THE CONVERGENCE AND THE ECONOMIC AND SOCIAL PRACTICE

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ABSTRACT: THIS PAPER FOCUSES ON REAL CONVERGENCE AND ITS DETERMINANTS FOR THE REGIONS OF ROMANIA, IN THE CONTEXT OF EUROPEAN INTEGRATION. REGIONAL GROWTH IS BASED ON THE DEVELOPMENT OF ENTREPRENEURSHIP. ANY MORE OR LESS INNOVATIVE UNDERTAKER FACES A DOUBLE MAJOR CHALLENGE: TO GENERATE A NEW BUSINESS (EXISTENTIAL CHALLENGE) AND TO GROW, DEVELOP THIS BUSINESS (THE CHALLENGE OF THELASTYEARS, IMPORTANT STEPS TOWARDS A BECOMING). INENTREPRENEURSHIP REVOLUTION HAVE BEEN TAKEN. TO THE OLD FORMULA TO LAUNCH A BUSINESS, A NEW ONE RUNS COUNTER WHICH BECOMES A DRIVING FORCE, MAKING THE START-UP PROGRAMME LESS RISKY, "LEAN START-UP" FAVOURS: EXPERIMENT OVER ELABORATE PLANNING, FEEDBACK FROM THE CLIENTS OVER INTUITION, ITERATIVE DESIGN OVER "BIG DESIGN FRONT". IN THE NEW APPROACH THE ENTREPRENEURS EXAMINE HYPOTHESES, THUS OBTAINING EARLY FREQUENT FEEDBACKS, PRESENTING "MINIMUM VALID PRODUCTS" TO THE POTENTIAL CLIENTS. THIS APPROACH THROUGH THIS NEW PROCESS ADMITS THE FACT THAT LOOKING FOR THE ADEQUATE BUSINESS IS THE MAIN TASK WHICH A START-UP HAS TO DO, THIS BEING DIFFERENT FROM DOING SOMETHING ACCORDING TO A MODEL AS THE STABLE COMPANIES DO.

KEW WORDS: REAL CONVERGENCE, ENTREPRENEURSHIP, ENTREPRENEURIAL-INNOVATION, LEAN START-UP, MODEL.

Introduction

The major and complex issue of quickly eliminating the development gaps which each locality, region in Romania faces in the context of European integration, that is the issue of accomplishing the real convergence is much more disputed in the economic theory and less in the economic and social practice.

The conclusion that the academician, Aurel Iancu [1] reaches, that of "bridging the development gaps between Romania and the EU as soon as possible cannot be achieved exclusively through market forces, since they rather tend to cause divergence and polarization" is correct/accurate but not enough.

To rethink the issue and thus re-integrate the issue starts from redefining the relation between science and society in the context of the existence and persistence not only of an economic and social crisis, but as a crisis of the science itself as well as the European desideratum of public commitment of science (and the researchers).

The social and economic sciences and/or economic managerial sciences as scientific domains (pluri-disciplinary with trans-disciplinary tendencies) are par excellence domains of the complex entities/ systems.

"Social-economics and economic-management" face today three fundamental challenges: that of complexity, of research-action and entrepreneurial-innovation and which bring about three major evolutions/ transitions:

- the challenge of complexity (complexity turn)
- the challenge of research-action (action-research turn)
- the challenge of entrepreneurial-innovation (entrepreneurial-innovation turn).

Assuming the challenge of complexity

Regarding the assuming of complexity challenge, we start from the synthesis made by Catellani and Hafferty [2] in their book, "Sociology and Complexity Science - A New Field of Inquiry" which shows that the researchers' viewpoint from complexity science may be articulated with two different start-ups.

The first starts with a series of phenomena and processes as the complexity of the globalized society reached a critical point which imposes a shift in the organization; this shift is mostly a function of the informational revolution specific for the post-industrialization and globalization and to this new situation with phenomena and processes as the collapse of the environment, economic globalization, political and cultural conflicts cannot be applied the regular (old) tools of science, consequently new methods, new tools, new perspectives are necessary, in other words the complexity science is the future of science.

The second starts from "the bottom line" where the investigation of modern science reached. Thus, despite exquisite successes, the reductionist science "finished its course" as well as the quantitative programme with the traditional statistics-mathematics modelling/moulding and thus new ways to make science are necessary to carry on the scientific investigation and the best modality is by adopting the perspective of complex systems, characterized by the idea that life is holistic, self-organizational, emergent, highly relational, interconnected, non-linear and evolving, as well as by adopting the last advances in mathematics, networks and computational modelling as useful tools in scientific investigation of these complex systems.

