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THE IMPORTANCE OF LIFELONG LEARNING FOR THE "NEXT" SOCIETY

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"The old foundations of success are gone. For all of human history the source of success has been controlling natural resources-land, gold, oil. Suddenly, the answer is knowledge." (Lester Thurow, June 1999)

1 Introduction

Long time ago, an Austrian economist, Friedrich von Hayek, thought that the fundamental problem of economics is not to study the optimum use of scare resources for limitless and competing needs, but to analyze efficient use of information and knowledge which are largely spread in society. Although, it is important to know what and how to produce an output, and to whom that output will be sold, it is crucially important to study the process through which knowledge about production and selling of goods and services are used in an efficient manner, because there is nobody in a "great society" (or complex modern society), either producer or consumer, having ready-made knowledge on all the inputs, production methods, consumption patterns, individual tastes evolution and so on.

In a permanent changing world, every economic actor has only a piece of information and knowledge and putting together these pieces of knowledge could be an insoluble problem even for the most brilliant human mind or group of remarkable human beings. The big challenge for the social scientist is to study the use of knowledge in the market process and the huge task of the firm or entrepreneur is the efficient use of knowledge in the market process. There is no such a central omniscient and omnipotent body of decision-making as to coordinate all the individual interests towards achieving the optimum welfare, but everybody can learn in competition to use knowledge from the others in order to perform his/her purposeful activity. **(1)**

Two decades later, when the number of white collars began to exceed the number of blue-collars in the American economy, another Austrian invented the term "knowledge worker", helpful for emphasizing a new trend of industrial organization, management and labour force in advanced societies. **(2)** At that time, some sociologists like Daniel Bell and development economists like Walt Rostow used to speak about "information society", "post-industrial society" or "tertiary economy". But, none of them had been as insightful as those two forerunners, thinking that what it happened was a social transformation.

During the first part of the 60s, a third Austrian, at that time a professor at Princeton University, wrote a landmark book about the important role of knowledge in U.S. economy. He proved that almost one third of the U.S. GDP represents knowledge output. **(3)**

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So, it seems that there is nothing new about knowledge, knowledge economy and knowledge society. As stressed in a recent paper: "Knowledge and ability to create, access and use it effectively, has long been a tool of innovation, competition and economic success, and a key driver of economic and social development more broadly." **(4)**

At a first glance, the following question cannot be avoided: If the knowledge has always been so important for economic development, even Alfred Marshall, a hundred and twenty years ago, observed: "Knowledge is our most powerful engine of production", why are there so many people nowadays, academics, business experts, civil servants and policy-makers alike, speaking about knowledge as the most important determinant of economic growth and about building knowledge society as an essential condition of competitiveness in the globalisation process? Moreover, a second question should immediately be asked: If the knowledge-driven social progress has been well supported by the existing systems of education and training, is it not somehow too much to claim in the large international debate on the emergency of developing a better human capital through totally changed education and training?

This paper is aimed at answering to the previous questions while a focus on lifelong learning is permanently followed. In order to achieve this goal, the paper will be structured in the following parts:

The first part is about some general things regarding knowledge as a production factor and education as a human capital factor;

The second part is centred on lifelong learning debate, ideas and approaches;

The third part attempts to find some trends from facts and policies on lifelong learning;

The fourth and last part is devoted to the state and prospects of lifelong learning in Romania.

2 From production of knowledge to knowledge society

Some researchers have found that almost 70-80% of the recent growth rates of developed countries are explained by the total factor productivity. Even, in South-Asia countries, well recognized for a high rate of investment, hard and intensive working, small public sector and a special policy of "developmental State" as opposed to big public sector and policy of "welfare State", and last but not the least factor of "economic miracle" - that is an export-led growth, over one third of the growth rate over the last two decades has been explained by the total factor productivity. As we know very well, all the remained value of the economic growth rate after subtracting the share of increasing stock of capital and labour force or human capital should be the contribution of total factor productivity: better technologies, improved organization and management and higher quality skills.

In a nutshell, the total factor productivity comes from technological progress and increased efficiency. Surely, this accounting of economic growth is not so easily confirmed by practice, because, for instance, at least a part of technological progress is included in better capital equipments. However, in general terms, finally, higher factor productivity means higher work productivity. So, there is a clear linkage between education and training, innovation and right economic incentives, on one hand, and the value and level of growth rate, on the other hand. All the previous factors mean knowledge. To be more concrete, an example must be given. Since 1995, the average rate of productivity growth in U.S.A. has registered a double level, almost 4%, in comparison with the previous period of time, 1973-1994. A half of that average rate has been produced by the so-called "knowledge industry" which includes production of ICT. But the share of ICT production (computers, telecommunications equipment, software and digital equipment) is no more than 12-15% of the American GDP. This is a huge influence of the ICT industry in the biggest economy of

the world. But the story of new technology is not only about computers and digital equipment industry. In order to get a whole picture, we have to add the other high-tech industries (aeronautics, biotechnologies, pharmaceuticals, new materials and so on), ICT applied in mechanical industries (like automotive and transportation equipment), ICT applied in business services, ICT applied in public services and even ICT applied in traditional industries (agriculture, mining, petroleum and so on).

For a decade or so, all the non-financial businesses from America have invested more than 50% of their capital expenditures in ICT. Such an impressive share has determined many people, experts and laymen, to speak of a "new economy" based on ICT and networks. Other developed countries could have been counted as followers of the first rank, second rank etc. For instance, empirical research on "new economy" was done at the end of the former decade and at the beginning of the new century. It found that ICT had been applied on a large scale in U.K., Ireland, Denmark, Australia, Canada, Japan, Sweden, Finland, Singapore and Taiwan. And nothing is more far by true than to consider that it was all about Internet and dot.com bubble.

Therefore, we have a first group of countries strongly connected inside through ICT and highly connected outside in a kind of "network of networks". Then, there is a second group of countries - all of them members of OECD - and these could be named "followers", which have an important ICT sector and a big proportion of high- and medium-tech industries in industrial GDP and labour force. Finally, there are "late comers" like India, China and some East-European countries which are quite successful in the development of ICT sector.

From a technical point of view, we know that the ICT sector needs more knowledge than capital and manual labour. At the same time, it produces information and knowledge and it is used as a support for other economic and social sectors, either as a device for production or as a tool of organization and learning. Very short, such a situation could be regarded, *as Joseph Schumpeter explained, large waves of technical innovation from the past in terms of "creative destruction" and "long industrial cycles" (lasting almost 50 years)*, **to represent a new industrial cycle, based on high-technology and knowledge**. In a very influential book, Michael Porter has argued that the economic development of a nation can be of the following sorts: (1) natural resources-driven, (2) capital-driven,(3) investment-driven, (4) technology-driven and (5) innovation-driven. Given that, he regarded innovation in a very large sense, as the last stage of development that could be assimilated to **knowledge-based economy**. **(5)**

The above mentioned description is only one side of the coin, or to be more precise only the internal production of knowledge. But even in the case of an isolated country, let it be from the first group, it would be a mistake to consider only the economic side, including the services sector.

