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COMPETITIVENESS FOR SUSTAINABLE ECONOMIES

Empirical study

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Abstract

The current economic environment puts pressure on all national economies which struggle to improve their competitiveness and innovativeness in a sustainable way.

This article aims to present the current state of the competitiveness by reviewing the main literature and worldwide researches, in order to provide a brief overview of the determinants that drive productivity and economic success at global and national level, taking into consideration the entrepreneurial activity for a country's competitiveness and economic growth.

The paper identifies the ways in which efficiency driven countries can improve their policies and get a better return on their investments, underlining a set of competitiveness enhancing policies (measures) that can be implemented by public and private institutions in order to strengthen the economic fundamentals of the economies.

Introduction

Lately, competitiveness is a very often used concept. The Global Competitiveness Report (GCI), released by the World Economic Forum at the end of each year, which assesses the competitiveness landscape of more than 140 economies, contributes to enhance the interest towards this subject.

At the beginning of the XXI century, the world's economy is influenced by the globalization process which has a significant economical, political and cultural impact over all countries. Networks of relationships and dependencies acquire a growing potential to become international and global. Globalization and competitiveness are complementary and this is explained by the speed at which technology is changing, reducing product lifecycle.

Although well-known as a concept, there are different approaches regarding competitiveness, depending on the level of aggregation we refer to. The three levels lead to different meanings, as well as to different indicators.

At company level, competitiveness is defined as the ability or capacity of companies to compete; often as the ability to compete in international markets, with a satisfactory rate of return (OECD, 2001).

Competitiveness at industry level is understood by economic literature as the ability to compete, particularly in international markets, with satisfactory performances in a certain industry (OECD, 2001).

The Organisation for Economic Co-operation and Development (OECD) describes a nation's competitiveness as the degree to which it can, under free and fair market conditions, produce goods and services which meet the test of the international markets, while simultaneously maintaining and expanding the incomes of its people over the longer term (OECD, 1990).

The last aggregator is also the subject of discussion for The Global Competitiveness Report, which annually makes a hierarchy of most of the countries in the world, based on their economies performance. In this case, competitiveness is regarded as "*the set of institutions, policies, and factors that determine the level of productivity of a country"*(Schwab&Sala-I-Martin, et al., 2013)

Increasing the competitiveness has become, in the last decades, a primordial coordinate for the social-economic development strategies of most countries in the world, mainly of the developed ones, of the sector development strategies in national economies and business strategies.

The assertion of the globalization phenomenon, which has enlarged the confrontation arena of the economies, sectors and companies, has emphasized the importance of their competitiveness in gaining a favourable positioning in the international competition, and therefore, has obliged the "players" to take ample measures of stimulating the activity of the determinant factors and of superior capitalization of their effects (Russu, 2008).

Factors of competitiveness

The assessment of the performance of the economies is based on a set of predefined indicators. During the course of history, there have been many economists that tried to establish the drivers of productivity and competitiveness and it is well known that the level of productivity sets the level of prosperity that can be reached byan economy and determines therates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growthrates, as shown in figure 1.

A more competitive economy is one that is likely to grow faster over time so being competitive is a desirable characteristic for all economies.

The Global Competitiveness Index (GCI) evaluates over 140 countries based

on a number of factors that influence the business environment, grouped in three main development stages (factor-driven, efficiency-driven and innovation driven stage). These stages are made up of 12 pillars that not only are they related to each other, but they tend to reinforce each other: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication, innovation, figure 2.

Although all 12 pillars matter to a certain extent for all countries, the relative importance of each one depends on a country's particular stage of development. To take this into account, the pillars are organized into three sub indexes, each critical to a particular stage of development.

Countries are allocated in stages of development based on two criteria. The first is the level of GDP per capita at market exchange rates. A second criterion measures the extent to which countries are factor driven.

The *basic requirements sub index* groups those pillars most critical for countries in the factor-driven stage. The *efficiency enhancers sub index* includes those pillars critical for countries in the efficiency-driven stage. And the *innovation and sophistication factors sub index* includes the pillars critical to countries in the innovation- driven stage.

The specific weights attributed to each sub index in every stage of development are shown in table 1.

When reviewing the competitiveness reports we can definitely observe two very different periods. In 1989 for example, the most competitive advanced economies were Japan, Switzerland and the Netherlands and among the emerging markets we could find Singapore, Hong Kong and Malaysia. Also, the competitiveness report looked totally different without countries that did not exist back then like Russia or China.

