



## *Discussion papers*

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### **First session**

# **Towards a knowledge-based economy within firms and in society at large**

**Discussions are introduced by :**

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## THE CONSTRUCTION OF EUROPEAN IDENTITY

Statement prepared for the European Presidency of the European Union,  
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### **Preliminary remarks.**

This is not a research paper. It is a policy oriented document prepared at the request of the Portuguese presidency of the European Union in the first semester of 2000. It does rely on a number of materials, information, and analyses, most of which can be found in my trilogy "The Information Age: Economy, Society, and Culture", particularly in the new, revised edition, to be published in May 2000. In this context, I will not try to demonstrate my points. This is written in statement mode, to suggest ideas and directions for discussion, for what is worth. And this is not wishful thinking. This is, right or wrong, what I think can be done, under current constraints, to advance the construction of European identity. I will not be dealing here with major strategic issues, such as economic policy, technological development, and the restructuring of the welfare state, without whose proper treatment, discussions about identity become an empty ideological exercise. I am aware of other papers submitted to the Portuguese presidency of the European Union on these matters. They are excellent papers, I agree with them in their main lines, and I will avoid to be redundant with their contribution. I will start however with one previous question: is European identity a relevant matter in the construction of the European Union?



## 1. Why European Identity is important.

After the creation of the euro, and the constitution of the European Central Bank, the European Union is, for all practical matters, one economy – waiting for the full integration of UK and Sweden to consolidate the union. Any reversal in the process of integration in the coming years would have catastrophic consequences for European economies, and for the global economy. Besides the economic dimension, European Union countries are now intertwined in a web of institutional, social and political relationships which will grow in size and complexity in the coming years, as new countries become associated with the EU, and as the European institutions extend their realm of activity. Thus, we are too far in the process of European integration (with considerable benefits for everybody, to this point) to think the unthinkable: the future breakup of the European Union. And yet, the European ground may be shakier than we believe. This is, first of all, because the global economy is, and will be characterized, by recurrent crises, in the financial markets, in trade arrangements, and in the integration of social, national, cultural and environmental demands from people around the world – as WTO's fiasco in Seattle has shown. We were lucky in the 1997-99 crises in Asia, Russia, and Brazil, that financial turbulences were contained within emergent markets. But as core markets become electronically entangled worldwide, and as the dynamism of the new economy is coupled with higher doses of risk and unpredictability, we cannot bet on a smooth transition to full-fledged globalization. Besides, the transition to a new technological paradigm, and to a new economy, that is only now picking up speed in Europe, is bringing substantial disruption to important segments of the population, in many regions, and is affecting the interests of social actors and political institutions which were rooted in a very different economy and society. If we add to this, the increasing multi-ethnic character of most European countries, and the emergence of new kinds of geopolitical dangers (nationalism and fundamentalism from the excluded and marginalized from the new economy), I



think it is fair to say that we are heading toward a very stormy period – in spite of its extraordinary potential as an age of creativity, prosperity, and institutional reform. It can go both ways depending on what “we” do. The “we” is of course the tricky part of the equation. Because who are “we”?



As long as the European Union is a positive sum game, in which everybody wins (some in economic terms, some in political terms, others in technological terms, still others in social terms), without sacrificing national identity and political sovereignty, crises of transition are absorbed by countries themselves. Yes, the European Commission is not very popular, and its pitiful performance in 1997-99 has made things worse, although the first months of the Prodi regime have reinvigorated the Commission and given some hope for its future. But, in spite of their distrust of the Commission, people around Europe did not feel (rightly) that the Eurocrats had real power over their lives. Things are changing. Regardless of how much real power Brussels has or will have, the European Union as such, and other supra-national institutions (such as NATO or IMF), have taken away sovereignty from the European states. Not that nation-states are not important. But they have become a node, albeit decisive, in a broader network of political institutions: national, regional, local, non-governmental, co-national, and international. Europe is already governed by a network state of shared sovereignty and multiple levels and instances of negotiated decision-making.

Thus, on the one hand, we are heading towards a complex process of economic/technological/cultural transition that will create innumerable problems and resistances – along with new opportunities and wealth. On the other hand, the political system in charge of managing the transition is increasingly disjointed from the social and cultural roots on which our societies are based. In other words: the technology is new; the economy is global; the state is a European network, in negotiation with other international actors; while people's identity is national, or even local and regional in certain cases. In a democratic society, this kind of structural, cognitive dissonance may be unsustainable. While integrating

Europe without sharing an European identity is a workable proposition when everything goes well, any major crisis, in Europe or in a given country, may trigger an European implosion of unpredictable consequences. Because the construction of identity is a long term process, we are in a race against the clock between the time horizon of transitional, social/economic crises and the emergence of an European identity on whose behalf citizens around Europe could be ready to share problems and build common solutions. Instead of blaming the neighbor, and de-legitimizing their governments, potentially suspect of eurocracy.