At the middle of the 90s, the famous economist Robert Solow, contemplating on the fast development of the ICT, said that: "Computers are everywhere, but the productivity is nowhere." What Solow intended to say was not about the lack of net value of the huge investment in ICT throughout the economy, but to observe that all kind of services, social, administrative, security, educational etc., were engaged in a race to implement computer systems. Usually, services encounter a problem from the productivity standpoint - a slow increasing trend. Perhaps, we have to keep the following idea: all the sectors of society are influenced by ICT, but not in the same proportion and manner. As a British economist has remarked: "High-tech is in a great part high-touch, not bigger productivity." **(6)**

In fact, one of the greatest writers on social transformation since the years of World War II, Peter Drucker, has identified the problem of productivity at the very beginning of the 90s: "*The productivity of knowledge work-still abysmally low – will become the*

economic challenge of the knowledge society. On it will depend the competitive position of every single country, every single industry, every single institution within society. The productivity of the non-knowledge services worker will become the social challenge of the knowledge society."**(7)**

In addition to the internal dimension of the knowledge society, we have to discuss what happened in the globalisation process. Some social scientists believe that we are already confronted with a global knowledge society. Be it global or not, the important fact is that the technological factors led to more integrated world markets and closer cultural and civic values, but at the same time they undermine traditional social values and structures.

Several dramatic changes in the recent decade have fundamentally increased the importance of knowledge and the competitive edge that it gives to those who harness it quickly and effectively **(8)**:

The ability to process and transmit information, globally and instantaneously has increased exponentially per unit of cost due to the combined effect of advances in computing speed and competition, innovation and lower costs in global communication networks.

As the technical impediments (distance, geography, cost) to accessing and using the best knowledge about a given process, skill or market decrease, that knowledge becomes increasingly the key to competitiveness, locally and globally. At the same time, these efficiencies in information and knowledge flows make possible and necessary a closer link between R&D and downstream innovation, an increased rate of innovation, and shorter product cycles in many major sectors of the economy. Even in the more traditional industrial sectors of the economy, knowledge is more easily and rapidly accessible on a global basis, and thus its competitive value is increased.

The increase of world trade and foreign direct investment, itself facilitated by the ease of information flows, accelerates the impact of these changes. In an increasingly global economy, where knowledge about how to became competitive and information about who is well positioned in global competition are more readily available, the effective creation, use and dissemination of knowledge is more and more the key of success, and thus to sustainable development that benefits all. Innovation, which fuels new job creation and economic growth, is quickly becoming the key factor in global competitiveness.

The impact of global information flows and of the knowledge economy on governmental and societal institutions is no less profound or important. In information-rich environments where knowledge flows freely and communications are abundant and multi-directional, pressures increase on governments to be more transparent, accountable and participatory. At the same time, the ability of governments to access and control information, and the uneven access to information and knowledge among sectors of society can, in certain circumstances increase inequality and further entrench existing political and social elites.

Of course, globalisation, especially economic globalisation, could not be explained only by technological factors. This is a simplified perspective useful for emphasizing the impact of technological change on education and training sector. That education is important for economic growth is not a new thing. Theory of human capital and its empirical tests have proved for a long time that investment in education, R&D and health care is as well valuable as investment in capital equipment from the point of view of economic growth. The problem is that formal schooling which has been counted in human capital theory, having as outcome codified knowledge and skills available for a long period of time, seems to be not too much suitable in a very changing world.

Drucker said that education will become the centre of the knowledge society and the school its key institution, but he did not insisted on the issue of what kind of education.

Maybe, he has thought about formal education due to his often reference to formal knowledge. Somewhere, he pointed: "*Knowledge has become the key resource for a nation military strength as well as for its economic strength. And this knowledge can be acquired only through schooling. It is not tied to any country. It is portable. It can be created everywhere, fast and cheaply. Finally, it is by definition changing. Knowledge as the key resource is fundamentally different from the traditional key resources of the economist-land, labour and even capital*." **(9)**

We established, with Drucker help, that **knowledge is the main engine of long-term economic growth** and that the "next society", regardless of the name which we would like to use for it, will be a **knowledge society**. But beyond these meaningful words, we do not yet know what education and training should be in the next society. A new concept-knowledge economy framework - launched by a World Bank paper, is valuable for our task.

Knowledge economy framework holistically encompasses the following elements or pillars:

- Education and traning;
- Innovation and technological adoption;
- Information infrastructure;
- Conductive economic incentive and institutional regime.

A sustained investment in these knowledge economy pillars, said the researcher, will lead to the availability of knowledge and its effective use for economic production. This would increase the growth rate of the total factor productivity and, consequently, result in sustained economic growth. **(10)**

We got a good idea about the place of education and training in the knowledge society. Let's see what kind of education is conceived in studies and reports from the World Bank, an institution concerned with economic development as its main reason and activity.

An insightful inquiry is made by a recent report:

"The global knowledge economy is transforming the demands of the labor market throughout the world. It is also placing new demands on citizens, who need more skills and knowledge to be able to function in their day-to-day lives. Equipping people to deal with these demands requires a new model of education and training, a model of lifelong learning. A lifelong learning framework encompasses learning throughout the lifecycle, from early childhood through retirement. It encompasses formal learning (schools, training institutions, universities); nonformal learning (structured on-the-job training); and informal learning (skills learned from family members or people in the community). It allows people to access learning opportunities as they need them rather than because they have reached a certain age. Lifelong learning is crucial to preparing workers to compete in the global economy. But it is important for other reasons as well. By improving people's ability to function as members of their communities, education and training increase social cohesion, reduce crime and improve income distribution." **(11)**

3 Ideas and approaches on lifelong learning

Lifelong learning is not a new concept. Many academics and practitioners in the management field have recognized that organizational learning is the most important activity for the development of human resources and the economic performance of a business organization.

Herbert Simon, Richard Cyert, Peter Drucker, among a lot of other writers in the management literature, launched during the 60s the idea that human assets or more general intangible assets are more valuable than fixed assets from the point of view of

organizational performance. Maintaining and repairing these human assets should be the main interest of top management if the company or public organization is to be efficient and accountable to its stakeholders. Therefore, continuing learning through job-training programmes, ad-hoc training, enrolment in intensive learning programmes of schools, universities and training providers would be a good practice of human resources management whether it is in business organizations or in public sector organizations.