After 1997, period when we start to feel the globalization, these types of reports started to be unified, with both advanced and emerging countries so that their evolution is more evident each year and the winners and losers more clear to identify as pointed out in table 2.

Competitiveness in Romania

Once integrated in the European Union, Romania must advance on the higher stage of development and this situation is possible just by increasing its competitiveness as well as all the individual components of the national economy.

In the 2009 report, Romania was ranked as being an *economy in transition from the efficiency-driven stage to the innovation-driven one*. In the 2013-2014*Global Competitiveness Report* which assesses the competitiveness landscape of 148 economies, providing insight into the drivers of their productivity and prosperity, the country is placed one stage back, as seen in figure 3.

The performance of Romania's economy, concluded in the ranking obtained for the 12 pillars, provides some very important information regarding the level of development in each direction. Table 3 provides a summary of Romania's rankings, compared to the ones of Switzerland, the last year's first ranked economy form the competitiveness perspective.

For the first pillar, institutions, the best rank of Romania is 41, regarding the *strength of investor protection*. There are no other sub-pillars where it ranked in top 50 countries.

In the case of the second pillar, infrastructure, Romania has no sub-pillar in the first 50 countries. This is maybe the most visible problem of the country because it affects more areas, transportation and also services, especially in the way it influences travel and tourism

industry in terms of access to tourism destinations.

The ranking for the third pillar, macroeconomic environment, tells the same sad story: no ranking in the first half of the top.

Regarding the fourth pillar, health and primary education, the situation is good when referring to sub-pillars like *HIV prevalence* (rank 11), but really bad if we look at the rank for *primary education enrolment* (rank 112). This reveals the difficult situations in which people from the certain under developed areas of Romania live in. Also, it depicts a long term problem because in the future these particular issues will affect the fifth pillar, higher education and training. Nowadays the sub-pillar regarding *secondary education enrolment, gross%* is ranked 46, which depicts a better situation than in the case of primary education.

One of the best Romanian rankings is number 4 for the *trade tariffs*, from the sixth pillar, goods market efficiency. Also, we can find the country in the first half two more times for *number of procedures to start a business* (rank 47) and *number of days to start a business* (rank 49).

For the seventh pillar, labour market efficiency, the only sub-pillar for which Romania reached the first half is *redundancy costs, weeks of salary* (rank 8). The worrying aspects here are those regarding the *country capacity to retain talent* (rank 138), *country capacity to attract talent* (rank 132), *reliance on professional management* (rank 131) and *effect of taxation on incentives to work* (rank 146).

In the assessment of pillar number 8, financial market development, besides the sub-index *legal rights index* (rank 12), all ranks for the other sub-pillars are after 78. These are clear indicators of the less fortunate situation in which this country is from a financial point of view. These problems prevail in all the relevant areas of the financial market: availability of financial service, affordability of financial services, financing through local equity market, access to loans, venture capital availability, soundness of banks, regulation of securities exchanges.

The bright side comes along with the ninth pillar, technological readiness. The access to internet provides a great advantage, especially when we consider the access to information. Still, thinks could be better when it comes to the *availability of the latest technologies*, *firm-level absorption* and *technological transfer.*

The evaluation of the ninth pillar, market size, brings Romania in the first half of the chart for the following sub-pillars, *domestic market size*, *foreign market size and GDP*.

The problematic sub-pillar is *exports as a percentage of GDP*. This is an area that definitely needs improving and its causes are related to the configuration of the sector value -added as a share of the GDP as presented in table 4.

In the last two pillars, business sophistication and innovation, Romania's economy scores are quite low. Most of the problems in this area are related with the poor management style: *nature of competitive advantage, state of cluster development, value chain breadth, willingness to delegate authority* and *extent of marketing*. All of these problems can be solved by applying a professional management which is based on collaboration. This aspect is conditioned mostly by the education system which also influences on the long term the research capacities of the country, innovation and the production processes by extent, shown by sub-pillars like *production process sophistication* and *local supplier quality*.

Romania's education system ranks 99 in the research, the sub-pillar of math and science ranking 57 and the management schools sub-pillar ranking 104. This shows the unfortunate situation in which Romania might have the technological skills, but is totally

unsuccessful in managing the businesses based on those technologies.