The key concepts of complexity paradigm as non-linearity, self-organization, emergence, dynamics, and nonergodic, irreducible evolutions show us that any action and/or intervention in a complex adaptive system may lead to non-predictable results, to cumulative impact and paradox effects.

Developing the central concept "adaptive complex system", through "system of self-organized critique" [3] of "complex evolving/ co-evolving system" [4] and "responsive complex system" [5] underlies a better understanding of economic and social phenomena and processes as well as of conceiving the idea of integrative design of a policy and/ or strategy for "organic and ecologic development".

Assuming the "action-research challenge"

Phenomena of deep social-economic crisis as well as the fact that all these changes and/ or transitions transcend the economic domain and/ or the economic science dealing with what U. Beck [6] called "meta-change" of modern societies: "whether the cises, transformation, radical social change have always been part of modernity, the transition

towards a second reflexive modernity not only changes the social structures, but also revolutionizes the coordinates, categories and concepts of change itself."

The social activity and practice, the scientific included, generally speaking, require reviews and even reconsiderations of trans-disciplinary nature. Thus dealing more and more with an accelerated evolution with non-linear dynamics, practice itself becomes "action-research".

In this sense, any practice and/ or human activity in the context of growing complexity is compelled (in order not to produce externalities) to integrate science with action, that is to adopt an endeavour of action-research type.

Uncertainty, complexity, genuine complexity, growing complexity calls for action-research. Not merely action-research, but "the systemic action-research" or "the critical reflexive action-research", or even better "the wholly systemic research-action" and/ or "action-research-network".

Thus Danny Burns [7] points out that "Systemic action research is a process through which communities and organisations can adapt and respond purposefully to their constantly changing environments. It supports participative solutions to entrenched problems, and enables us to work with uncertainty". Or in the same direction R.L. Flood [8] asserts that," It is through systemic thinking that we know of the unknowable. It is with action research that we learn and may act meaningfully within the unknowable".

We may conclude that the systemic action-research makes possible and widely opens the door to conceiving and achieving some genuine strategies to face successfully the complexities and uncertainties of the real world. Besides, the action-research starts from the principle [9] that "the best modality to understand something lies in the attempt to change it".

The concept of "action-research wholly systemic CERC" [10], developed relatively recently by the Canadian professor Andre Morin from Montreal University, in practice joins the systemic approach and action-research applied upon the social system, yet prioritizing the human being, as the first to be held responsible for its acts towards its own positive change. CAIS is a participative and cooperative approach. It enables the researcher-actor to be responsible for the richness of its subjectivity in a dialog with the others in the team's subjectivities, community, organization, society, etc. Out of these interplays a joint agreement emerges, enriched by inter-subjectivity, inter-cultural and/ or pluri-disciplinary. Even the title of Morin's book *Cheminer ensemble dans la réalité complexe.* La recherche-action intégrale et systémique (RAIS) synthesizes almost metaphorically the concept, making it intuitive and immediately perceptive.

Another variety of action-research integrating the social human aspect with the technological one, called "action-research-network" is a methodology of action-research involving people, places and technology, attempting to answer the challenges coming from changing of the nature of community and society interplay by the emergence of informational society based on knowledge, of network society.

The action-research-network takes into consideration both the human aspect and the technological aspect of social networks (practice communities, interest communities, traditional communities, etc.). Thus technology is oriented towards practice, towards the human modality to be, becoming more and more ergonomic, more oriented towards human and better centred on applications. In practice, the social communities (either traditional or network) function as social learning systems, in which people have relations and/ or connect to solve issues, share ideas, establish standards, build tools and develop relationships from one human being to another.

Assuming "the entrepreneurial innovation challenge"

In economic sciences, despite the fact that innovation (and implicitly the entrepreneurship) is not a new phenomenon, it has not been paid the proper attention. In practice, except for Schumpeter and relatively recent historians in economic sciences as Gerschenkron, Rosenberg, Abramowitz and even if Adam Smith admitted from the beginning of economic science the importance of technological change, very few economists have paid attention to the innovation and/ or entrepreneurship, the economists have rather preferred to focus on factors as capital accumulation, labour market instead of innovation. Besides the present economic theory "old-fashioned but still in power" does not explain the innovation and/ or entrepreneurship.