Then, the idea of continuing education has been well developed in all the countries with a very competitive economic environment. For instance, postgraduate programmes like MBA and MPA have a long tradition in Anglo-Saxon countries. The same can be said about technical training in Germany and Switzerland which have a rich experience of post-secondary technical training and vocational education. But this was a private activity of firms, colleges and universities without obvious and permanent support of public policy.

The information revolution and economic globalization have determined officials and policy-making process in different countries to be guided by a requirement of structural reform of education and training. Some international institutions like OECD, World Bank and UNESCO began two decades ago to promote the idea that lifelong learning is the most important activity for human capital development in knowledge society. Knowledge is a much broader concept than it is usually understood.

Education has been traditionally concerned with two components of knowledge: *know - what* and *know - why*. These components belong to formal or codified knowledge. But there are two other components: *know-how* and *know-who* as important as formal knowledge, or often more important, for individual and organization performances. This is the "tacit knowledge" which is more difficult to codify and measure. The "tacit knowledge" is tied by places, time, organizational environment, group affiliation, informal values and many other factors which contribute to the social structures and institutions development. Some social scientists consider that "tacit knowledge" matters more than any other factor to success and performance, regardless of the type of organization.

Know-how refers to skills or the capability to do something. Businessmen judging market prospects for a new product or a personnel manager selecting and training staff have to use their know-how. The same is true for the skilled worker operating complicated machine tools. Know-how is typically a kind of knowledge developed and kept within the border of an individual firm. One of the most important reasons for the formation of industrial networks is the need for firms to be able to share and combine elements of know-how.

Know-who involves information about who knows what and who knows how to do that. It involves the formation of special social relationships which make it possible to get access to experts and use their knowledge efficiently. It is significant in economies where skills are widely dispersed because of a highly developed division of labour among organizations and experts. For the modern manager and organization, it is important to use this kind of knowledge in response to the acceleration in the rate of change. The know-who kind of knowledge is internal to the organisation to a higher degree than any other kind of knowledge.

Learning to master the four kinds of knowledge takes place through different channels. While know-what and know-why can be obtained through reading books, attending lectures and accessing databases, the other two kinds of knowledge are rooted primarily in practical experience.

Know-how will typically be learned in situations where an apprentice follows a master and relies upon him as the authority.

Know-who is learned in social practice and sometimes in specialised educational environments. It also develops in day-to-day dealings with customers, sub-contractors and

independent institutes. One reason why firms engage in basic research is to acquire access to networks of academic experts crucial for their innovative capability. Know-who is socially embedded knowledge which cannot easily be transferred through formal channels of information.

In the global competition, know-how and know-who became more and more factors that make the difference between competitive and less competitive or "losers" industries and businesses. While the "formal knowledge" remains an important condition of productive efficiency, "tacit knowledge" becomes the leading factor of competitive advantages in any field of economic and social sectors.

Perhaps, this is the explanation of the increasing concern of so many people with lifelong learning. The question is not about adult education, continuing education and experiential learning (learning by doing), but it refers to the reform of schools, universities and other institutions of formal education.

"Being successful in the knowledge economy requires mastering a new set of knowledge and competencies. These include basic academic skills, such as literacy, foreign language, mathematics and science skills, and the ability to use information and communication technology. Workers must be able to use these skills effectively, act autonomously and reflectively, and join and function in social heterogeneous groups." **(12)**

What is the difference between traditional learning and lifelong learning? A World Bank report established the following characteristics: **(13)**

a) Traditional learning

The teacher is the source of knowledge.

Learners receive knowledge from the teacher.

Lerners work by themselves.

Tests are given to prevent progress until students have completely mastered a set of skills and to ration access to further learning.

All learners do the same thing.

Teachers receive initial training plus ad hoc in-service training.

"Good" learners are identified and permitted to continue their education.

b) Lifelong learning

Educators are guides to sources of knowledge.

People learn by doing.

People learn in groups and from one another.

Assessment is used to guide learning strategies and identify pathways for future learning.

Educators develop individualized learning plans.

Educators are lifelong learners. Initial training and ongoing professional development are linked.

People have access to learning opportunities over a lifetime.

It is conventional wisdom that a lifelong learning framework encompasses learning throughout the life cycle, from early childhood to retirement. It includes formal, non-formal and informal education and training, where: (1) formal education and training include structured programs that are recognized by formal education system and lead to approved certificates; (2) non-formal education and training include structured programs that are not formally recognized by the national system; examples include apprenticeship programmes and structured on-the-job training, and (3) informal education and training includes unstructured learning which can take place almost anywhere, including the home, community, or workplace. It refers to unstructured on-the-job training, the most common form of workplace learning.

Recent knowledge and the accumulated stock of human capital are inputs in the production of new knowledge and wealth. The speed of change in the knowledge economy means that skills depreciate much more rapidly than they once did. To compete effectively in this constantly changing environment, workers need to be able to upgrade their skills on a continuing basis.

An expert in knowledge economy said that: "*Change is so rapid that firms can no longer rely solely on new graduates or new labor market entrants as the primary source of new skills and knowledge. Schools and other training institutions thus need to prepare workers for lifelong learning. Educational systems can no longer emphasize task-specific skills but must focus instead on developing learners' decision-making and problem-solving skills and teaching them how to learn on their own and with others*." **(14)**

There is a total agreement among academics, policy-decision makers and practitioners regarding the importance of lifelong learning in knowledge societies and the requirement of reforming education and training systems. But there is no common view of how to address the challenge put by knowledge society on the education and training systems. Some specialists in education policy and many politicians thought that the government must have a compact strategy, while others were concerned with the problem-solving as a task of individuals and organisations. A survey on the field literature allows the finding of **three main approaches of lifelong learning**:

(1) **a so-called "official compact" approach** which considers the State as being the single actor able to design, implement and control a "national strategy of lifelong learning". Being responsible for international competitiveness of the country and welfare of the society, the State can produce a lifelong learning strategy that match the demand of new knowledge, new skills competencies and adaptive capability of individuals and organisations. Even if the State-made strategy is discussed with social partners or stakeholders, the right, responsibility and decision-making remain with the State. Design, management and funding of the "national system of lifelong learning" are done by government and its agencies.

The root of this approach is a very old one - its soil could be named mercantilism- and the general framework is a heterogeneous one, but someone interested in details should refer to "welfare state" education as a public good and as a consequence free of charge education, regardless of its level, full employment and optimum economic growth as goals of the State. Nowadays, such an approach is very common in the European Union. The most recent example is the document which re-launched the Lisbon Strategy-*Integrated Guidelines for Growth and Jobs, 2005-2008*. Those 23 guidelines that combine macroeconomics and microeconomics with social security are typical to the old keynesian policy and indicative planning. And they have a support of a fashionable ideology that is "the third way";

(2) **"private service" approach** which regards lifelong learning as a business of individuals, firms, schools, universities and other providers of education and training. This approach also has an old root in classical liberalism and a general framework which includes friendly market policies of the State, free competition and free enterprise, minimal government and the rule of law. While it recognizes the role of State as a provider of "social safety net", the large redistribution of national income through public budget, regulation of everything and State management of many economic activities, eventually through a big public sector, are totally refused.

