ROMANIA'S INNOVATION CULTURE: THE QUEST FOR THE DEPENDENT VARIABLE

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Abstract

The present paper treats the problem of innovation culture. We try to identify the main variables that influence the innovation culture. We make use of current data available in the research field by appeal to the literature and concrete data from European Union report data. We are putting the focus on Romania and we are trying to discuss the historical, the geographical, and the economical premises that determine these variables. We discuss about entrepreneurial activities, public sector investments in research and development, the appetite for risk, uncertainty avoidance, the taste for wisdom and mediocrity. We treat also the problem of an historical horizontal shape of Romania's destiny, full of compromises in the present, with lack of specialized culture. After this we discuss historical-political factors by appealing the subject of collectivism versus individualism and we stress the fact that although for our country it is best suited the spirit of collectivism and we were even put in our history to live in collectivism the gene of our country is an individualist one with no antrepreneurial spirit. We conclude the present paper by identifying a possible model of variables that we consider they influence our innovation culture.

Key words: innovation culture, Romania's innovation culture, R&D, saeculum

The starting point for this paper is the quest for the dependent variable of Romania's innovation culture. We try to identify the main reasons, or otherwise saying the main variables that influences what we will try to define as innovation culture and its meaning for Romania. If there is alot of evidence by which someone can admit that the taste for entrepreneurship, the will for making business and assuming risk is very low in Romania one can argue that Romania has a great potential in being innovative.

We have alot of references which states that Romania's culture is a minor one (Cioran, 1990, Patapievici 2007). In this country every gesture, every action, and every attitude is an absolute beginning. There are no constancies, rules or directives. No one is preceding us, no one is encourages us, and no one is helping us (Cioran, 1990).

The formal shape of our destiny is an horizontal one. We have not lived our gothic spirit. We suffer from: passivity, skepticism, self contempt, gentle contemplation, minor religiosity, un-history, and wisdom. We have a past full of humiliations and a present full of compromises.

A people which has no political spirit misses the way to the nation and a structural change based on collective orientation is necessary.

The Romanians love changing to one hundredth and eighty degrees, meaning the inconstancy in the process of things.

Imitation is mandatory for cultural progress, but the imitation must happen by taking into consideration the saeculum (Lovinescu, 1923-1926). But the problem remains in identifying the main characteristics of this saeculum. Could it be the technological progress? Or maybe globalisation? Or perhapse the simple mediocrity?

We will discuss in the next section the main method and material used for this paper. In the second section we will discuss the main results. In the end of the paper we will draw some plausible conclusions.

METHOD AND MATERIAL

Our research method is a calitative one. We will identify some qualitative factors that we think they influence the innovation culture. The material used is based on empirical data and facts about Romania's innovation policies, innovation key indicators, and innovation cuture. The proposed research model is presented here therefore (*figure 1*).

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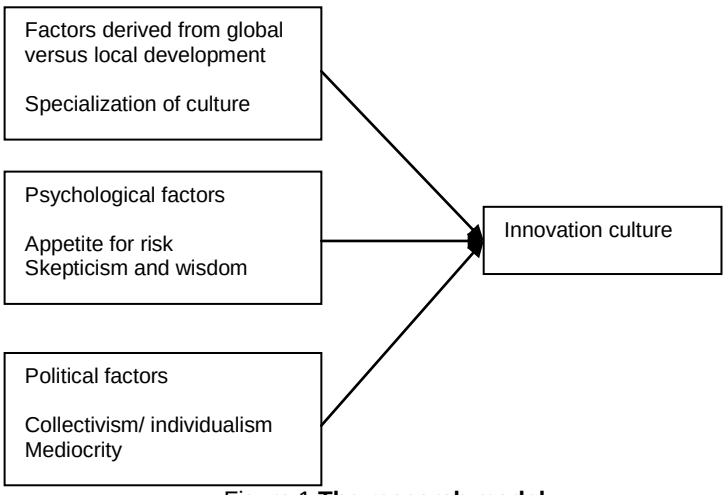

Figure 1 **The research model**

RESULTS AND DISCUSSIONS

Innovation culture is to be understood in terms of attitudes towards innovation, technology, exchange of knowledge, entrepreneurial activities, business, uncertainty (Hofstede 2001), and related behaviour and historical trajectories.

