Enhancing Competitiveness by Education and Training

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1 Introduction

The term, "Knowledge Economy", has been on the front pages of the news for some time. The EU had initiated the Lisbon strategy which has become, due the economic crisis and recession, almost forgotten. And yet many companies have already discovered that the long term exit from the crisis is by reinventing innovativeness as a core activity. The question is; how can innovativeness be enhanced, and by so doing, competitiveness improved? Training and education can help improve the situation, and perhaps is the only long term instrument of doing so, particularly in an era where intangible knowledge is becoming the core of competitiveness when international division is no longer by industries or products, but by tasks (Baldwin 2006). It implies that one's learning how to learn is important as the central aspect for enhancing competitiveness. Although there may be a little disagreement regarding the above general propositions, there are many who are wondering how to enhance competitiveness. First of all, can stimulating investments in R&D and education, or providing better infrastructure (books, libraries, schools…), improving the teaching methods and quality of teachers do the trick? Secondly, are there basically some new challenges due to ongoing social and economic changes in the world and consequently are new approaches are therefore needed? In this article, we will first review some basic theories and empirical studies related to the role of education in development in order to set the stage for the second part of the article that is devoted to challenges of new international environment, trends in globalization and division of labour in the world. In such a way, we can identify (new) factors of competitiveness along with the increasing role of soft skills and intangibles in the new economy. The fourth and central part of the article is devoted to the relation between education/training and competitiveness. In conclusion we will summarise our thesis and suggest some policy recommendations concerning what should be done in order to respond to new challenges and enhance competitiveness by improving education.

2 Theoretical framework

Since the article concentrates on the implications of massive shifts in the world regarding education and competitiveness, the narrowly defined theories of education are not our focus. We will only present some of our basic conclusions from empirical research in this domain, in particularly looking at whether there is a positive correlation between length/volume and quality of education and growth or if the relationship is more complex, including quality factors and what is the direction of causality. Consequently, two sets of theories are most relevant in our context; first, the development theory and theories of international trade in such a context, and secondly, theories of competitiveness. The central issues of education theories are in evaluating the impact of lengths/volume of studies and quality of education vs. growth and distribution of income and the role of institutions. There are almost no general conclusions since the impact is quite different when looking at developing vs. developed countries. The starting position of a country has also proved to be very important, substantially differentiating the results of empirical testing. Nevertheless, it became clear that

there is a causal relationship between education and growth and that better education does contribute to more equal distribution of wealth, which is extremely important, since inequalities in the capacity to create knowledge exceed even those with wealth (see World Bank, 1999; 2). The first, and most solidly based, finding is that the largest source of variation in student learning is attributable to differences in what students bring to school – their abilities, attitudes, and family and community background. (OECD 2005; 2). Length of schooling is the second important factor. Each year of schooling is statistically significantly associated with the long term growth rate that is 0.58 percentage point's higher; more in non OECD members (almost 50% more) as in OECD members. (Hanushek and Woessmann 2007; 22). However, more schooling does not necessarily mean more learning. It also depends on the quality of education and teachers. The relationship is even stronger when it comes to quality, than in the case of quantity of education (see Barro and Lee 2001 in Hanushek and Woessmann 2007; 28). The quality of education (including education infrastructure, curriculum, teaching methods…) and teachers (qualifications, experiences, academic ability or subject matter knowledge), is positively correlated to a student's performance (standard test results), but perhaps to a lesser extent than might have been expected. The teachers' characteristics are harder to measure, but they can be vital to student learning, including the ability to convey ideas in clear and convincing ways; to create effective learning environments for the different types of students; to foster productive teachers-student relationships; to be enthusiastic and creative; and to work effectively with colleagues and parents (OECD, 2005:2). There is, however, also reversed causality running from higher economic growth to additional education which may be as important as the casual effect of education on growth in the cross country association. (Hanushek and Woessmann 2007; 24). Finally, all the influence of the above mentioned, is much stronger when a proper institutional framework is in place (like autonomy of training institutions, effective rule of law, good salaries of teachers, etc.). The traditional approach to development (Solow 1956) was based on technical progress as external factor. New theories changed dramatically the focus, emphasising the ingenuity of technology as a result of a company's own activity (Romer 1986; Lucas 1988). Total factor productivity , and in such a way, human capital, became central for growth. By increasing the importance of international trade and investment, local knowledge creation lost its close links with national knowledge centers and became global; international co-operation, trade, investment and migration also became instruments of gaining knowledge. The impact of the quality of education is much stronger if countries are open to international trade, including migration and capital that can significantly magnify the benefits of a quality education (see Hanusek E.A., Woessmann, 2007: 41 and 42). Competitiveness of countries depends on four factors (Porter 1990). Within these factors, the conditions that are the most relevant are when education is concerned, since knowledge has become the most important production factor. Production needs induce the demand for improving education in order to improve products and services. Demand conditions are also important; more sophisticated, better educated buyers demand better products and services. Two external factors, chance and government also play an important external role, meaning that government can contribute to conditions for the development of education. Finally, institutions and individuals (management in particular) can take advantage of, or miss the chances and opportunities offered in the global economy. Micro competitiveness can be enhanced basically by reducing costs or by differentiation of product. The second aspect is central, since differentiation is a product of talent, knowledge and innovation - mostly products of education. Education strengthens human capital, innovativeness and facilitates transmission of knowledge by enhancing capacities for acquiring, absorbing and communicating knowledge which is becoming increasingly important in open economies when learning by doing business abroad has become so important.