Compulsory education could have good social and economic reasons, because it offers basic knowledge and skills to everybody and doing so it increases productivity, enhances personal responsibility and develops capacity of social cooperation. Due to the fact that investment in primary and secondary education has a bigger social return than private return, the state could finance the two kinds of education. Yet this should not be a reason to

monopolize primary and secondary education. Competition of schools and free choice of families have to exist if the quality of education is to be fitted for social needs and acquired skills are to be valuable in economy.

There is no role for the government to plan, manage and control higher levels of education. These do not produce benefits for the whole society, but mainly private earnings. As the level of education is increasing, the social return of investment is decreasing. No good analysis and practical evidence prove that social return of investment in higher education is bigger than private return. If the individual gains extra income through higher education he/she has to pay tuition fees. Otherwise, it will be a paradox: poorer people would contribute to the education of students from richer families, because their paid taxes are used to finance universities chosen by students from rich families. In such a case, even social justice is disrupted, to do not say something about fiscal equity. If the barriers of access and lack of opportunities for poor students are to be diminished, the State should offer individual subsidies to those students, either through vouchers or negative income tax.

Free market can do a good job for higher education. It is the same with lifelong learning. Better skills and adaptive capability would have a higher labour productivity which leads to a bigger salary or personal income. The extra income is obtained by individual as a result of his/her better contribution to the firm output. Where is the place of state in this relationship? **(15)**

As regards international competitiveness and social welfare which are so much invoked as a reason of State involvement in lifelong learning, we need a long discussion about economic fundamentals of these concepts. Some well known international economists have proved that international competitiveness of a national economy is a dubious concept inspired by a new-mercantilist policy, having no sound argument in economic analysis. **(16)** Therefore, someone cannot pretend to get scientific fundamentals for lifelong learning policy, building on allegations. But there is no doubt that a lifelong learning strategy has a place in competitive business organisations and in efficient public institutions. In fact, competitive firms and efficient public institutions have always applied a kind of lifelong learning strategy. At the end, human resources development and continuing training have been invented by the American industrial corporations, not by governments. Everywhere and anytime, competitive firms and efficient public institutions have found solutions to address a new challenge, moreover, they often promoted technological and social changes without planning or guidance from the State.

Emphasizing the role of knowledge as an engine of development in a global world, Lester Thurow remarked: "*There are no institutional substitutes for individual entrepreneurial change agents. Capitalism is a process of creative destruction. The new destroys the old. Both the creation and the destruction are essential to driving the economy forward. Entrepreneurs are central to the process of creative destruction, they bring the new technology and the new concepts into active commercial use. They are the change agents of capitalism. Europe provides a good example of the importance of entrepreneurship. Europe save and invests more than U.S, has a better-educated populace and has a basic understanding of science that is just as good as that in the U.S, yet it has created none of the new brainpower industries of the twenty-first century. How can a region be a leader in the twenty-first century and be completely out of the computer business? The European entrepreneurs that should exist don't.*"(17)

The successful reformer of New Zeeland in the 80s, Roger Douglas, does not see any role for a "compact national strategy of lifelong learning" in the knowledge economy. The requirements for good performances at microeconomic and macroeconomic level are not different in knowledge society from those considered to be essential in industrial society.

"*My conclusion is that the environment that IT and knowledge-intensive firms need to prosper is not very different from what other businesses need. Key factors are low taxes and low regulation. Low taxes, including personal taxes, are important because high taxes reduce the expected returns on risky projects and curtail investment. Key regulations for high-tech industries include employment laws: if governments make it costly to lay off workers when ventures don't work out, they won't be started in the first place*."(18)

(3) **public-private partnership approach** concerns lifelong learning as a joint-venture of government and its agencies, on the hand, and education and training providers and business organisations, on the other hand. Government has an important role as strategy designer, but together with social stakeholders. Also, it has to create an institutional framework which offers incentives, including rules and benchmarks.

Innovative development of lifelong learning and programme management has to stay with providers and users. No omniscient and omnipotent government, if such an organisation would really exist, will succeed in developing a "national compact lifelong learning". A national system of lifelong learning which assumes that "one size fits at all" will fail, because it lacks the effective involvement of providers and users.

An effective and efficient strategy of lifelong learning should begin with two questions: (1) Given limited resources, what type of governance framework promotes lifelong learning for people in general and disadvantaged groups in particular? and (2) How can financing of lifelong learning be inclusive, affordable and sustainable?

Public-private partnership approach of lifelong learning has been adopted by the World Bank.(19) Experts from the World Bank have observed that in order to create effective lifelong learning systems, countries need to make significant changes to both the governance and the financing of education and training. Good governance of lifelong learning means flexible policy and regulatory frameworks that encompass a wider range of institutional actors. The framework includes: legislation and executive orders; arrangements for ensuring coordination across ministries and other institutions involved in education and training activities; mechanisms for certifying the achievements of learners, monitoring institutional and system performance and promoting learning pathways.

In relation with funding, the government cannot be the only single provider. Private funding of lifelong learning must have an important role. As the World Bank specialists said: "*Governments need to finance lifelong learning for which social returns exceed private returns (for example, basic education). The private sector needs to play a role in financing investments for which private returns are high (for example, most higher and continuing education). Government intervention beyond the basic skills and knowledge should be targeted at learners from low-income or socially excluded groups and others facing high barriers to learning*." **(20)**

4 Policies and Facts

In the last decade, lifelong learning has been conceived by international institutions (mainly World Bank, OECD and UNESCO) as one of the main pillars of the “knowledge society framework”. This is a structured vision of the development of knowledge economy relying on the backgroung of many facts and evidencies from the globalisation process. But the debate about lifelong learning is not a new one. Since the 70s, UNESCO has seen lifelong learning as the most important activity for human development and as a tool for poverty diminishing, social inclusion, active citizenship and sustainable development. Then, OECD has developed theoretical frameworks and empirical approaches for competitiveness strategy of the advanced countries. Among the objectives, policies and actions of this strategy, lifelong learning had a special place. Better skills and competencies, higher work

and professional mobility, improved capability of adapting to new techological and social challenges were considered as important outcomes of the new model of education and training.

During 90s, the World Bank revised the policy of funding projects in education and training, adopting a „holistic manner". Educational projects have not been treated only in terms of targeted activity or service and direct results, but considered as being linked with the other components of education and training. For instance, training on-the-job, adult education and continuing education have become further activities of each project designed for formal education. However, before the Lisbon Strategy and the EU preocupations with lifelong learning, several experiences of countries and international institutions were acquired, and this makes possible to speak about facts and policies of lifelong learning outside the EU and accesion countries framework. Unfortunately, no finding about results of the new model of education and training is highly accurate, because lifelong learning is evolving in relation to international and national economic and technological environment. As a consequence, my findings must be taken only in general terms.