Herbig and Dunphy (1998) define culture, Hofstede presents a more definite and less flexible conception of culture, Brons (2006) looks into different definitions of culture but all conclude that culture is a sum of values and beliefs that distinguishes people of one nationality to another. Hofstede has a model of national culture with four dimensions: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation.

The concept of „culture of innovation" is often overlaped with the concept of „business culture" with all the meanings that one can draw from that.

But there are other considerents to take: „most people work in hope of reward" no matter the taste for risk of the nation to which they belong, religion is an important considerent in discussing the concept of innovation culture, and even the taste for skeptisicm and wisdom is an important factor.

What about Romania? We have a history of resistance, one of deffending our teritory, to treat our political co-regional neighbours with extremely carrefull and wisdom policies, with compromises and we are known to be different in this part of the Balcan region.

Facts supporting the factors derived from political spectrum

At present, Romania does not have a National Innovation Strategy to define clear innovation policies and priorities. Therefore, innovation policies are addressed in some of the programmes of the 2007-2013 National RDI Plan.

Public procurement for innovation and pre-commercial public procurement do not exist in Romania.

The connection research-development-innovation-standardization is poorly developed.

Lead market initiatives are very incipient in Romania.

Support to open innovation and user-centered innovation are not developed.

These facts conclude the main idea that our innovation culture is not a specialized one and it is only derived from a general framework.

The main recommendations concerning research-development-innovation (RDI) policies that we consider necessary are:

1. Strengthening the performance of the RDI system and its capacity to meet socio-economic needs
2. Stimulating private RDI investment
3. Developing the European dimension of RDI policies and programmes

Evidence on effectiveness of innovation policy:

- Poor policy prioritization
- Strong disconnect between the science system and the production system
- Mismatch between the allocation of RDI funds and the areas of national comparative advantage
- Fragmentation and large number of public R&D institutes in a wide range of scientific fields and sub-optimal allocation of resources
- Limited implementation oversight
- Unpredictable budgeting given the fiscal crisis and uneven patterns of funding
- Rigid budgeting and human resource management rules
- Frequent changes in personnel
- Weak incentives for performance
- A confused legal framework and a plethora of actors with unclear coordination roles

- Competing for budget resources having different institutional priorities
- A heavy concentration of funding in the early stage of the innovation value chain was identified, while the later stages (product development and product launch) are severly under-funded and largely ignored by the government.

The Word bank's Functional Review provides four main recommendations:

1. Strengthen the governance of the RDI system
2. Strengthen the performance of R&D activities within the public sector itself
3. Accelerate the translation of R&D into innovation in the private sector
4. Increase the level of private sector R&D

The national strategy should focus on innovation investment. Because people perform innovation, all stakeholders in improving innovation need to focus on creating innovators. Developing new generations of talent takes time, as does regenerating our innovation pipeline that started to become less fit in the mid-1990. The path to return us to our innovation economy requires long sustained investments that support iterative innovation and create innovators as we concomitantly downsize inefficient government expenditures.

The growth in R&D relative to economic output after World War II, and especially in the 1980s, can be attributed to a number of important changes. The transition to a "knowledge-based economy" (OECD, 1999) or to "knowledge-societies" (Mansell et al. , 1998) is a widely accepted phenomenon in developed countries, and has become a target for developing and transitional economies. The growth in R&D intensity is often cited as one of the indicators of the emerging knowledge economy, but additional indicators, independent of R&D, also point in the same direction. There has been an increase in the knowledge content of production, especially in the developed economies, over time, skills have become more important in production and education levels have risen. Industries with a strong science base, such as chemicals, pharmaceuticals, electronics and aerospace, have grown in relative importance while other industries, such as automobile production, have incorporated more science-based elements. For example, computerized components have become prevalent in new automobiles. Thus, many economies have experienced a tendency for the portion of value added related to skills and knowledge applications to rise. And this implies a need for more R&D to pursue further advances in knowledge.