Linking entrepreneurship to competitiveness and sustainability

Entrepreneurship re-gained the attention of scholars in the last years but in spite of its long history there is no general agreement about how to be defined, but studies tend to point out that it "is central to economic growth" (Parker, 2009). One known definition is that given by GEM – Global Entrepreneurship Monitor – (Bosma, Wennekers&Amorós, 2012; Amorós&Bosma, 2014) stating that entrepreneurship is "any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business".

Both entrepreneurship and competitiveness are two broad and complex concepts and both terms are very often used lately, but regardless of all the debate on this themes, none of these concepts has a unanimously accepted definition, most authors and practitioners consider entrepreneurship as an important factor for economic growth and competitiveness to be "the only way to ensure long term job and prosperity growth…" (Porter, 2002).

Entrepreneurship according to many authors and practitioners is associated with economic development and well being of a society and entrepreneurs through their actions stimulate structural changes in economies (creative destruction according to Schumpeter), contribute to competition and productivity growth, create new jobs in the economy and by doing this it contributes to national competitiveness.

We would like to point out that there are some connections between competiveness and entrepreneurship at country level and in accordance with Jose Amoros, which argued that entrepreneurship "is a very important activity for a country's competitiveness and growth…" (Amorós, Fernández&Tapia, 2011; Amorós&Cristi, 2008).

As mentioned, entrepreneurship is considered to be a key activity for country competitiveness, economic and social improvement. The creation of new business ventures plays a substantial role in economic development at country level through its contribution to new job creation.

Still beside the fact that entrepreneurship has an important function in generating new jobs, there is no consensus about the real impact of it on a country economic growth and there are few studies concerning the impact of entrepreneurial activity on countries competitiveness (van Stel et al., 2005).

The relationship between these two concepts (competitiveness and entrepreneurship) is mainly studied in connection to economic growth. The literature review denotes that entrepreneurship contributes to economic performance by causing change to occur in markets, introducing innovation creating and enhancing competition (Wong et al. 2005).

The relation of influence between entrepreneurship and economic development is a reciprocal relationship, a higher level of development eases de way for entrepreneurial activity and stronger entrepreneurial activity contribute to economic development. Competitiveness should create the needed context needed for entrepreneurship to thrive and entrepreneurship drives improvements in competitiveness, enables economic diversification and it is fundamental to job creation. (Porter, 2002).

When studying the connections and relationship between entrepreneurship and economic growth, we give credit and subscribe to the work of Wennekers and Thurik(Wennekers&Thurik, 1999), which developed a framework for linking these two concepts.Linkinggrowth to entrepreneurshipmeanslinkingtheindividua

llevelto firmandthemacrolevels.
(Carree&Thurik, 2010)

The entrepreneurship should be analyzed at individual level, firm level and macro level.

At its base entrepreneurship has to do with the activities of the individual persons, the person that initiates or develops a business venture which implies new activities in order to pursue a perceived opportunity.

At firm level entrepreneurship deals with new organizations and business creation, at individual level the conditions and determinants of entrepreneurship deal with behaviour characteristic of the entrepreneur. At firm and macro level the conditions of entrepreneurship deal with culture environment, institutional framework and business culture incentives.

The most important elements of entrepreneurship at individual level are skills and attitudes towards the entrepreneurial activity and then actions, which at firm level means new start-ups, innovations, new products, and new markets. At the aggregate level we have competition between the firms created by entrepreneurs between various new ideas and initiatives. The competition and selection enhances the productive potential at national and regional level.

The impact of entrepreneurship at individual level means personal wealth and self realization at firm level the impact of entrepreneurship is measured in terms of firm performance and at aggregate level the impact materializes in increased competitiveness and economic growth.

A similar but no so sophisticated as the framework presented above is the life cycle entrepreneurship model developed by WEF were at individual level the following influencing factors are found: attitudes, skills and cultural framework. At the ecosystem level the key factors that influence are regulatory framework, market framework, network access. The entrepreneurial life cycle has 3 stages stand-up (decision to create a new business venture), start-up and then scale-up the business (expand the business, scaling the revenue, job creation and economic impact).

Some of the determinants for competitiveness are also important factors for the entrepreneurial activity, it could foster, and support and enhanced entrepreneurship or it could represent obstacles in the way of the entrepreneurs.