Musso Pierre & others [11] in Fabriquer le futur 2: L'imaginaire au service de l'innovation", points out that comparatively to a traditional conception of innovation (founded on developments of technology-science type) innovation leaves the labs of research-development to become a transversal and multidisciplinary phenomenon. Emerging concepts like eco-conception, ascending innovation, digital revolution 3D, applied perspective, pilot innovation etc. are brought in.

Within the rethinking of entrepreneurial type (from a posture of social science for choice, not only of natural science) of knowledge we should start from Aristotle's concept, "phronesis",[12] usually translated practical wisdom or caution, showing that ",,phronesis is a true state, reasoned, and capable of action with regard to things that are good or bad for man". Phronesis goes beyond the scientific, analytical (episteme) knowledge, as well as technical knowledge or know-how (techne) and involves judgments and decisions done in the manner of a virtuous social and political actor. It is completely wrong to reduce knowledge to social sciences or to episteme or to techne or understand them in these terms.

Innovation becomes both the method of imaginative research in the domain/ space of possible and the tool to experimenting-testing in the virtual space/ domain of a simulation platform and/ or in cyberspace, as well as the prototype-machine in the real space of the new production plants.

Conceptually-technically speaking, a passing from the concept of innovation as "innovative machine" [13] has been done lately towards the concept of innovation as a system and/ or ecology "co-innovation and/ or network innovation. The essence of innovation is conceptual rather than technical or scientific. The innovator is characterized through the capacity to perceive as a system what others see as disparate elements without connection among them" [14].

Through its nature, an innovative entity is a complex one, that is it has characteristics as multiple logics (contradictory rules); non-linearity (formal non-predictability); dynamic (it is not in balance); non-determinist (not completely at random); with open frontiers, but with great changes in behaviour.

Thus in a more and more complex, globalized world, in a period of deep changes it is preferable, in fact it is necessary for the innovative-entrepreneurial action to be utilized for the imperative "to innovate in order to transform the present non-sustainable human civilization into a sustainable civilization based on knowledge" [15].

In this context we may state that the innovative undertaker will become a suis generis "action researcher" generating or contributing to generating new markets of sustainable nature actuating "the organic ecologic network development".

In order to show its success, innovation needs, at the level of macro-institution and at the level of culture, the emergence and development of entrepreneurial society. In USA,

authors as Peter Drucker [16], with Innovation and Entrepreneurial System", Acs, Z.J. with "The Changing Structure of the U.S. Economy", and more recently David Audretsch with "The Entrepreneurial Society" [17] and Carl Schramm with "The Entrepreneurial Imperative" [18] have supported this idea imperatively and with arguments.

From this perspective we cannot talk about a mere entrepreneurial perspective any longer, but of policy to create a friendly environment in the context of entrepreneurial economy, with view to build a new and sustainable civilization based on knowledge and on the idea-concept of "organic ecologic development".

From an artificial growth to an Organic Growth wards an Organic Ecologic Development

Most of the times, economic growth has occurred and occurs artificially, in an unsound/ unhealthy manner by limitless exploitation of non-renewable resources (as coal, steel, oil) or renewable but unsustainable exploited (as it is the case of wood), and/ or of some "symbolic resources" artificially created but badly managed (as it is the case of money credit) by companies which have become multinational or trans-national corporations but which once they become "too big to fail" they are on the verge to bring to collapse whole national economies or even global economy.

The statistics show us that most of entrepreneurial start-ups (75%) fail in the first years of existence. A very paucity of those which succeed grows artificially (most of the times through "mergers and acquisitions") and they become the huge corporations "too big to fail".

The economic growth from the perspective of the new economic science of innovation is in the first place the result of the endogenous change in technology, tastes and preferences thus determining the changes depending on production and utility, the driving force being creativity and inventiveness of the economic agents in a social economic and ecologic context, in fact being "an organic growth" or "organic and ecologic development" and/o network organic ecologic development".

The theories of complexity concern the economic agents (undertakers, companies, corporations) as being complex adaptive systems, whose interplays, evolutions and dynamics are varied, difficult to predict, contradictory even paradoxical at certain levels. From this perspective, innovation emerges as a natural phenomenon, endogenous, coherent of economic activity.

