

## TOTAL ENTREPRENEURIAL ACTIVITY AND ECONOMIC GROWTH

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**Abstract:** *Entrepreneurship represents the action of the social actor of transformation into an economic agent, namely: the discovery, evaluation and exploitation of opportunities to create goods and services. Thus, as a social force, entrepreneurial activity generates economic effects. Based on the statistical analysis of the data regarding the dependence between the entrepreneurial activity of mature people (aged between 18 and 64) and GDP, from 50 countries, we determined that there is a statistically significant direct relationship between Total Entrepreneurial Activity and Economic Growth. The values obtained from the econometric modeling, respectively from the regression equation, validate the research hypothesis and can outline the following conclusion. This research shows us that the decision of entrepreneurial debut is necessary to transform opportunities into realities and economic growth is possible on the basis of entrepreneurial activity, which turns potential energy into cash.*

**Keywords:** *Economic Growth, Gross Domestic Product (GDP), Total Entrepreneurial Activity (TEA).*

**JEL Classification:** *O12, O40, P47.*

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### INTRODUCTION

Joseph A. Schumpeter, the first scholar to theorize about entrepreneurship, believed that a country's economic development is sustainable when it has a strong segment of the population who are either a nascent entrepreneur or owner/manager of a new business. He argued that the economic growth will come from entrepreneurial activities, market power and innovation. In the last century, a strong accumulation of new technical and scientific knowledge has led to ample opportunities for innovation, and those who have taken the risk have generated a corresponding increase in entrepreneurship. Now, in the new digital age, knowledge has become accessible to a growing number of citizens of the planet, so we can consider the growing interest in entrepreneurship and the formation of new businesses is a fact. But, the dynamics of the entrepreneurial activity, as the process of designing, launching and running a new business, is different from one country to another (Kirzner, 1973).

From the beginning we want to specify that we make a clear distinction between economic growth and economic development. Economic growth refers to a positive/negative evolution in the volume of goods and services, provided by an economy.

Conventionally, economic growth is given by the percentage rate of change of real gross domestic product. And, economic development is the process by which an improvement in the quality of life and standard of living is achieved in accordance with previously established objectives (Jaffe, 1998).

Entrepreneurial opportunities exist and have always existed, because social actors as economic agents have their own beliefs about the relative value of resources and the methods by which they can transform them from inputs to results. The contribution of entrepreneurship to economic growth and the development of an economy is also widely discussed and accepted, and new scientific approaches to entrepreneurship support the complexity of this area as a means of economic growth. Entrepreneurs contribute to the emergence of new innovations, the dissemination of knowledge, the growth of business variety, the stimulation of competition and competition. Entrepreneurship is also a social force that induces economic effects mainly through the creation of new jobs (Schumpeter, 1934; Kirzner, 1979; Shane & Venkataraman, 2000; Drucker, 2014).

Richard Cantillon, in his *Essai sur la Nature du Commerce en Général*, introduced the term 'entrepreneur' for the first time, although traditionally, Jean-Baptiste Say is credited with inventing the concept. In Cantillon's opinion, risk-taking is the basic component in defining the social actor as an entrepreneur. John Stuart Mill would later popularize the term in the *Principles of Political Economy* and, Jean-Baptiste Say is the one who claims that the entrepreneur uses the opportunity to give economic resources a new use in an area with higher productivity. Schumpeter (1934) is the one who promoted the concept and supported a different approach, which is based on the role of innovation. He also considered that entrepreneurs are not only coordinators of the production of goods and / or services they are agents of change, by assuming the role of innovators. Schumpeter claims that entrepreneurship introduces into the economic circuit: new materials, new sources, new production methods, new products or new markets. Thus, entrepreneurship is one of the key factors in the growth and economic development of a country (Séamus, 2013; Drucker, 2014).

Kirzner (1973) has an opposite view than Schumpeter because (...) the entrepreneur is to be seen as responding to opportunities rather than creating them; as capturing profit opportunities rather than generating them (p.74), which means they are not innovators. Subsequently, other authors have different views on entrepreneurship and entrepreneurship, which has led to the emergence of hundreds of definitions. Shane and Venkataraman (2000) argue that the perception of opportunities represent a determining factor in the development of entrepreneurship, and that a low level of entrepreneurial activity reflects a lack of vision, or even lack of personal skills. Arenius and Minniti (2005) pay special attention to self-confidence, risk-taking and perception of opportunities, which are generally subjective perceptions rather than objective expectations. But, they can be significantly correlated with the implementation of new business. Finally, the literature proposes the following definition: Entrepreneurship is a process that involves discovering, evaluating and exploiting opportunities to introduce new products, services, processes, ways of organizing or markets (Shane & Venkataraman, 2000, p. 219). Thus, social actors who have a high degree of self-esteem give little importance to possible threats approach entrepreneurship with a reduced fear of failure, which leads to increased business success (Tsai, Chang & Peng, 2016).

Bjørnskov and Foss (2008) have realized a study on economic freedom and entrepreneurship in which they measured the influence of global economic growth on the emergence of new firms in the economy. The two researchers reached results that showed that economic growth (GDP per capita) is inversely associated with development of new enterprises, which means that there is a polarization of entrepreneurial activity towards protecting the status quo. We consider entrepreneurship as a creative process, through which resources are mobilized from a level of productivity to a higher level of use, and the process is one based on social actors who are agents of change, because they assume responsibilities in identifying opportunities and fighting for to turn the idea into a finished product (Wennekers & Thurik, 1999).