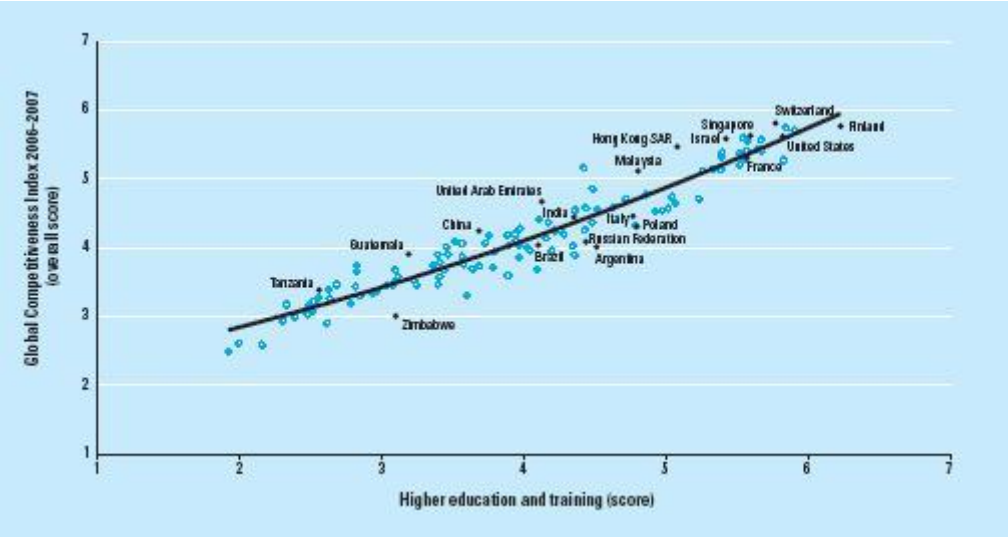
3 Challenges of the International Environment