A short survey in the field literature allows us to speak about *national systems of lifelong learning, national strategies of LLL and "soft" policies.* The first two concepts are very clear and they do not need more discussion. Instead, the last concept needs to be explained a little more extensively. There is no such a term like "soft policy" of lifelong learning in the field literature. But, I think that any country experience in lifelong learning, conceived in an integrated framework without a focused policy, previous to structured vision and programmes could be regarded as "soft" policy. For instance, South Korea, Finland, Ireland and Singapoure have been very successful in building knowledge economy, but they did not have at the time of developing education and training with ICT support a national strategy of lifelong learning. What they had were strategies of ICT development or knowledge society building.

Let's take shortly three cases of success in building knowledge society: Finland, Ireland and South Korea.

At the beginning of 90s, Finland raised as a major exporter of electronic and high-technology products. By 2000, this sector had grown to over 30% of exports, and Finland had become a world leader in the production of celluar telephones and related equipment. Empirical research done on the Finland case proved that two factors seem to have played a vital role: a sustained investment in research and development, to fuel innovation, and a coherent and forward-looking response to economic crises. The sustained investment in R&D had been relied on a solid background of education. Finland had adopted a strong commitment to education and training and to a stable incentive framework for competitive entrepreneurs and businesses long time before. High quality of skills and competitive economic framework have nurtured innovative wave of companies and public organisations. Therefore, the increased investment in R&D was a response to a social and economic need. This support, focusing on encouraging innovations that could be brought to market, was one of the crucial elements of Finland's creative response to the crisis it faced in the early 90s, a crisis from which it rebounded dramatically. Prior to a national strategy of lifelong learning, Finland had had Nokia and a clear commitment to the fundamental factors that enabled its success in knowledge economy: good and consistent policy framework, support for innovation, openness to the global economy and high quality education. **(21)**

In the case of Ireland's economic "miracle", the factors of success are more complex. However, there is a broad consensus that two factors in particular fueled Irish economic growth: education and foreign investment. Beginning in the 60s and increasingly in the 70s, successive Irish governments made a major commitment to expanding educational opportunities, by extending free secondary education and by an increased effort to upgrade

tertiary and technical education. The Irish placed particular emphasis on expanding and improving their network of Regional Technical Colleges, an expansion that was further fueled by EU Structural Fund support in the early 90s. This sustained but well-targeted investment in education laid the groundwork for, and then was further encouraged by, increased inflows of FDI by high-technology companies, particularly in the early-to-mid 90s. Education and foreign direct investment were not magic bullets. Their combined effect was only possible because other fundamentals were in place. Ireland had consistently pursued trade openness since the 60s. Its relatively non-ideological main political parties fostered a broad social consensus on economic priorities, and created a stable macroeconomic and fiscal environment. **(22)**

Korea is considered one of the most remarkable economic success stories of the 20th century, rising in three decades from widespread poverty to global competitiveness. From 1966 to 1996, Korean per capita GDP grew by an average of 6.8% annually. When it joined the OECD in 1996, Korea had already achieved universal primary and secondary education enrolment and surpassed the OECD average in tertiary enrolment. The 1997 economic crisis created big problems for the "developmental State" of Korea and showed weaknesses of the industrial policy. But Korea enjoyed a dramatic and short recovery; the economy grew by 10.7% in 1999 and has continued strong growth since then. There are many basic factors of the Korean economic success, but we shall not insist on them. From point of view of this paper, one basic factor is of crucial importance - education. Intense and sustained investment (both public and private) in education has been one of the pillars of Korea's economic development. After the mid-90s, Korea has been preocupied with structural characteristics of the education and training system. It deregulated the education system and this policy has led to increased autonomy for secondary and university education, greater flexibility in curricula and higher quality.

Some findings could be obtained from this short survey:

In order to be successful or internationally competitive, a country does not need to focus on a single „magic" factor such as lifelong learning;

High quality education and training will produce benefits for all people in a stable and incentive creating political and economic environment;

Lifelong learning could not be developed from "scratch", on groud "0", it needs a solid background of formal education and training and human resources development in business organisations;

A national strategy of lifelong learning could be effective and efficient only if it is crafted on things and facts which already evolved in business sector and public institutions.

National systems and strategies of lifelong learning have emerged after the mid-90s. Several countries and international institutions have begun to be concerned with factors of international competitiveness and social efficiency. On the other hand, higher education in advanced countries and in several developing countries has increasingly internationalized. This process has raised questions regarding cross-country transfer of qualifications, knowledge and practices. Developing countries were in search of "best practices" in quality assurance, funding and management. As the economic globalisation advanced, it has been realised that a reactive behaviour of organisations and policy-makers in the field of education and training is no more enough. To be prepared for a strategic response to the new technological and economic changes, an integrative approach of education and training is needed whether they come from formal system or from other sectors and activities. So, some developed countries have adopted comprehensive strategies of lifelong learning and national systems of LLL have begun to be developed. A short view in the specialized literature leads to the idea that a framework of LLL strategy includes the following components:

- New skills and competencies;
- New pathways to learning;
- Governance system;
- Financing options.

The World Bank and OECD studies recommended a "public-private partnership" approach of the lifelong learning. The government has to play an active role as a coordinator and designer of rules. But the whole range of activities which is included in LLL would go up to the social and economic actors. An effective policy of LLL is one assumed by stakeholders and treated as their own strategy. There are already cases of countries which adopted a strategy and have implemented a national system of lifelong learning. Perhaps, nordic countries, Ireland and New Zeeland offers the most obvious examples of comprehensive strategies of lifelong learning, having very clear definition of all the "building blocks", priorities, functions of main actors, benchmarks and evaluation methods. Yet, it is too early for an assessement of the results after a period of time less than a decade. Surely, some ideas could be shaped on the ground of indicators like schooling rate at different levels, drop-out rate, rate of adult participation in LLL and so on. Nevertheless, in order to discuss about efficiency and effectiveness of a given policy, someone needs more deeply aspects and facts. In the case of LLL policy, even the diminishing of unemployment rate, mainly for young people, and the increasing share of high-tech industries in GDP are not enough for an informed idea. We may suppose that due to LLL more young people have been employed in high-tech companies and more old workers have been able to fiind faster a job in the new economy. This does not mean a finding. Changes of education and training system might be judged „a la longue", when the structure and content of activities are established and the structural adjustements in economy are obviously done.