Institutions. Both public and private play a role providing a transparent business environment and a legal and administrative framework that provides the business with a transparent and sound institutional environment. Only in a fair and strong and transparent environment business can thrive.

Infrastructure. An efficient and extensive national infrastructure is very important for the economy, it can determine the location of business and economic activities concentrate around regions with good road, rail, ports, and airways connections. That can be reason why in Romania we encounter such big disparities between some regions in terms of competitiveness.

The telecommunication system is also very important to entrepreneurs as well fast access to information and reliable and secure connections with business partners are a must in the digital era. “Effective modes of transport enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate” (WEF, GCI 2013-2014).

Macroeconomic environment. A stable macro-environment is very important for the generation of new ventures and for the development of business. In an environment with high inflation and budgets deficits firms are very vulnerable and cannot establish a long-term business plan.

Health and primary education. Basic education is important because through it people learn the basic skills needed for employment and business need qualified workforce at all levels. Health is very important both at individual level but also

in relation with their work, missing work or being sick can influence the productivity of workers which influences the performance of the business who hired them.

Higher education and training. If the first 4 pillars presented are the basic requirements for a factor driven economy, the fifth pillar (higher education and training) represents the first pillar for the efficiency-driven economies. The quality of higher education is an important factor the globalized economy because firs are competing both at national level but international too, well educated and prepared personnel is important for a business in order to be able to compete and create added value for the business.

Goods market efficiency. Goods and services should be traded efficiently on the market without government intervention; government protectionist measures may interfere and slow down entrepreneurial activity and business productivity. A correct market competition is a must for business productivity and efficiency, if such conditions are met.

Labor market efficiency.Labour market should provide enough workforce but also flexibility in terms of and easy and quick transfer of the workforce from one activity to another, which is important especially in the years after the economic recession when there are major transformation in the markets and people should be able to adapt rapidly to the new environment, because otherwise it will contribute significantly to the growth of unemployment. The availability of workforce and especially qualified personnel is an important aspect for business in general and especially for new ventures.

Financial market development. Has a critical importance in order to distribute the available financial resources to most productive businesses and new ventures. Quoting the WEF report, which presents this idea in a proper way, “It channels resources to those entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected.”

Technology readiness. The rapid technology evolution in the last decades changed the way business are done, the ICT (information and communication technology) has a major influence on how we communicate, transfer data, connect to clients and other business but also contributed to an increase in productivity. ICT is a major source for cooperation and collaboration and innovation. The viability of technology to the business environment is a major issue for firms and the capacity to absorb and put to proper use these technologies is a key factor. Nowadays an increasing number of the new ventures are launched in connections to the ICT sector, so technology readiness plays an important role for the entrepreneurial activity.

Market size. Larger markets have the advantages of scale economies. Due to process of globalization business could exploit the opportunity of access to both national and international markets and trade is usually associated with economic growth.

The last 2 pillars are associated with innovation driven economies. Business sophistication and 12. Innovation the quality of a business networks and individual firms operations determine a greater efficiency level. Research and development is critical to technological innovation and technological advance, as mentioned before, is a key factor for economic growth. A sophisticated business network environment that enhances innovation could represent a cocoon fostering opportunities for entrepreneurs that will start new business ventures and for economic growth.

Competitiveness is driven by many actors (pillars and many more sub-pillars presented above) including, companies, academic institutions, public and private institutions. Even if some large enterprises have an important contribution in creating a competitive environment, SME are the main source of competitiveness. At EU

level over 99% of all enterprises are SME and they provide for 66,5% of jobs from the total employment and contribute more than half of the total added value created by businesses (2012). In Romania 2/3 of the jobs are provided by SME (31.11.2011) and contribute with 58% from the total added value.

In the last years factors connected with economic development and technical innovation which contribute to competitiveness improvement are associated with SME rather than corporations. Most entrepreneurial initiatives begin like SME, and this type of business adapt easier to the market requirements, are more flexible and usually tend to have a higher degree of creativity and innovation. The impact of new small business ventures could be seen in job generation, technical innovation new business models etc.

According to findings in studies coordinated by authors like Carree, Audretsch and van Stel and others it is shown that competitive impact and the contribution of the entrepreneurial efforts to economic growth differ at country levels but also among different regions in the same country(Audretsch&Keilbach 2004,Carree, van Stel, Thurik&Wennekers, 2002). Similar results are found in the case of Romania, where according to the data from EU RCI – Regional Competitiveness Index – (Annoni&Dijkstra, 2013), we can observe major differences in terms of competitiveness across regions of the same country. The region concentrated around the capital city having better competitiveness indicators to other regions of Romania.