One of the major objectives of education is to improve the welfare of the individual and the society in which the person is living. Societies today, are only part of the more globalised and interdependent economy/society. The international environment is particularly important for small countries that can not exert much influence upon that environment, but the former can strengthen their ability to adjust and respond swiftly to increasingly unpredictable and volatile external circumstances. Close links between the international environment and the position of individual states has been more clearly manifested now in the crisis that has not left any country unaffected, while the small countries were hit even harder. The major tendencies and external conditions in which countries find themselves in their efforts to enhance their competitiveness are: i) globalisation, ii) changing economic structures, factors of competitiveness and forms of international economic co-operation, iii) membership in EU, and iv) massive changes in the global economy. In spite of the present crisis, which was also sped up by globalisation, these conditions will stay with us as global division of labour, although globalisation itself will have to be modified so as to distribute its benefits and costs more evenly among the global population. Education can play a role in such a transformation of globalisation, by globalising itself in two ways: by internationalising teaching staff, as well as increasing student mobility to make cross cultural awareness a way of life as early as possible in our lives. By doing so, it can also help overcoming many conflicts so frequently based on lack of cultural understandings. Irreversible domination of services in industrial countries makes knowledge and information major factors of competitiveness, as was the case with industry after the industrial revolution. They became much more important in industry and now even more so in service economies where information can be everything. Intangible capital constitutes the major share in total wealth (80 % in industrial countries: World Bank 2005: 4). Such intangibles are basically intellectual capital as a result of education and accumulated experiences. The good news is that it can grow independently of the limitations of tangible capital and has been growing very fast , but the bad news is that it is usually transferred internally within companies through intercompany trade. This limits the scope of information dissemination, although information has, in principle, character of a public good. Changing economic structures has also influenced the changing importance of forms of international economic co-operation. In recent decades, global integrated production networks are increasingly a result of the activities of multinational companies, their foreign direct investment (FDI) and off shoring being the most dynamic forms of international economic co-operation. This also induces changes in the relative importance of needed knowledge for such activities (increasing importance of soft skills, cross cultural and communication abilities, adaptations in real time…). Among one of the consequences is that now not only low skilled jobs are in danger in developed countries but also highly skilled jobs , which is certainly a challenge for education systems in their efforts to effectively address new division of tasks in the world. International co-operation is increasingly becoming not only the instrument for the materialisation of company specific advantages, but also an instrument of gaining such advantages abroad. Thereby multi nationality has become a factor of competitiveness per se. Perhaps the most important challenge comes from the geo-strategic reconfiguration of the world map with Chindia (China and India) and BRICS (Brazil, Russia, India, China and South Africa) on the brink to take over the engine of world growth from USA (see scenarios in Svetličič and Sicherl, 2006 and Svetličič and Sicherl 2007). Billions of new customers are joining old ones, with their different preferences and cultures. Such a reconfiguration of global economy demands new skills and knowledge (including new language skills) to be able to tap into these new markets. Strengthening co-operation with these fast growing parts of the world is the major strategic challenge of the future, as indicated in the view of the Aurora and

Vamvikidis finding on the basis of the evaluation of 100 countries, that "even after controlling for other growth determinants, a 1 percentage point increase in growth in a country's trading partners is correlated with an 0.8 percentage points rise in domestic growth. Our findings suggest that trading partners do indeed matter significantly for growth. In particular, it pays for countries to trade with relatively fast-growing and rich trading partners" (2005: 49 and 50). Today, when China has continuously been growing over 8% per year while industrial countries and Slovenia record negative growth rates, such co-operation becomes imperative, and a can be a positive response to the crisis.

4 Changing factors of competitiveness

The importance of education is best illustrated by a strong positive correlation between Higher education, training and competitiveness. Countries with excellent education system are also highly competitive (Finland, Switzerland, USA and Singapore). However, even some less developed countries have achieved good results in standard knowledge tests. Mostly those who have followed more open development strategies or have invested more in education (former socialist countries). Figure 1: Correlation between competitiveness and education and training scores



Source: WEF, 2006, figure 3.

Parallel with the massive changes and saturation of markets, the sources of competitiveness have also been changing, moving away from the historically primary importance of resources, cheap labour, to technology and information. Although technology is still important, in view of narrowing the technological gaps and more transnational companies' involvement in global production in more distant and less known developing countries, and the increasing importance of intangible knowledge, soft factors of competitiveness (communication and negotiation skills, managing people etc.) are becoming increasingly important. Education is not values free, therefore knowledge has to become a value in the society more than wealth or power. Not just any knowledge, but particularly the ability to analyse and be critical, is becoming crucial. In real life, knowledge is so rapidly changing that one has to be able to, first to ask the right question to diagnose the problem, and secondly to be able to respond to it in "real time". Speed , adaptability and the capability to learn how to learn are becoming crucial. Fast application of knowledge and its appropriate articulation in solving every day

problems have become crucial competences. With evolving global production networks, importance of networking, lobbying and negotiation competencies are joining the importance of the generally increasing role of soft knowledge for competitiveness. Formal education has become a necessity but not a sufficient condition for getting a job. In a recent survey among English companies, communication skills were rated as most important (40%), while formal education came only second (25%) in qualities of personnel (see KPMG 2006). With the complexity and interdependence of global markets, also interdisciplinary knowledge, together with the ability to work in teams was also among the highly valued skills. With the membership in integration groupings like the EU, competitiveness is not based anymore on hard factors alone, but also on the ability to influence the creation of decisions in integration grouping bodies. Lobbing skills are therefore becoming an important factor of competitiveness. The preconditions for effective lobbying are also local language skills and the ability not only to know the issues, but also the ability to articulate them together with persuasion skills. All of this can be effectively implemented only by negotiation competencies. These usually underestimated abilities in regular education programmes have to increase in importance in training for the future world. Such skill, together with cross cultural awareness has to also become among the major criteria for the selection of expatriates working in affiliation or other missions abroad. Many managers claim that their companies can compete globally on the basis of technology, products or services but make major mistakes not knowing enough of the local customs, values and sensitivities of the foreign market in general. What is important is not only being aware of differences or being able to adapt to them, but to be able to apply such diversity for enhancing productivity. Culturally different teams are able to cope with increasingly volatile environment much better due to higher probability that one of the members of a cross cultural team has already been familiarised with a similar situation. For a non-culturally diverse, team certain new situations can be a complete shock, leading to failures.