For the moment we are able to discuss something about the "input" and "process", if it is allowed to use terms specific to industrial organisation. The countries mentioned above have succeded in putting a suitable "pool" of inputs into a well organized process of lifelong learning. What it is worth mentioning is (with differencies of proportion and emphasis) the approach of LLL strategy adopted, descentralization, broad involvement of social actors and providers of education and training, permanently consulting among the partners, complementary funding of activities and clear role of the market.

The most active promoter of lifelong learning in recent times is the European Union. It has created a broad framework of programes aimed at encouraging lifelong learning development in the member countries, candidate and associate countries, and had brought in place an extensive "philosophy" of LLL.

Since 1994, when "The White Paper Growth" was launched, until now, a lot of documents, studies and official statements have been issued. Several landmarks in the development of a European framework of lifelong learning could be detected. The first was a report written by Jacques Delors, published in 1996, "Learning The Treasure Within". The report emphasized lifelong learning as the major scholastic direction that should be pursued in the 21st century. It suggested four main pillars of learning: learning to know, learning to do, learning to be and learning to live together. The EU declared the year 1996 as the year of "Lifelong Learning in Europe". Then, the follow-up from Lisbon Strategy saw the European Commission's document, *Memorandum on Lifelong Learning.* This was the subject of an intensive consultation process with all European Union Member States, countries of the European Economic Area and the candidate countries. This resulted in the new European Commission's document, *Communication: making a European area of lifelong learning a reality* (2001). This document provides a strategic framework for the development of comprehensive lifelong learning strategies that "combine social and cultural objectives with

the economic rationale for lifelong learning and practical measures ("priorities for action") to embed lifelong learning throughout the education and training systems in Member States." The candidate countries are also encouraged to undertake reforms to their systems in the perspective of lifelong learning. At European level, specific initiatives are being taken forward (through policy action papers, e.g. Action for e-Learning, and European Fora, a Transparency Forum dealing with issues such as recognition of non-formal and informal learning and a new Quality Forum that will work on minimum standards).

Lifelong learning has a central place in the European Employment Strategy where it is a cross-cutting principle underpinning action under four employment pillars: employability, entrepreneurship, adaptability and gender equal opportunities. It has become a basic principle underpinning education and training policy in all EU Member States. However, the Member States emphasize different aspects. For example, in U.K, France, Germany and Sweden the focus is more on any learning activity that increases job opportunities for individuals and in addition promotes social integration and personal development goals. In Spain, Italy and Belgium lifelong learning is seen primarily in economic terms linked to greater job opportunities, increased competitiveness, professional promotion, wage increases or mobility. **(23)**

The EU documents have developed a comprehensive vision of the policy of lifelong learning which involves fundamental reforms of education and training systems in order to meet the challenges of globalisation and the development of the knowledge society and to achieve social inclusion and active citizenship. It seems to be a very ambitious approach with no aspect of cultural, social and economic life set aside. The framework outlined in the *"Communication"* encompasses six key strategic building blocks and six priorities for action. The six building blocks include:

- Working in partnership across the learning spectrum
- Having insight into the demand for learning
- Providing adequate resources
- Facilitating access to learning for all
- Creating a learning culture
- Striving for excellence
- The six cross-cutting priorities which support building blocks are the following:
- Valuing learning
- Information, guidance and counselling
- Investing time and money in learning
- Bringing together learners and learning opportunities
- Basic skills
- Innovative pedagogy.

As we may see, it is a perfectly designed framework of lifelong learning which could make envious the non-European countries that adopted rather gradual policy than an "all at once" strategy and more "soft" framework than "hard mechanism" type one. This is a reason why the European approach of lifelong learning may be named an "official compact" one which concerns everything that is learned from everywhere and establishes linkages of learning with all the things and circumstances of a society. Yet the "tacit" knowledge, that is normally difficult to be evaluated, if not impossible, has a place in the European framework. We have to wait for the outcome of this comprehensive framework and policy. At this time, all we know is about the progress of Member States and candidate countries in implementing strategies of lifelong learning. The EC's Communication, *Modernising education and training: a vital contribution to prosperity and social cohesion in Europe,* from November 2005 delivered extensive information about "putting in place coherent and

comprehensive lifelong learning strategies". We may find here what the refered countries have done in relation to the objectives established by the "Education & Training 2010 work programme". Most of the Member States have adopted or are at some stage of adopting broad strategic statements on lifelong learning, but "*The ambition set by the Council and the Commission and supported by the European Council is that by 2006 all Member States should have in place comprehensive and coherent lifelong learning policies*." Unlike the policy, analysis is not so comprehensive and insightful. In fact, to put the things clear, the analysis referes to input and process, but not at all to output. Perhaps, it is too early to observe some progress in economic and social terms.

5 Lifelong Learning in Romania

Generally speaking, the public debate on lifelong learning began in Romania in the mid-90s. Initially, some academic organisations and many specialists in the field of education and training theory and policy had been preoccupied by the capability of the education system to respond to the new major challenges: the social and economic transformation after 1989, on one side, and the requirement of active participation in the globalisation process, and, in the near future, accession to the EU, on the other side. But at that time, the two challenges were seen as putting pressure on the system of formal education which was characterized by obsolescence. Then, the officials and policy-makers were informed that there were emergencies in some very vulnerable areas beyond the old formal system of education and training (e.g. vocational education and training, continuing education, adult education and education and training of people from economic depressed regions and low-income categories). The perspective of accession to the European Union and participation in European programmes for education and training have encouraged a broader reform in the second half of the 90s, which focused on structural problems of education and training. The policy and actions of public authorities were not adopted in a comprehensive framework of lifelong learning, but they were awarned by the importance of developing another model of education and training, more flexible, accountable and open than the previous one. Since 1997, the policy of education and training has targeted the following aspects linked to lifelong learning:

- Development of vocational education and training;
- Extension of continuing education;
- Development of adult education;

Increasing equal access to education and training in economic depressed areas (for instance, rural education) and for social disadvantaged groups (for example, education of Roma ethic minority).

Development of partnership between schools, universities and training providers, on one side, and business organisations, public organisations and social institutions, on the other side.

While the active participation in European programmes of education and training was considered as a commitment towards the process of accession to the European Union, the Ministry of Education undertook the development of its own projects focused on structural problems as a main vehicle of the new policy. Two projects developed in the second half of the 90s are relevant from LLL point of view: the rural education project and the reform of higher education & research project. These two projects have already been implemented and assessed, and due to this fact we are able to make some comments about their outcome in terms of LLL.

The Rural Education Project had four components, three of them being tied to the extension of education beyond the formal framework:

- improvement of teaching and learning through school-based professional development for teachers, providing career development opportunities, upgrading basic education conditions in schools, and ensuring access of rural students to basic teaching-learning materials;
- improvement of school-community partnerships by setting up a school-community grant program;
- development of project management capacity including drawing up an information, education, and communication strategy for increasing awareness of policy and decision-makers and generating stakeholders' support.