Similar results are shown in FPP (Fundația Post Privatizare) report on SME in Romania where the demographic analysis of the SME and their economic performance shows that there are important disparity between the 8 development regions in Romania and a considerable difference in terms of development between the Bucharest/Ilfovregion and the rest of the Romanian regions, the region around the capital city being way ahead of the others.

The WEF GCI categorizes Romania as a country with efficiency-driven economy but as the economic reality proves it some regions are more close to the factor-driven economies and others like Bucharest/Ilfov (with values at EU level) could be considered as being part of an innovation-driven economy.

We also subscribe to the idea presented in the study mentioned above, that there is a direct correlation between the degree of economic development and the number of entrepreneurial initiatives, in the sense that in regions where there is a good (strong) business/economic ecosystem, there are more new start-ups created with an natural effect of multiplication (Barta, Modreanu, Spirea&Piti, 2013).

Sustained efforts to create a more competitive environment have allowed to the entrepreneurial activity to grow in a more supportive and endorsing environment.

Entrepreneurs that developed new ventures led to diversification and development of the business sector in the last decades in Romania. Start-ups developed in the last years are no longer connected to (and protected by) state institutions and derived from old large public companies through privatizations (there were encountered types of entrepreneurship and business models at the beginning of the ’90 in Romania).

The evolution and sophistication of new business ventures throughout time has left a mark on the economic development in our country but in order that the impact to be significant for the growth of the economy sustained efforts to enhance competitiveness and entrepreneurship still have to be done.

Entrepreneurs are key factors with a crucial importance in order to transpose (convert) the registered progress at

competitiveness level into economic growth at national level.
The success of the developing an entrepreneurial environment in our country depends on continuous and sustained efforts in the country policies to improve ceaseless the business environment in order to provide opportunities for growth.

Conclusions

To assess the real impact that entrepreneurship has on competitiveness at a country level further research should be undertaken in order to see the correlation between these 2 concepts, but without a clear definition of the terms and national and international comparable indicators this task will be a challenge… but taking into consideration the possible positive impact that competitiveness and entrepreneurship has, a national policy should take into consideration measures that will stimulate the entrepreneurial activity and the creation of a competitive business environment. Entrepreneurs represent an important channel through which recommendations to promote competitiveness is implemented into practical outcomes (Hnyilicza, 2008).

Romania (ranked 76 out of 148 in World Economic Forum – GCI – and is situated at the bottom of the hierarchy in the EU RCI) is facing challenges in terms of economic growth as well as competitiveness. Competition from other regions in Europe and outside, especially from regions from Asia where the labour cost is incomparable lower to the wages in Europe. Some of the competitors are adapting more quickly to actual post-crisis environment and better harness the new opportunities.

The recent economic crisis has put pressure on country competitiveness at a time when unemployment registers high levels, so governments should seek to sustain the creation of new jobs and economic growth and in order to achieve such goals it should concentrate their efforts on improving competitiveness and creating a favourable environment for entrepreneurship.

There will be challenge in dealing with unemployment generated by the economic crisis but also by the insufficiently adapted education system to the market requests which led to a gap between skills and jobs which is widening further in our country in respect with other countries in Europe and one of the issues concerning this gap is the employability of youth.
Under these circumstances Romania should emphasizes skills and education it it's strategy and invest in developing entrepreneurial skills to build sustainable economic development and generate new jobs, better-prepared young entrepreneurs and I this way to improve competitiveness.

Competitiveness should become central to Romanian economic policy agenda. Certain reforms have been implemented in some areas (infrastructure, legal, business regulation) some of them were successful others not due to bureaucracy and the political environment in our country. These still remain only small steps taken in order to achieve a better competitive environment at country level and encouraging economic growth and job creation remain critical priorities. Stimulating entrepreneurship is important in order to get the full benefits of the competitiveness reforms. Entrepreneurship development policies and competitiveness policies are closely interrelated so these should be addressed as one.

The competitiveness of a country is essential for the welfare of its citizens. It means output growth and high rates of employment in a sustainable environment (Moldovan, 2011).