All these competencies are not infrastructure, nor institutions free. Social sciences have long ago concluded that institutions are an important development factor (see North 1990, 1993, and 1999), that there is correlation between good governance and incomes (UN, 2006: 129 in 130) and also productivity (Dunning, 2004: 129). Not only are the design of laws and regulations crucial for growth and development but also the working of these institutions, implementation of laws and regulations, effective implementation of the rule of law. Institutions are based on people and their knowledge, which is based on good education and the ability to learn continuously and to be creative in facing ever growing new problems. When we state that institutions are increasingly more important, we in fact imply that people are crucial for the performance of institutions.

5 Improving education for enhancing competitiveness

The basis for any improvement is a diagnosis of the present state of affairs. The test of the knowledge of young job applicants in the company UMco , has demonstrated a very poor ability of the applicant to apply knowledge gained at the university. Only one third of applicants knew how much 30% of 70 was. Only 50% resolved the second test, i.e. how fast a driver has to drive to arrive to a destination 130 km away in 20 minutes. The third test was much harder and only one third of candidates were successful in resolving it. The conclusion is simple; after almost 14 years of mathematics in school candidates are not able to resolve simple mathematical problems. They are certainly able to resolve much more complicated

problems in the school "laboratory" given more time, but not a simple one in real life in a short time. The major problem is obviously the application of knowledge for practical problem solving. Secondly, it was also noted that candidates have not been able to answer very simple questions about what is going on in the society. They are not reading newspapers or following the media. Tests among students of International relations also confirm this (see more in Svetličič 2007: 237). It proves the following about the education system in Slovenia and probably also in many other countries:

- teaching is generally overloaded with encyclopedic knowledge, with details, about trees loosing sight of the forest,
- poor education budgets and lack of schools' and teachers' autonomy,
- low teacher salaries and lack of stimulus for high quality teaching,
- traditional teaching methods, lack of case teaching, simulations and creative problems solving,
- memorising is more important than creativity, and critical thinking,
- too much testing of knowledge not competencies and
- lack of cosmopolitanism, international/global dimensions, not being able to speak about cross cultural differences and communication, soft skills.

On the basis of such a diagnosis, and following general Lisbon Council suggestions (2006), the following major instruments for enhancing competitiveness by improving education and training can be proposed:

- a) Increasing investment in education and permanent training including training on how to learn. Education is too frequently still regarded as cost, rather than as investment. Changing this mentality has to be the first priority. However, volume of education and additional funds do not help without changes in the quality, methods and substance of teaching. The number one objective must become creativity and innovativeness. The education system must "prepare for permanent education, not for the permanent job" (Baldwin, 2006: 43). This can not be achieved without excellent teachers who not only can teach, but more importantly, who will be able to generate curiosity and stimulate interest in pupils for learning, and acquiring knowledge. Teachers should be able to make students enthusiastic about knowing more, they should awake a child-like curiosity in students. Curiosity is the best foundation for innovativeness and it is created very early in the child's life. Here the parents have their important role to play. As paradoxically as it may sound, the education system should stimulate in students their child instinct. It would have to stimulate asking questions as children do without fear of being criticized for not knowing the answers, which is so frequently a barrier to learning when we get older as we fear being considered ignorant, if asking questions. The "need to be capable of preparing students for a society and economy in which they will be expected to be self-directed learners, being able and motivated to keep learning over lifetime (OECD, 2005; 2).
- b) In an ever more globalised world, when domestic prosperity depends more and more on international co-operation (particularly of small countries), the cosmopolitan oriented education becomes the precondition for enhancing competitiveness. The Goldman Sachs foundation (2005) has come to the conclusion that "critical skills needed to compete in the global market place in the future are global knowledge and language skills for all students, not just a select few. Students should not graduate high schools without courses in world history, geography and international economics. They should speak more foreign languages and develop global perspectives, have