The project had a value of USD 91 million, out of which USD 60 million have been funded by a World Bank loan, and was shared by primary education, secondary education and the public administration sector.

The Reform of Higher Education & Research Project had two components linked to LLL:

- undergraduate and continuing education, comprising university, college and continuing education programmes;
- postgraduate education and research, including multi-user research centres.

It had a total value of USD 84 million, out of which USD 50 million have been funded by a World Bank loan. As usually, the outcome did not meet the level of expectations, but it has strongly improved the capability of universities to address the need of new skills and competencies and has extended the participation of professionals in continuing education and postgraduate programmes.

The European Union has provided a broad support for the reform of education and training in Romania. Besides financial support which has been, and still is, very important, the European programmes have had a crucial contribution to the development of a more coherent policy of education and training, and a better framework for initiatives of educational organisations, local communities and business organisations.

More and more, both the schools and universities, and, largely speaking, social organisations (enterprises, non-governmental organisations, public organisations and so on) have become preoccupied with what it is evolving beyond the formal education and training. Most of the institutions of post-secondary education are not waiting anymore for central decisions in order to deliver programmes of continuing education, professional training and human resources development in enterprises (for instance, on-the-job training programmes). At the same time, a lot of specialised providers of training have emerged without official decree or planning.

The financing of projects from PHARE and LEONARDO da VINCI programmes has encouraged the development of lifelong learning in a "bottom-up" manner. At least for professionals or university graduates has raised a "boom" of training programmes which is shared by public and private universities, subsidiaries of foreign providers of education and training (e.g. Open University), subsidiaries of multinationals (e.g. Microsoft, Oracle, Cysco Systems, IBM and so on), domestic private firms specialised in human resources development, and public organisations. Surely, this increasing activity of training professionals is not totally connected to European programmes, but it has been highly promoted by European programmes.

The Ministry of Education has developed some more LLL components linked to primary, secondary and post-secondary non-university education (such as technical and

vocational training) rather than to higher education. Three projects are primarily tied to lifelong learning:

Phare TVET (technical vocational education and training) which aims at developing new technical skills and competencies through restructuring formal secondary technical education and adult education;

Phare "Equal access to education and training" which aims at general development of "education for all" and special provision of education and training for socially disadvantaged people (focus on Roma ethnic minority);

Phare "Development of human resources and managers from secondary schools" (focus on rural areas). It was said that LLL must begin with teachers and HDR providers training if a policy or a strategy of LLL is to be effective and efficient. Somehow, this idea has taken place in the above mentioned project.

Therefore, we have public and private activities of education and training which could be relevant from a lifelong learning point of view. These activities have been developed without a strategic national framework of lifelong learning, or, to be more precise, without a comprehensive and coherent framework of that type thought in official statements by European Commission after the Lisbon summit.

In terms of World Bank framework of LLL, since the mid-90s, two components have been developed in Romania: "new skills and competencies" and "new pathways to learning". But the other two components: governance system and financing options, seems to be much less approached in a coherent and comprehensive manner.

Some progress has been achieved in the following areas: technical skills development and increasing enrolment in secondary and post-secondary technical education; adult education and continuing education and training; quality assurance in vocational education and training; increasing involvement of social partners in education and training policy; development of teacher education and training; and increasing access to and participation of socially disadvantaged groups in education and training.

Moreover, an institutional or, to be rigorous from the social science point of view, an organisational framework for LLL has been developed since the end of the 90s. There are four national organisations under the Ministry of Education and Research coordination which deal with different activities of LLL: The National Centre for the Development of Technical and Professional Education and Training; The National Centre for the Development of Human Resources in Primary and Secondary Education; The National Centre for Adults' Professional Training (which includes also adult education among its activities) and The National Agency for Qualifications and Universities Partnership with Business Sector. The National Agency for European Programmes in Education and Training (which is focused on SOCRATES and LEONARDO da VINCI) should be added to this organisational framework which underpins LLL activities. Even a *strategy for continuing professional training, 2005-2010* has been adopted, and its goals are: (1) development of a national framework of qualifications; (2) development of new professions in the education system; (3) development and modernisation of the system of providing services of professional training; (4) development of the network of training providers; (5) development of the system of quality assurance in education and training; (6) increasing access to high quality training services; (7) development of the provision of continuing education, and (8) promoting partnership in education and training. Yet the framework of lifelong learning is not structured, coherent and comprehensive in that kind suggested by the European Commission. An official document of the European Commission stated recently that "*Romania indicates that so far no global, integrative and coherent approach to lifelong learning has been agreed, nor has a partnership approach."* ***(24)***

As the debate has been evolved in the European Union, in order to have an effective system of lifelong learning, three main sorts of problems should be solved: (1) designing a comprehensive strategy; (2) implementation and coordination of the LLL strategy, and (3) feed-back assessment and improvement of the LLL strategy. Perhaps, no European country, excepting Nordic countries, has set such a broad and deep framework which takes a whole system of formal, informal and non-formal learning, often heterogeneous, as one single learning organisation. However, Romania is still working to solve the first sort of problems.

With regard to the design and establishment of a national comprehensive framework of lifelong learning, we may identify some general problems which characterize LLL in all the East and Central European Countries and some problems specific to Romania.

A report written by an expert of ETF, "*Implementation of the Lisbon Objectives by the acceding and candidate countries",* has found that: "*A number of major steps have been taken, and national strategies are being drawn up in most countries. But the actions taken reflect the persistent imbalance between the formal and non-formal/informal elements of lifelong learning systems, and are too recent to permit evaluation."* ***(25)***

That report has identified four main problems of the LLL strategy in, then, acceding countries (eight ECECs) now, new Member States, and candidate countries:

Insufficient coordination between ministries and weak involvement of the social partners in defining and implementing strategies "*despite the establishment of numerous consultative committees and tripartite commissions";*

Narrow orientation of activities, lacking a holistic approach (most activities are taken in ITC field, improvement of education in rural areas, and expansion of "second chance education" for young people who left school with no qualifications);

Weak support for learning in the workplace through appropriate incentive schemes or initiatives to encourage private investment in training;

Insufficient emphasis on quality of vocational education and training.

The report has concluded that: "There is still a huge imbalance between the importance that the education system attaches to general and higher education on the one hand, and to vocational education and training on the other, and also between the initiatives taken in the formal education system on the one hand and the development of skills in the workplace and among sections of the populations at risk of exclusion on the other. These imbalances are likely to increase further because the social partners find it difficult to intervene in these questions and enterprises are still unable to take the necessary action." **(26)**

The analysis which has been done for the *National Plan of Development, 2007-2013,* identified five specific problems of lifelong learning in Romania:

A low rate of reinsertion in the system of education and training of those who left the school early and have no qualifications;

The lack of a system of quality assurance in lifelong learning;

A low level of infrastructure development;

The insufficient development of the national framework of qualifications and of the framework for recognition of informal and non-formal learning;

The low level of adult participation in continuing education and training.