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Table 1: Specific weights of the sub-indexes according to the development stage

Sub index	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

Source: own adaptation based on The Global Competitiveness Index, 2013-2014

Table 2: Evolution of the economies, according to the GCI

	countries	**rely on**
Winners since 1997 (+ 5 or more ranks)	US, Singapore and Canada	long-term advantages such as technology, education and advanced infrastructure.
	Switzerland, Sweden and Germany	exports, manufacturing, diversification, competitive SMEs and budget discipline.
	Asian economies	redirecting their exports from the US and Europe to other emerging markets
Losers since 1997 (- 5 or more ranks):	**countries**	**problems with**
	UK, France, The Netherlands, Luxembourg and Finland	adapting their competitiveness models to a changing environment.
	Italy, Spain, Portugal and Greece	lack of diversifying their industry enough or control public spending and are now facing austerity programs.
	Ireland and Iceland	uncontrolled fast expansion
	Chile, Brazil, Argentina and Venezuela	eing challenged by the emerging competitiveness of Asian nations.

Source: own adaptation based on The Global Competitiveness Index, 2013-2014

Table 3: Rankings for the twelve pillars

			Pillar rank											
Country economy	Overall rank	Overall score	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
			basic requirements				**efficiency enhancers**						**innovation**	
Romania	76	4.13	114	100	47	84	59	117	110	72	54	46	103	101
Switzerland	1	5.67	7	6	11	12	4	6	2	11	9	40	1	2

Table 4: The sector value -added as a share of the GDP

	agriculture	**manufacturing**	**non-manufacturing industry**	**services**
Romania	7%	21%	4%	68%
Switzerland	1%	19%	8%	72%

Figure 1: The mechanism of competitive economies

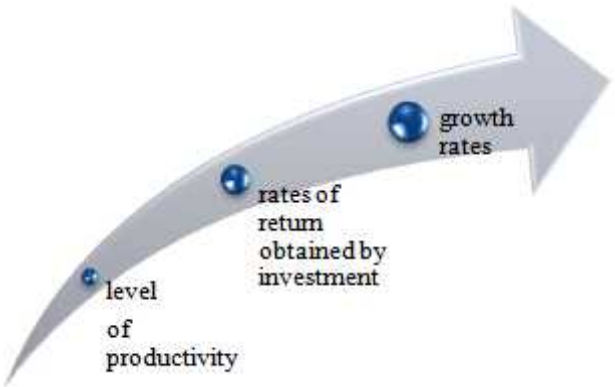
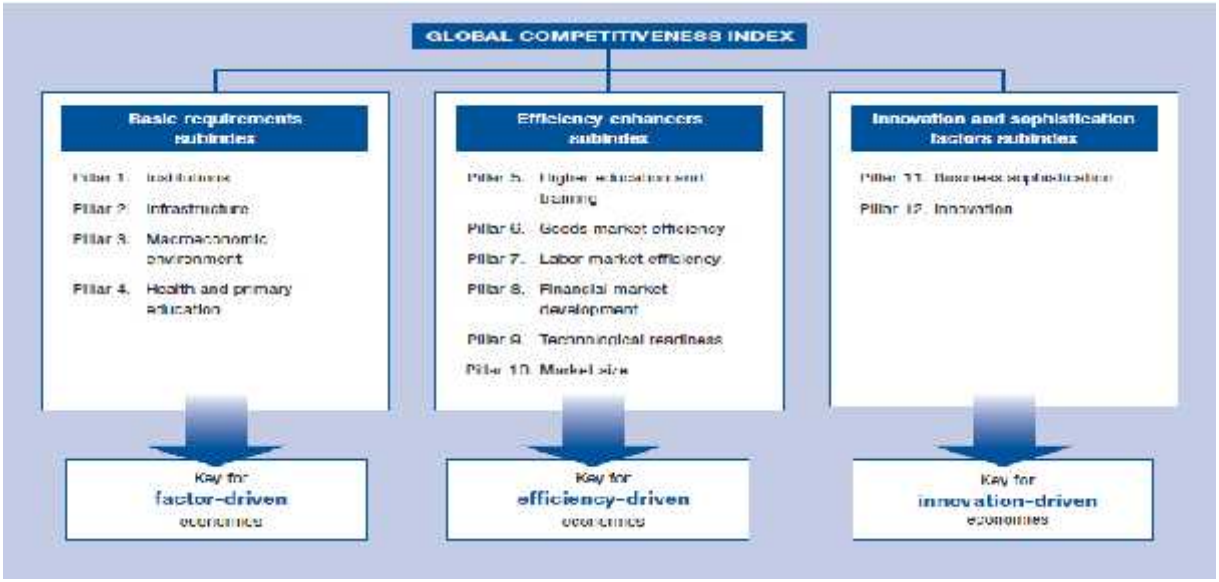