respect and interest in different perspectives, in short having a global mindset" . The report concludes that "societies that are open to new ideas, wherever they originate, have huge advantage" since, diversity is becoming a factor of enhancing, not hindering productivity. Language skills are a necessary precondition for such globally oriented teaching. Only in such a way, pupils/students will be able to realise that customers are not only neighbors in the next village, but all inhabitants of the world. Customers are also poor people, if the right services or products are designed for them (see Prahalad 2004). Global markets are like a chess board with millions of combinations and the winner is the one who is able to predict the moves of the other side, always looking for and finding new solutions and not sticking to yesterday's paths like a mouse, "looking for cheese always in the same place" (Johnson 2002). One has to start looking for new pieces of cheese while there is still cheese, in the old place. In spite of the present crisis globalisation is obviously here to stay, although modified, therefore one has to find ways how to "swim with its waves" and not to complain that the sea is getting rough.

- c) In order to achieve such cosmopolitan education curricula, teachers and students have to become more internationalised. The number of foreign students in Slovenia is substantially below the number of foreign students in Sweden (see Braček 2007), Singapore or in France. More than 40% of students in Stockholm are born in families of foreign born parents. Besides their mother language they all speak English (Choy, 2006). In Germany, more and more teaching is in English. France has the plan to increase the number of foreign students from the current 7% to 20%. (Economist, 7. Oct. 2006, Survey: 10). Therefore, efforts that special the programmes in English are being attempted in Slovenia are not a good solution. The idea of the ERASMUS programme is to achieve cross cultural learning and not the separation of foreign students to ghettos. Slovene students expect full integration in the local community when they go abroad in order to learn local language and culture. Fears of "devaluation" of the importance of the Slovene language are not well founded. One has to take care of the Slovene language all the way to the University, where excellence becomes the major criteria and everything stimulating excellence has to be supported. In such a way, also the Slovene culture can be promoted by the excellence of its science. The objective should be to have the best professors, regardless of nationality, and language and foreign students so that cross cultural learning is not only learned academically but practiced. In Estonia for instance, the PhD theses are written and defended in English (or another world language) and this multicultural education is financed by the government.
- d) Enhancing the co-operation between industry and schools/universities is becoming a precondition for competitiveness. As much as 80% of 2,500 surveyed American managers claim that they had to go back to school in order to get a promotion, 62% claimed that they had to travel long distances, and 21% accepted jobs in China or India (see Business Week, Aug. 2006:46). Slovene managers have also claimed (end 1990s), that although many have been educated abroad , they still not know enough about the internationalisation of business. In the long run, the value system which still looks upon academia as something above the "dirty" practice has to be overcome in order to enhance co-operation between the two spheres. Such co-operation should become a virtue, an advantage, and not regarded as now by some academics, as "dirtying their hands".
- e) Ever tougher competition in global markets implies the need for searching for the best minds, for talents, the number one race in the present day struggle for global market shares. And not only searching for talent, also retaining and inspiring them and

the others who follow. This can be done either by stimulating the best within the existing schooling system, giving them special attention or going in search for them abroad. Companies regard the growing global market of labour as the fourth most important factor for their efficiency (McKinsey, 2006a). Due to the search for international talent, there is a Chinese labour office in Silicon Valley (Economist, Oct. 10, 2006, Survey: 10). Universities establish their R&D departments in China, or elsewhere in Asia, in particular where ever the largest pool of graduates exists. There is a war for talent, which is not surprising in view of the fact that the importance of the intangible assets of companies has increased, according to S&P 500, from 20% in 1980 to 70% today (Economist, 2006, Oct 10, Survey: 11).

