What is the meaning of a knowledge based economy?

Technology, Innovation



What is the meaning of a knowledge based economy? The term "knowledgebased economy" results from a fuller recognition of the role of knowledge and technology in economic growth. Knowledge, as embodied in human beings (as "human capital") and in technology, has always been central to economic development. In the knowledge-based economy it is the production of ideas, not goods, that is the source of economic growth, and the reason that the new computing and telecommunications technologies are so economically revolutionary in their nature is that they allow ideas to be distributed instantaneously and in a coherent way to anyone, anywhere in the world. Knowledge and learning The knowledge-based economy is affected by the increasing use of information technologies, it is not synonymous with the information society. The knowledge-based economy is characterised by the need for continuous learning of both codified information and the competencies to use this information. Education will be the centre of the knowledge-based economy, and learning the tool of individual and organisational advancement. The accumulation of tacit knowledge needed to derive maximum benefit from knowledge codified through information technologies can only be done through learning. In the knowledge-based economy "learning-by-doing" is paramount. A fundamental aspect of learning is the transformation of tacit into codified knowledge and the movement back to practice where new kinds of tacit knowledge are developed. Knowledge networks / transfer It is not a new idea that knowledge plays an important role in the economy. The knowledgebased economy places great importance on the diffusion and use of information and knowledge as well as its creation. The determinants of

success of enterprises, and of national economies as a whole, is ever more reliant upon their effectiveness in gathering and utilising knowledge. The science system plays an important role in transferring and disseminating knowledge throughout the economy. One of the hallmarks of the knowledgebased economy is the recognition that the diffusion of knowledge is just as significant as its creation, leading to increased attention to "knowledge distribution networks" and " national systems of innovation". In the knowledge-based economy, learning becomes extremely important in determining the fate of individuals, firms and national economies. Human capabilities for learning new skills and applying them are key to absorbing and using new technologies. Schumpeter and the Knowledge-Based Economy: The concept of technological progress, through innovating activities and knowledge creation, as the main engine for economic growth, is not a new one in economics. We only have to consider the dominant role given to technological progress by classical economists such as Karl Marx or this century by Joseph Schumpeter, to realise that economists have always been aware of the crucial importance of innovation and knowledge accumulation for long-term growth. A new knowledge policy The knowledge basis of innovation is privileged by market economics. But this knowledge is only a part of the knowledge a given society has according to its state of development at a certain moment of time. The new policy is an attempt to increase the spectrum of knowledge to be used by a society. The following examples will show the global relevance of this policy, which therefore needs support from various forces of the society. Enterprise. Each enterprise not only uses knowledge but also gives birth to knowledge. Indeed, each one

enjoys various learning curves during its live. To keep their knowledge util, enterprises must be concerned by it rather systematically and that during all their life spans. The same is true for public authorities giving support to enterprises and innovation. Therefore, public authorities and enterprises discover they must measure and value knowledge according to some criteria. In the case of enterprises, it is discovered that although their knowledge is their real asset, their data give generally a very poor picture of this knowledge. That means their data reflect badly their real value. Citizen. People carry on the knowledge, which has to be discovered and protected. Therefore, with the emphasis of the new policy, the concern for the transition to innovation and its results slides from enterprise to people. All brains matter. This is not only important to get a better climate inside firms but also to give a better chance to citizen to get job continuously even through changes to their work status. Indeed, the concern for knowledge might lead to ad hoc passport delivered within enterprise. It will gradually be fulfilled by knowledge identified during the working time whichever the status of work is (full time, part time worker). The passport would not be limited to working periods. The idea is to give each citizen the opportunity to get a knowledge passport summarising all its knowledge (i. e. not only to the labour market related one) and care to it's the best as possible and during all its live. Mobility. The passport will be accepted on the European space. So it will give European citizens the best chance to get a job on that space. Therefore, the passport is an help given to everybody to care about its knowledge and to live with it so as to achieve the best according to personal criteria and without privileging some knowledge i. e. citizens at the expense of some

others. Policy Conclusions "Knowledge in all it forms plays today a crucial role in economic processes." (OECD, 1995). The new policy is a powerful tool to change the global development issues. But obviously it requires support to be applied being well focused, designed and scaled. So it needs research. Therefore an appeal is launched to get the funding giving birth to an international network of researchers. Bibliography 1. SMITH, K. (1995), " Interactions in Knowledge Systems: Foundations, Policy Implications and Empirical Methods", STI Review, No. 16, OECD, Paris; 2. OECD (1996), The Knowledge-based economy, Paris; 3. Luc Soete, Bas ter Weel, Schumpeter and the Knowledge-Based Economy: On Technology and Competition Policy - Department of Economics and Maastricht Economic Research Institute on Innovation and Technology; 4. OECD Global Forum, Policy Frameworks for the Knowledge Based Economy: ICTs, Innovation and Human Resources, Brazil September 2002, Session 3: Innovation