Facts supporting the factors derived from global versus local development

Romania is the second smallest among the member countries of the European Union regarding research and development spending show the European statistics office, Eurostat.

The latest European Innovation Scoreboard presents Romania as one of the modest innovators with a below average performance (http://www. proinno-europe.eu/inno-metrics/ page/romania).

Relative strengths are in Finance and support and Outputs. Relative weaknesses are in Open, excellent and attractive research systems, Linkages & entrepreneurship, Intellectual assets and Innovators.

High growth is observed for Public R&D expenditure, Community trademarks and Community designs. A strong decline is observed for Non-EU doctorate students. Growth performance in Finance and support and Intellectual assets is above average. In the other dimensions it is below average.

The performance of Bulgaria, Latvia, Lithuania and Romania is well below that of the EU27. These countries are Modest innovators.

Bulgaria and Romania are the growth leaders of the Modest innovators. We present the average annual growth in innovation performance (*figure 2*). The performance of the four country groups across the different dimensions is shown bellow (*figure 3)*. The annual average growth per indicator and average country growth is presented bellow (*figure 4).*

Important measures to consider:

- A better prioritization of RDI themes in close connection with the areas of national comparative advantage
- Increasing the RDI capacity of Romanian enterprises (both SMEs and large firms)
- Introducing an innovation culture in the economy
- Better support to and monitoring of innovative and high-growth firms
- Better support for entrepreneurship
- Improved technology transfer infrastructure and qualified personnel in universities.

Facts supporting the psichological factors

From the data available and presented above anyone can draw a simple conclusion: Romania has alot of potential but her taste for skepticism and her appetite for wisdom are some psichological factors that influence what is called national culture.

The only important measure to consider here is focusing on a culture of innovation at the individual level of citizen.