Having taking into account the classification made by Schwab and Sala-i-Martin (2017), we have considered the level of GDP (per capita on purchasing power parity) and Total Entrepreneurial Activity (TEA) – measurement of the degree of entrepreneurial activity as a variables that are correlated. The purpose of this intellectual enterprise is to determine whether there is a causal link between the entrepreneurial activity of TEA and GDP.

**DATA METHODOLOGY AND STATISTICS**

To ensure that we will reach the main purpose of our paper we have used data related to the entrepreneurial activity, for 50 states; the data were collected from the Global Entrepreneurship Monitor (2020) and the World Bank Reports (2019, 2020). In order to establish a link between the dependent variable and the independent variable we used a linear regression.

The dependent variable is Total Entrepreneurial Activity (TEA) - that represents the percentage of the total mature population (18 to 64 year age) that is a new entrepreneur (manager or business owner).

The independent variables GDP per capita PPP (USD) - the gross domestic product converted into international dollars, using purchasing power parity rates and divided by the total population.

*Research hypothesis: GDP is influenced by TEA.*

Based on the data collected we can summarize the following: (1) 12.82% of the mature population is either new entrepreneurs or managers; (2) 53.65% of the mature population notice opportunities to open a business; (3) 58.27% of the mature population is involved in a stage of entrepreneurial activity or consider that they have the skills and knowledge needed to start a business; (4) the average value of GDP per capita at purchasing power parity is USD 37,929.

**Table 1. Correlations between variables**

		TEA	GDP
Pearson Correlation	TEA	1.000	-.190
	GDP	-.190	1.000
Sig. (1-tailed)	TEA	.	.043
	GDP	.043	.
N	TEA	50	50
	GDP	50	50

The research indicates, with a probability of 95%, that there is a statistically significant correlation between: Total early stage entrepreneurial activity (TEA) and Gross Domestic Product per capita (GDP per capita). Thus, the results obtained are consistent with those in the literature.

**Table 2. Correlation ratio**

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.618a	.382	.342	5.79096	.382	9.480	3	46	.000

The estimated correlation ratio is 0.618, which shows that the link between the GDP dependent variable and the TEA independent variable is strong. The determination ratio  $R^2 = 0.382$  indicates that the dependent variable variation is explained in proportion of 38.2% by the independent variable variation.

**Table 3. ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	953.693	3	317.898	9.480	.000
	Residual	1542.619	46	33.535		
	Total	2496.311	49			

Regression equation:  $Y_x = 2.946 + 0.303 TEA$ , where the value  $b_0 = 2,946$  represents the level of GDP, given that TEA is constant; and The value  $b_1 = 0.303$  shows how much, on average, the GDP increases, at an increase of TEA by one unit.

**CONCLUSION**

Scientific research in the last two decades addresses the entrepreneurial phenomenon starting from previously used premises to which they have added new determinants of development. Subsequently, new valences were discovered, among which we can list the innovative process or the labor market. Thus, the focus of scientific research on growth and entrepreneurship has evolved over time. Today, researchers around the world use both concepts used in this paper: economic growth and Total Entrepreneurial Activity. Thus, the complexity of entrepreneurial activity can be described as a vital force dependent on the process of human development, implicitly of the determining factors of economic or social origin. Our approach is limited to such a perspective and we started the intellectual process looking to identify possible answers regarding the factors that determine the decision to start a business. Analytical landmarks found in the literature showed us some correlations between the entrepreneurial process (activities of discovery, evaluation and exploitation of opportunities) and their individual perception. Previous research has considered the complementary aspect to the perceptual variable on market opportunities, which refers to the subjective side involved in decisions to start a business. This is an element that emphasizes the individual perception of the existence of

entrepreneurial skills. Correlations were also determined in terms of measuring the results of entrepreneurial activity and the macroeconomic indicator - GDP per capita.

Our study focused on determining the existence of an influence of the independent variable - Total Entrepreneurial Activity on the dependent variable - the level of economic growth (P.I.B. per capita). The values of the two dimensions were extracted from international documents (Global Entrepreneurship Monitor, World Development Report 2019: The Changing Nature of Work and Doing Business 2020), for a sample of 50 states, given at the level of 2019. According to my own descriptive analysis for mature population (aged between 18 and 64) we determined that approximately 13% are involved in entrepreneurial activities, 54% consider a business opportunity, and 58% believe they have entrepreneurial skills. It should be noted that the average value of gross domestic product per capita at purchasing power parity was USD 37,929, which corresponds to a relatively high level of economic development in which it analyzed.

The statistical analysis indicates the existence of a strong correlation ( $R = 0.618$ ), which is statistically significant, between TEA and the level of economic growth expressed by GDP per capita. Thus, we have a correlation between the two variables, which can be explained that individual decisions on starting entrepreneurial activities influence the economic growth of a nation. But, it is not enough just the perception of the existence of entrepreneurial skills, it is necessary to take the risk to make the final step towards entrepreneurship. The values obtained from the econometric modeling, respectively from the regression equation, validate the research hypothesis and can outline the following conclusion. This research shows us that the decision of entrepreneurial debut is necessary to transform opportunities into realities. And, entrepreneurial activity is positively influenced by the perception of individual skills. Under these conditions, economic growth is possible on the basis of entrepreneurial activity, which turns potential energy into cash.

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