- f) Enhancing and improving different forms of informal training - compared to certificates of formal education - is given more and more attention by companies. The arsenal of graduates is so large that they can choose among them and the factors of differentiation are more and more their soft skills, their creativity, flexibility and adaptability. The ability to apply the knowledge and to activate it as fast as possible in problem solving is becoming more important than formal education. These competences can be easily achieved during study by introducing more practical cases, simulations and team work problem solving.
- g) Reducing the reproduction of knowledge learning and enhancing creative learning aimed at problems solving , parallels with higher importance of innovativeness, imagination and creativity in assessing the respective body of knowledge. Getting information on Internet is not a problem anymore but one cannot get a creative solution to the problem at hand or have the ability to select information. The major problem today is selection of the right information and its application in problems solving. Smaller study groups and more autonomy to teachers can help in developing such skills.
- h) Permanent training of teachers is a must in achieving better competences-oriented schools. “Teacher quality is the single most important school variable influencing students’ achievement” (OECD, 2005; 2). Very few countries have strategies for professionally developing teachers. In Finland most non-university teachers have master’s degrees, classes are small and teachers have high autonomy while teaching (Keeley 2007:26). They are also well paid and have a high reputation in the society, which demonstrate again, the high importance of society value systems. Only well educated teachers can stimulate by asking the right questions, stimulate innovativeness and curiosity, and make their lectures interesting because these teachers are contemporary and are addressing real problems.
- i) In view of massive changes in the world, China and other BRICSs countries are becoming the largest economies and engines of global growth; special attention has to be given to these changes. The international environment in general, new cultures and cross cultural skills, and finally communication competences which together with the growing importance of networks are becoming a crucial factor for enhancing competitiveness. Even very strong, tangible competitive advantages are of no use if one is unable to persuade the customers that their products or services serve their interests the best. Or, if one is unable to get their proposals across the negotiating table in Brussels or international organisations in general. For any member of the EU, special knowledge about the EU and the working of its institutions and legislative/directive procedures is also becoming a source of competitive strengths . The evaluation of the Slovene presidency of the EU Council has clearly indicated that soft skills proved to be the most important skill for those working with the presidency. Negotiations, communication and language skills topped the list of most desired skills

in case of next presidency (from 65% to 63%), together with ability of cultivating informal contacts (59%). Similar, was also the list of needed competencies for presidency. Knowledge of English was considered number one by all respondents followed by good oral communications (99%), friendship making (93%), team work, negotiation techniques and analytical skills. (See more in Svetličič and Kajnč 2009; 74 and 67). International economics is, for a small country, so important that below the university level, the education system has to already be able to start cultivating internationally oriented curiosity and cosmopolitan attitudes as well as basic knowledge of the benefits of international co-operation.

- j) The world is changing so fast and it is becoming so volatile and unpredictable that any fixed education system cannot keep up such frequently traumatic changes. Training systems should therefore become much more flexible and open to changes in order to respond to almost daily new needs. The rigidity of European education systems is a huge barrier to the development of such modern and flexible systems. In the current education systems, it often takes as much as 5 years to change the education programmes. Can you imagine a manager waiting 5 years to change the strategy of the company in order to cope with, for instance, the current crisis?
- k) Moving towards more modular educational programmes can help in achieving the needed flexibility and the ability to respond to more and more specialised and interdisciplinary knowledge. In this way, the best experts can address specific modules within broader courses, moving from one to another university. Universities also have to try achieving economies of scale and scope to be more efficient.
- l) Internationalisation of corporate activities and their globalisation is a condition sine qua non for the existence of companies, particularly if they are from smaller countries; a more holistic educational environment is needed. Expatriates sent to other countries to manage affiliations abroad have to be knowledgeable in many domains, from economics (international business and economics, marketing, finance, production management…), to international relations (diplomacy because they negotiate with governments as well), human resource management (sociology, psychology…), negotiation and communication skills, law etc., all at least at such a level to be able to oversee what the local staff is doing or to ask local experts for advise. Narrowly educated experts and inexperienced people are not suitable for such tasks abroad. Even winners at home have frequently proven to be losers abroad, partly because of their mono-functional education, and even more so because of the inability to adapt to local cultures.
- m) With internationalisation, the importance of security issues and the vulnerability of expatriate staff also increase. The leaking of knowledge of company specific advantages can become a great threat in achieving competitiveness. Therefore, awareness of the importance of protecting the knowledge is becoming increasingly important. An appropriate security culture has to be developed since business intelligence is becoming big business.