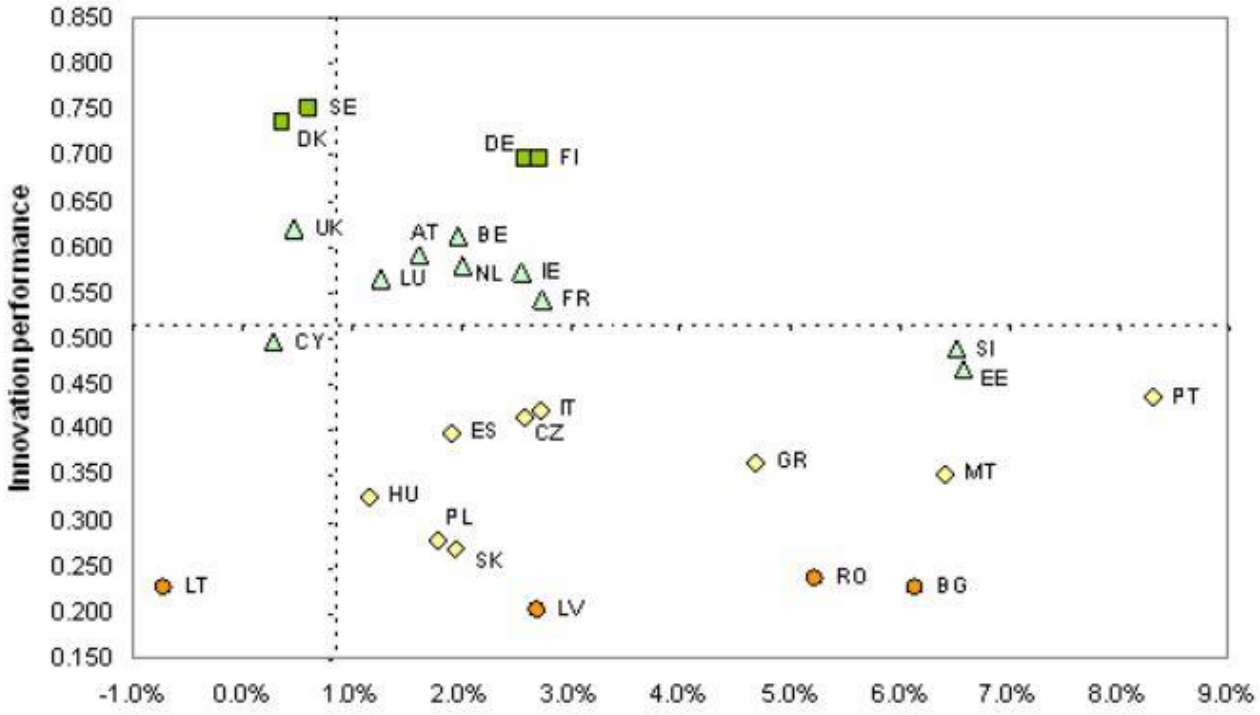

Figure 2 Average annual growth in innovation performance
Source: http://www.proinno-europe.eu/inno-metrics/page/romania

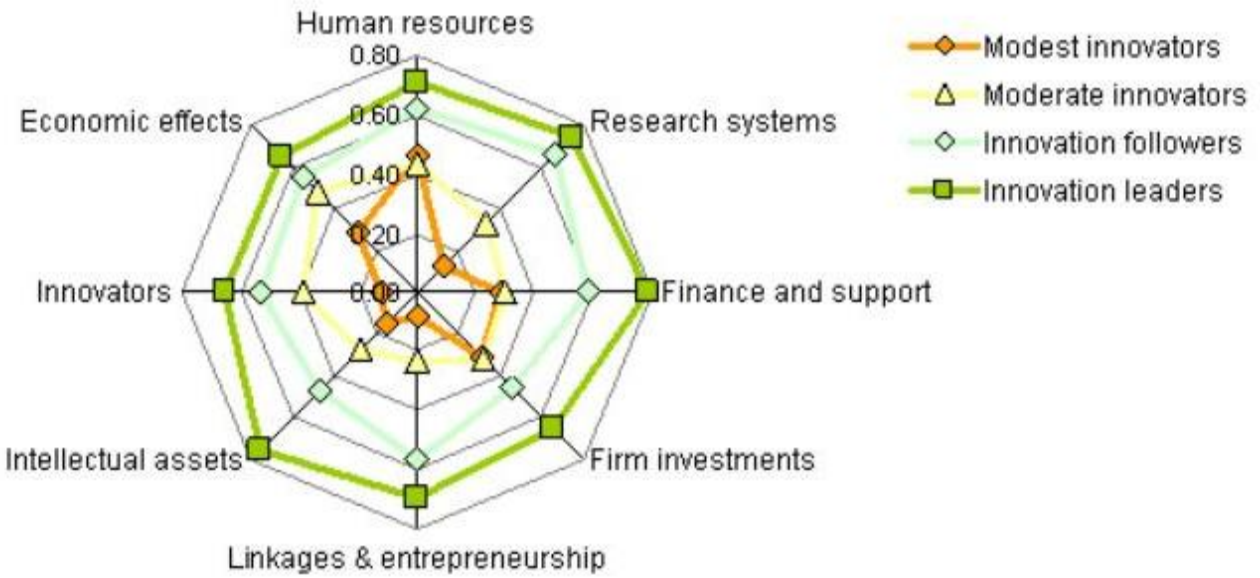

Figure 3 Country groups: innovation performance per dimension
Source: http://www.proinno-europe.eu/inno-metrics/page/romania

