of its operationalisation is the carrying out of surveys among the adult population, through unstructured interviews with national experts, questionnaires addressed to national experts, and analysis of relevant measures based on existing transnational datasets ([Reynolds et al. 2005](#); [GEM 2021b](#)).

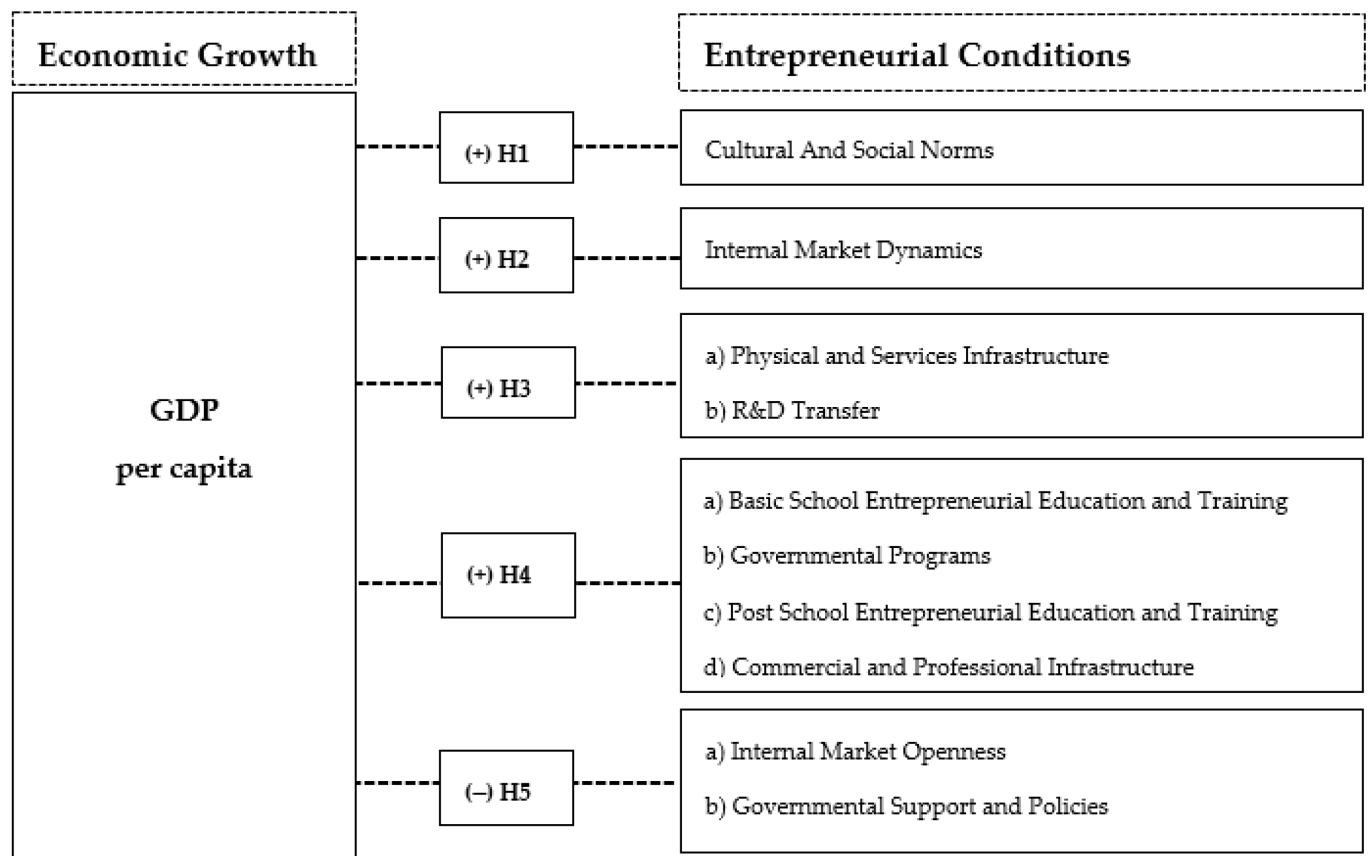
Concerning entrepreneurial framework conditions, the analysis of the main components was performed to derive 12 latent variables: (1) access to entrepreneurial finance; (2) government policy: support and relevance; (3) government policy: taxes and bureaucracy; (4) government entrepreneurship programs; (5) entrepreneurial education at school; (6) entrepreneurial education post-school; (7) research and development transfer; (8) commercial and professional infrastructure; (9) ease of entry: market dynamics; (10) ease of entry: market burdens and regulations; (11) physical infrastructure; (12) social and cultural norms ([GEM 2021a](#)).

According to [Marques et al. \(2011\)](#) and [Sommarström et al. \(2020\)](#), the school-business cooperation allows for achieving more ambitious goals of entrepreneurial learning, having positive effects at the level of economic development of the economy. Governmental programs aim to foster an innovative spirit, promote entrepreneurship, and give rise to new companies and new business models with added value in the market ([Acs and Amorós 2008](#); [Martinez-Fierro et al. 2015](#); [Medrano et al. 2020](#)).

Various studies on entrepreneurship have pointed out that commercial and professional infrastructures are crucial for the success of the entrepreneurial activity, and thus, for countries' economic growth ([Reynolds et al. 2005](#); [Peris-Ortiz et al. 2018](#); [Li et al. 2020](#)). According to [Sun et al. \(2020\)](#) and [Bertoni and Tykvová \(2015\)](#), government funding and support for entrepreneurial activity stimulates the development of entrepreneurial activity and the growth of an economy.

Various studies on entrepreneurship have pointed out that commercial and professional infrastructures are crucial for the success of the entrepreneurial activity, and henceforth, for countries' economic growth ([Reynolds et al. 2005](#); [Peris-Ortiz et al. 2018](#); [Li et al. 2020](#)). [Lepoutre et al.'s \(2013\)](#) study interpreted some limitations in its impact on countries' economic growth.

**Figure 1** shows the research model and the hypotheses formulated.



**Figure 1.** Research model.

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