6 Conclusions

During this time of massive changes, paralleled with the deepest economic crisis after the Great Depression crisis of 1930s, all countries today are facing some fundamental decisions. It is about tackling the current massive changes, or trying to stop them, hoping to preserve yesterday's world, yesterday's economic structures and relations. History has demonstrated that those who cannot see the changes coming, understand the shifting of power relations, recognise the shifting of the relative importance of determinants of competitiveness, have

always lagged behind (See Madison, 2005). Education is certainly one of the key elements on which the future of the world and the position of individual countries depend on in a knowledge-based society - so frequently declared as desired. Education is crucial for the promotion of economic and social well-being. We can conclude that the role of education in addressing future global problems has never been so important for two reasons; first, to respond to the changes, and second, to try to shape those changes in the long run. The first is relatively more important for small countries that so strongly dependent on the world economy, and the external environment, but now we are seeing the need to respond to change increasingly also important for large countries too. The present crisis has clearly demonstrated that even large countries are not isolated islands in the increasingly interdependent world. The major general challenge is how to be able to embrace and ride the waves of globalisation by using the opportunities offered by new emerging markets with all their cultural richness. Consequently, this means being able to adapt the existing production structures, including the education sphere, enabling it to "produce" the most important production factor, human capital. The winners of the 21st century are going to be those who will be able to choose the right moment for adapting to new challenges. Education can be a key. Winston Churchill had already, in 1943, in concluding his address to Harvard university, realized that the "Empires of tomorrow are going to be the empires of mind " (Economist, Oct. 10, 2009: Survey: 3). The changing of the geopolitical map of the world in the coming decades, with China (less so with India) and other emerging economies becoming the major economic powers and engines of the growth (see Prestowitz, 2005) of the world economy, has so many dramatic consequences just like with the appearance of Germany in 19th century or the USA as a leading power in early 20th century (see NIC, 2004: 9). We are almost certainly moving from a 20th American century to a 21st Asian century. If Marco Polo discovered China 800 years ago, it is now time that Europe and Slovenia discover China and the opportunities offered by new Asian markets and consequently change our mindsets on education to prepare ourselves and future generations for success. Strengthening the education systems, improving teaching methods and making knowledge, including soft skills, the major competitive factor has become the major challenge for the coming decades. It is not only about "putting more resources into schools-pure spending, reduced class size, increased teachers training, and the like" (Hanushek and Woessmann, 2007; 3) but more about the quality of education/training. It can also help in narrowing the income gaps because education is an effective instrument of convergence since "diffusion of technology and ideas can make narrowing the differences in income among states and make it possible that in 2100 all will be rich and happy" (Lucas 2000). Moreover, as the larger return to education and skill is likely the single greatest source of the long-term increase in inequality, policies that boost our national investment in education and training can help reduce inequality while expanding economic opportunity. (Bernanke, 2007).

This is only possible if education systems can produce human capital able to:

- think critically and make judgments about the barrage of information coming their way every day - on the Web, through the media, to their homes, at the workplaces and everywhere else – in order to be able to address such challenges. Critical thinking empowers people to assess the credibility, accuracy and value of information, analyse and evaluate information received;
- solving complex, multidisciplinary, open-ended problems which typically don't have a single right answer;
- think creatively and entrepreneurially (entrepreneurial mindset - the ability to recognise and act on opportunities offered by the market);

- communicate and collaborate with teams of people across cultural, geographic and language boundaries to interact competently and respectfully with others;
- make innovative use of knowledge, information and opportunities to create new services, processes and products. The global marketplace rewards organisations that rapidly and routinely find better ways of doing things.

These skills will withstand the test of time, fluctuations in the economy and the marketplace, and dynamic employment demands enabling countries to become or remain competitive.

This can be achieved by following the motto of Susan Strange (1998):

- Work hard - but question authority, whether political or academic.
- Distrust ideologies - but respect the evidence.
- Avoid following the crowd - but trust your own judgment and stand up for your own ideas.
- The freedom to do so is one of which, in free countries, the universities should be the most jealous guardians.

Time for change is here since and according to Sun Tzu, "great warrior creates momentum: then, at the right moment, he hurls his troops at the enemy like rolling a round rock down the side of a mountain. His victory is a matter of momentum and timing" (Krause 1995: 38). Education has to become an instrument for creating people who make things happen and not those who watch things happen, or those who wonder what is happening. "This is a seminal moment in history for education and competitiveness. The fundamental shifts in the economy demand bold and creative policies. Formalising the connection between education and competitiveness with an agenda focused on 21st century skills – which are widely acknowledged and supported by voters, employers, educators, researchers and thought leaders - is the starting point (see; Partnership for 21st century, 2008). Ljubljana, December 19th 2009.

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