The second part of the National Plan of Development that is *Strategy of Development, 2007-2013,* comprises a section focused on human resources development which addresses the problems identified above. Five objectives have been established:

The development of the National Framework of Qualifications and of a framework for recognition of skills and competencies acquired in LLL by 2010;

The development of human resources in the education and training system;

The establishment of professional/occupational standards for new professions;

The increasing quality of continuing training and diversification of the supply of continuing training and education;

The increasing participation of adults to lifelong learning.

However, a comprehensive and coherent strategy of lifelong learning has still to be developed.

Two years ago, the ETF report mentioned above found a "typology of candidate countries according to education and training issues", including five types of countries. The "e" type comprised Romania and Bulgaria: "*where results are lowest in almost all fields. The implementation of reform is seriously handicapped by lack of resources. Public spending on education is the lowest, as are rates of participation in continuing training. School drop-out rates are very high. Enrolment in higher education has increased appreciably, but less than in most of the candidate countries (at that time 12 candidate countries). Despite ambitious reforms, major structural problems continue to make it hard to modernise systems and to adapt them to the needs of the labour market and society.*" ***(26)***

If we analyze the performance of education and training in Romania in relation to the "Five European benchmarks" and in a comparative perspective, we shall find that the conclusion of the ETF report from two years ago should not have changed too much. However, such an analysis would be beyond the purpose of this paper. Two indicators are very important for monitoring performance and progress in lifelong learning: (1) percentage of the population aged 25-65 (all levels of educational attainment) participating in education and training; and (2) percentage of the population aged 25-65 with less than upper-secondary educational attainment participating in education and training. The countries surveyed by the "Progress Towards the Lisbon Objectives in Education and Training 2005" Report could be classified in four groups from the standpoint of both indicators: best performers, good performers, satisfactory performers and low performers. The countries included in a group of performers are not the same for both indicators; instead the low performers are the same: **Bulgaria and Romania.** For example, the best performing countries for the first indicators are: Sweden (over 35%), Denmark (over 25%), Finland (aprox.25%), U.K (over 20%) and Slovenia (over 17%). Good performers are Netherlands (over 15%) and Austria (over 12%). **The average level of EU-25 is aprox.10%.** All the other Member States are satisfactory performers, under 10%. But Romania and Bulgaria, low performers, have registered **only 2%!**

As we already suggested, these are input indicators. The "process" and "output" indicators are, perhaps, not so easy to evaluate after such a short period of time. For the moment, what we can say is that such a low rate of participation in lifelong learning in Romania is not only the result of the lack of a comprehensive and coherent strategy, but the obvious fact of many hidden structural problems going beyond the education and training system.

6 Conclusions

A wide range of important factors, going from technology to culture, has underlain during the last three decades some profound changes in the economy and society of the developed countries. Many social scientists have emphasized especially the technological determinants (e.g. new transportation means and methods, new manufacturing methods and all the ventures linked to ITC) and their outcome, the so-called "information revolution" or "information society". Others have considered that more complex factors than technology have been emerged in action throughout the Western society, determining the raising of "knowledge economy" or "knowledge society". The most advanced countries (mainly U.S.A) are in the "age of social transformation", as Peter Drucker has defined this evolving

large set of changes. However, these changes in the developed countries, being technological or some other sort of changes, have led to new patterns of production, consumption and social life all over the world. It was said that the new stage of development or the new process of economic growth is based on knowledge. As a consequence, countries, whether developed or less developed, if they want to improve their welfare and to get a good position in the global competition have to reform their systems of education and training.

The new model of education and training suitable for the knowledge-based society should develop lifelong learning as a way towards new skills and competencies for individuals, and new behaviour and culture of organisations. All organisations, either economic or some other kind, would became "learning organisations" in the "next society". This is not a choice; it is a compulsory condition for survival and competitiveness.

There is almost a consensus among academics and policy-makers regarding the structural reform of the education and training system, but the things are far from being so clear in relation to the undertaking of reform. Given that the concept of lifelong learning seems to be ambiguous and too large, the approaches in literature and policy are so different that it is quite difficult to find a model of lifelong learning. In the end, no reform which has been successfully undertaken in both economy and public sector did follow the "one size fits for all" principle.

Three main approaches of lifelong learning could be found in literature and policy: (1) "official compact", (2) "private" affair, and (3) "public-private" partnership. The international organisations like World Bank and OECD have recommended the last approach in their papers and documents. Due to the fact that the vast majority of reforms of the education and training systems are not yet implemented, we cannot get accurate data in order to do a comparative analysis and to find an appropriate model of the reform policy. But we are able to discern a main trend from the numerous facts and evidences which evolve in many countries, a strategy and a system of lifelong learning tend to concern four components: (1) new skills and competencies, (2) new pathways to learning, (3) governance system, and (4) financing options.

There are cases of countries besides the United States and several other very advanced countries which have successfully developed knowledge society without a comprehensive strategy of lifelong learning. But Finland, Ireland and South Korea have laid stress on education and training for a long time, and new technologies (mainly ITC) found a broad framework of appropriate skills and competencies of labour force. What we may infer from these facts is that there is no "magic bullet" like lifelong learning of the "knowledge economy" building. Someone needs to see what is happening with all the economic fundamentals in order to deliver some findings about the new stage of development, if we can use this term to name knowledge economy or knowledge society.

The European Union seems to be the most active promoter of lifelong learning. Although the concept and policy is not new, even in the EU they are two decades old, the European Commission and the EU Council have developed a new approach of LLL, somehow "official compact" thought and crafted, that is "comprehensive and coherent strategy of lifelong learning". Emphasizing a European strategic goal at the Lisbon summit in March 2000, the EU has to become "*the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion*", the European institutions and the Member States are concerned with lifelong learning as a kind of "magic" factor. If this approach would not comprise much "wishful thinking", it will become a model of lifelong learning policy and action for the non-European countries. For the moment, it is too early to see more than "input" indicators of this strategy.

The importance of lifelong learning for the "next" society has been recognized in Romania since the mid-90s. Actions related to "new skills and competencies" and "new pathways to learning" have been taken as public initiatives mainly by the Ministry of Education and Research and private initiatives of many educational and business organisations. The perspective of accession to the European Union has led to the acceleration of different projects and actions belonging to lifelong learning approach of education and training. But a "comprehensive and coherent strategy " of lifelong learning as the European Commission and the EU Council have suggested is not yet established. Such a structured framework of lifelong learning has to be designed and implemented as a condition for active participation in the EU policy and programmes of education and training. Yet, the successful performance of the Romanian economy and society will belong to the structural-problems solving in the next few years.

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