Any sound organic growth/ or organic ecologic development need an approach to see the phenomenon at least at two levels: the micro level of the individual, of the entity, of the organization, of the company which acts and the macro level, of the community, of the society, of the environment in which it occurs. The organic growth is rather a phenomenon/ an emergent process, while the organic ecologic development is a conscious process (enacted and managed by a human intention).

In "The Road to Organic Growth" [19], E.D. Hess presents a valid pattern of how to achieve an organic growth (organic ecologic development). Professor Hess identifies six keys to achieve and organic growth pointing out to the way they should be incorporated in a sustainable competitive advantage formula:

- -develop a simple business pattern, easy to understand and a growth strategy;
- -be entrepreneur-like with the clients;
- -weigh up/ quantify everything from finance to operations to departments;
- -build a human pipeline, skilled, loyal, involved;

- -look for focused internally operators to lead the company;
- -be a champion of technology and execution.

This approach of "the road towards the organic growth" shows that a sustainable successful business can be built from the inside without expensive acquisitions, financial manipulations or depreciation of the employees.

The entrepreneurship as a Key Factor in Quickly Eliminating the Gaps in Development

In this context of organic and/ or organic ecologic development any more or less innovative undertaker faces a double major challenge: to generate a new business (existential challenge) and to grow, develop this business (the challenge of becoming).

In the last years, important steps towards a genuine entrepreneurship [20] revolution have been taken. To the old formula to launch a business (either the technological start-up, small business, initiative within a big company) — write a plan; present it to the investors, make a team; introduce a product; start and sell as much as you can — is one of "try and see what happens", a new one runs counter which becomes a driving force, making the start-up programme less risky, "lean start-up" [21] favours:

- -experiment over elaborate planning,
- -feedback from the clients over intuition,
- -iterative design over "big design front".

This movement actually turns conventional wisdom about entrepreneurship upside down - the new approach proposes principles as "quickly fail" and "learn continuously". Instead of making business plans, giving working prototypes as in the old approach, in the new approach the entrepreneurs examine hypotheses, thus obtaining early frequent feedbacks, presenting "minimum valid products" to the potential clients. This approach through this new process admits the fact that looking for the adequate business is the main task which a start-up has to do, this being different from doing something according to a model as the stable companies do.

Essentially, it may be said that whether the existent companies follow a business pattern, then the start-ups looks for a business pattern. In this context, the definition of lean start-up is: a temporary organization designed to look for a measurable and iterative business pattern.

As for the entrepreneurs' other key problem (challenge of becoming), that of how to grow/ develop a business so that you could always create value (economic, social, ecologic), both for the company (employers and employees) and for the community/ society and the environment they function in, a new revolution is about to be outlined, that of organic growth. As Edward D. Hess [22] points out, the growth may be controlled (when and if it is high time for growth, how to do the growth, how to manage the growth process and what kind of leadership is needed, what organizational culture should be implemented, etc.).

Pragmatically and factually, if we take a look at the way in which different innovative entrepreneurs acted and performed along few centuries of capitalist development we notice that in essence their endeavour was a sui generis research upon activity. As a recent example, from Jessica Livingston's book "Founders at Work: Stories of Start-ups", [23] we can notice that the innovative entrepreneurs with successful stories practiced an intuitive research action, which was unaware and non-formal. In innovative start-ups nothing goes according the plan and perseverance and adaptability are needed so

that the process of attempt-fail, intention-fulfilment inherent for this phase can be seen as a research-action process.

Conclusion

Regional growth is based on the development of entrepreneurship. But the complexity calls for strategy. In a complex environment (ambiguous, uncertain, etc), a complex thinking is needed to make a strategy work. Whether yesterday the key word of knowledge was analysis, today the key word is conception. To conceive, that is to model/ mould and thus the initial question "how to identify the object?" becomes "how to conceive a pattern of the object" [24]. And also "to design" differently, that is a new design, the integrated and participative design with full-system [25] thinking with the assistance of which efficiency, more efficient performance can be obtained with an equal order.

And, of course, under the conditions of growing complexity and uncertainty, the achievement of the design at least at two levels: "the micro design" of the entity/ company associated with "the macro institutional design" to allow and enable generating some interplays in ecological chains-cycles of valid entities (companies/ start-ups) is as important.