Figure 2: The Global Competitiveness framework index



Source: The Global Competitiveness Index, 2013-2014

Figure 3: Romania's position in the GCI

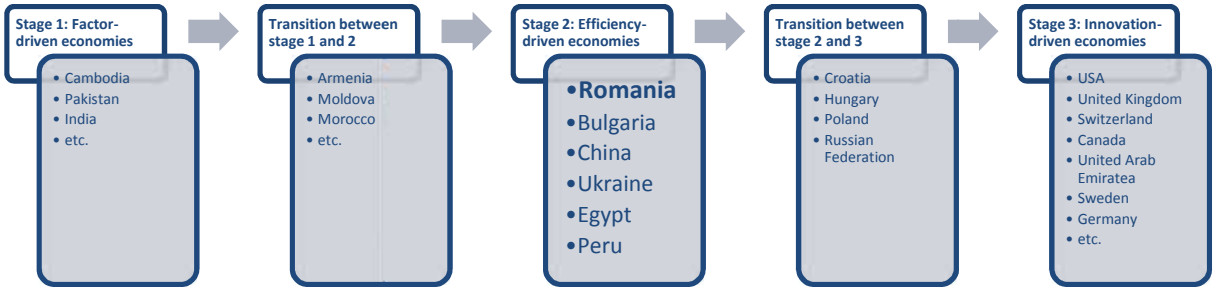
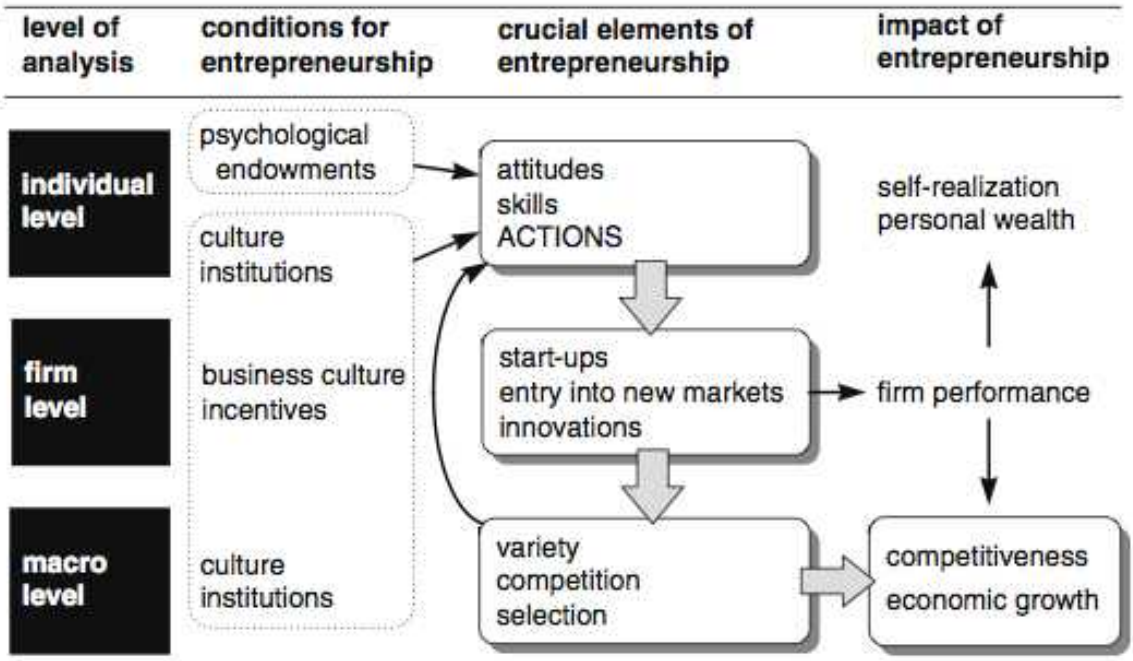


Figure 4: Framework: linking entrepreneurship to economic growth



Source: Wennekers S. and Thurik R., 1999