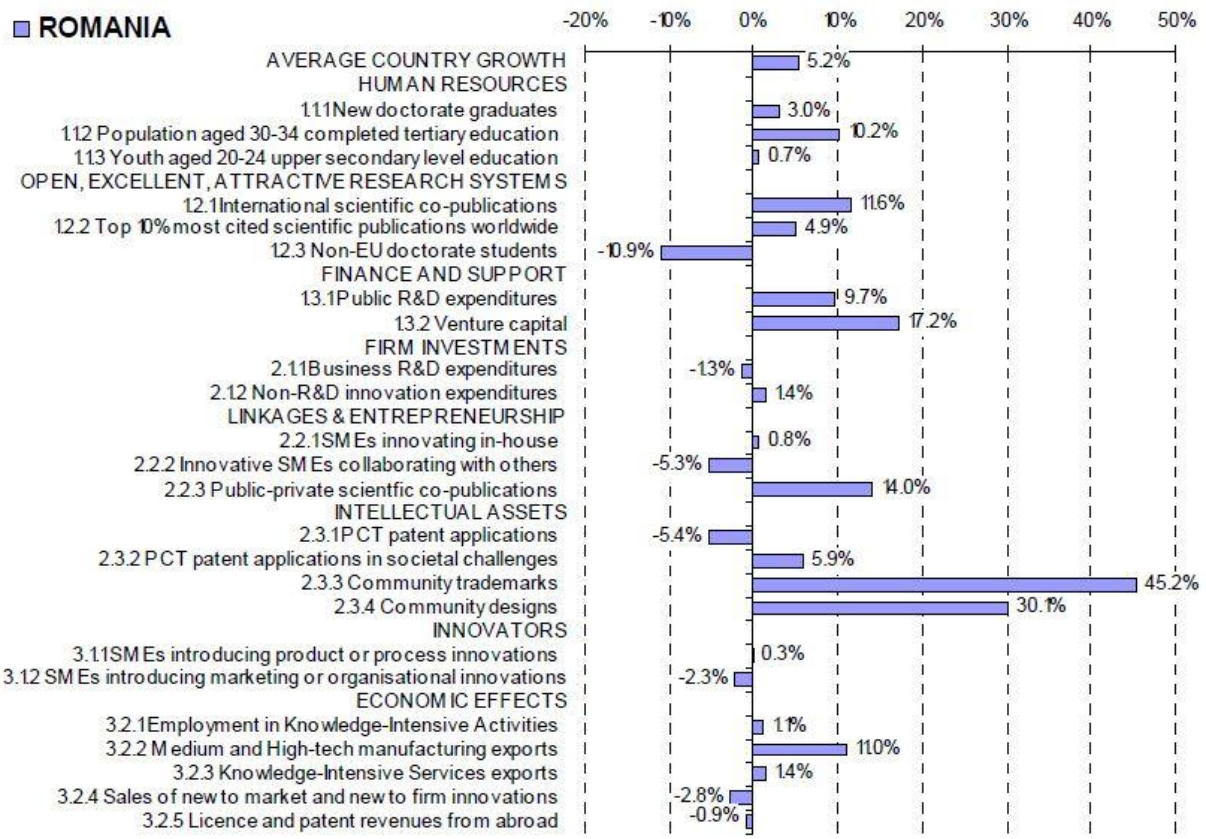

Figure 4 Annual average growth per indicator and average country growth
Source: http://www.proinno-europe.eu/inno-metrics/page/romania

CONCLUSIONS

Culture is learned. For a person this means education and for a nation this means adaptation to continual changes derived from the economical and geo-political medium. The main conclusions that can be drawn are that the investment in education, in R&D, in thinking a general framework for long-term for innovation policies could be the main considerents in supporting a nation's innovation culture. The title of our paper poses a question, which has to be answered.

We have learned that there is a reliable link between cultural dimensions and innovation policies. However, although culture undoubtedly plays an important role in innovation policies development, it should be stressed that the relationship is not straightforward and culture is not a sufficient factor for getting a notable outcome in having good innovation policies, indicating the need for further analysis.

We have found that to be successful in innovation culture, a nation should have lower than average the level of skepticism, the appetite for risk. The relationship is a direct on with an inverse effect. Also, we have learned that we need a better specialization of culture. We have alot of general specializations and to be sincere we have alot of general in everything.

The third level of factors indicated that our historical premises show us as being individualists with some anarhic influences but we liked to live in collectivism due to our low appetite for risk.

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