It is natural to emphasize that, for the first time in the history, because of the fact that globalization does not leave room for isolated collapse and/ or downfall the humankind occur the risk of global collapse/ downfall. In this sense, everybody's awareness towards the imperative that a major change is crucial, it is more than necessary, yet above all, taking into account the actual economic global crisis, it is urgent and deep. Starting from this fact we can radically and pragmatically re-think and re-structure the social economic sciences.

It is high time for the endeavour of economic science to be oriented towards or from the future, especially in the situation that an innovative leaping [21] is required towards another civilization, a sustainable one. The imperative is as great for the economic practice, taking into account that in these uncertain and turbulent times, any economic agent needs an adequate orientation to enable it to be/ become valid for a longer term. And, of course it does not require prediction and/ or prognosis, but it requires foresight and/ or "future outline".

REFERENCES

- [1]. Iancu Aurel, (2007,) *Convergența reală*, Studiu realizat în cadrul Programului CEEX, Proiect nr. 220, Convergența economică și rolul cunoașterii în integrarea UE, Revista OEconomica, issue 03/2007
- [2]. Castellani Brian & Frederic William Hafferty, (2009), *Sociology and Complexity Science* A New Field of Inquiry, Springer Pub., p. 24
- [3]. Per Bak, (1996), How Nature Works: The Science of Self-Organised Criticality, Copernicus Press, New York, p.68
- [4]. Mitleton-Kelly, Eve and Davy, Laura K. (2013) *The concept of 'co-evolution' and its application in the social sciences: a review of the literature* In: Mitleton-Kelly, Evangelia, (ed.) Co-evolution of intelligent socio-technical systems: modelling and applications in large scale emergency and transport domains. Understanding complex systems. Springer, Berlin, pp.43-57
- [5]. Stacey, Ralph D., Douglas Griffin and Patricia Shaw (2000). *Complexity and Management: Fad or Radical Challenge*. New York, Routledge.
- [6]. Beck, U & others (2003) The Theory of Reflexive Modernization Problematic, Hypotheses and Research Program, in Theory Culture Society, vol. 20 (2)

- [7]. Burns, Danny (2007) Systemic Action Research, A Strategy for Whole System Change, Policy Press, University of Bristol, p. 1
- [8]. Flood, R.L. (2001) The relationship of "systems thinking" to action research, in P. Reason and H. Bradbury, Handbook of action research: Participative inquiry and practice, London: Sage Publications, p.142
- [9]. Greenwood, D. and Levin, M. (1998) An Introduction to action research: Social research for social change, Thousand Oaks, CA: Sage Publications
- [10]. Morin André, (2010) Cheminer ensemble dans la réalite complexe : La recherche-action intégrale et systémique, Harmattan Pub
- [11]. Musso Pierre, Laurent Ponthou, Éric Seulliet, (2007) Fabriquer le futur 2: L'imaginaire au service de l'innovation, Pearson Education France
- [12]. Aristotle, Nicomachean (1999) Ethics trans. Terence Irwin, 2nd edition, Hackett,
- [13]. Baumol, William J. (2002), *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*, Princeton, Princeton University Press,
- [14]. Drucker, Peter, (1964), Managing For Results, William Heinemann Ltd, London, p. 172
- [15]. Jinaru, Aron, 2010 Finanțarea inovării în economia globală bazată pe cunoaștere, Teză doctorat, ASE Bucuresti , p.122
- [16]. Drucker Peter, (1985), Innovation and Entreprenorial System,
- [17]. Audretsch, David, (2007), The Entrepreneurial Society, Oxford University Press,
- [18]. Schramm, Carl, 2006, The Entrepreneurial Imperative, Collins, New York
- [19]. Hess D. E. (2007), The Road to Organic Growth: How Great Companies Consistently Grow Market Share from Within, McGraw-Hill Professional
- [20]. Harvard Business Review, May (2013), Turn a great idea into a business
- [21]. Blank, Steve (2013), Why the lean start-up changes everything, Harvard Business Review May
- [22]. Hess, Edward D. (2012) ,Grow to Greatness: Smart Growth for Entrepreneurial Businesses, Stanford Business Books
- [23]. Livingston, Jessica (2007) Founders at Work: Stories of Startups' Early Days, Editura Apress
- [24]. Le Moigne, Jean-Louis, 2006, La théorie du système général. Théorie de la modélisation, PUF. Reeditare, p.73
- [25]. Rocky Mountain Institute, 2010 Factor Ten Engineering Design Principles Version 1.0, http://www.rmi.org/rmi/10xe%20principles