## 2. What is European Identity.

For the sake of clarity, identity is a set of values that provide symbolic meaning to people's life by enhancing their individuation (or self-definition) and their feeling of belonging. Of course people may have various identities, according to different spheres of their existence: one can feel Portuguese, socialist, catholic, woman, and all these identities can overlap without major contradiction. Which one is dominant depends on the moment of life and on the realm of activity.

European identity would be the set of values that would provide shared meaning to most European citizens by making possible for them to feel that they belong to a distinctive European culture and institutional system that appeals to them as legitimate and worthwhile. Which could be the sources of such an identity? it is essential to know, first, WHAT IS NOT EUROPEAN IDENTITY. It is not a "civilization" based on religion, past history, or a set of supposedly superior "Western values" (a la Huntington). European countries have spent centuries (and particularly the last one) killing each other, so the notion of a shared history has a sinister connotation.

Religion (meaning Christianity) is an unthinkable source of identity once we have established the separation between the church and the state, and in the historical





moment when non-Christian religions (eg Islam) are growing fast in the European Union, both among ethnic minorities, and in future member countries (Turkey).

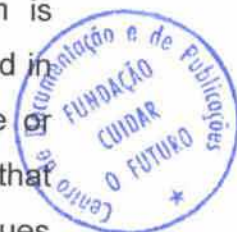
Language, one of the most important sources of cultural identity, is, of course excluded as a common source of European identity, although I will argue that a certain approach to language is essential in constructing identity.



National identity as European identity is also impossible, by definition. Nations, and nation-states are not going to fade away. In fact, they are going to grow and become important sources of collective identity, more than ever, as new, formerly oppressed nations, come into the open (Catalunya, Euzkadi, Galicia, Scotland, Wales etc), and as strong nationalist movements assert their rights in the public opinion against the submission of the nation to the European state. I start from the assumption that in the foreseeable future, Europe will not be a federal construction similar to the United States. There will be no unified European state, superseding and cancelling current nation-states. Thus, identification to a political construction, such as the state, cannot be a source of identity, thus eliminating the option of "European nationalism" equivalent to "American nationalism", emerging in a multi-cultural, immigrant nation. It was because it was an immigrant nation in an empty continent (or forcefully emptied from its native inhabitants when necessary) that America could combine strong cultural and ethnic identities with an equally strong American identity. Such is not, and will not be, the case of Europe.

So, it is in the realm of values, of new values where we could find the seeds of an European identity. On the basis of surveys of attitudes, and a review of the literature, in my book "End of millennium" I identified some elements of what I called an "European identity project". Not what I propose, but what appears empirically that would bring a broad cultural consensus throughout Europe: besides political democracy (which is a widely shared value, thus not distinctively European). These elements can be identified as shared feelings concerning the need for universal social protection of living conditions; social solidarity; stable

employment; workers rights; universal human rights; concern about poor people around the world; extension of democracy to regional and local levels, with a renewed emphasis in citizen participation; the defense of historically rooted cultures, often expressed in linguistic terms. If European institutions would be able to promote these values, and to accord life with these promises for all Europeans, probably this "project identity" would grow. But the problem is precisely that some of these aspirations will have to be rethought and adapted in the new historical context, for instance in what concerns the welfare state or stable employment. Moreover, the mere enumeration of these values shows that they are a reasonable wish list, that does not necessarily articulate these values in a coherent set, beyond their popularity in the public opinion. So, these elements of an European project, while they must be materials to work with, cannot be asserted as a finished model to be imposed top down as, for instance, the French revolution did with its political ideals, to construct, at the same time, the universal citizen and the French nation, as necessary and sufficient conditions of the civilized state and society. This extraordinary accomplishment could be carried on only through military enforced political domination, and under the conditions of restrictive democracy (without women and without the tolerance of historic cultures). In a fully democratic, multicultural, multiethnic Europe, exposed to global flows of communication and information, no project can be imposed from the state. Thus, European identity does not exist, and there is no model that could be taught and diffused from the European institutions, and national governments.



And yet, the problems I raise continue to be relevant. While national and local identities will continue to be strong and instrumental, if there is no development of a compatible European identity, a purely instrumental Europe will remain a very fragile construction, whose potential, future wrecking would trigger major crises in our societies.



But if there is no European identity model, there still can be an identity in the making, that is a process of social production of identity. In other words, we cannot create, artificially, a European identity, from a "concours d'idees" in the same way that, at one point, the Yeltsin government was trying to find a new Russian identity. We should help the development of a series of mechanisms that, in their own dynamics, would configure the embryos of this shared system of values throughout Europe, and we should make possible an observatory capable to detect the birth and development of these new values, and ensuring their diffusion, and interaction, while avoiding to transform them in a new ideology, the ideology of pan-europeanism in this case. It is by engaging in social experimentation, by letting society evolve by itself, but helping to constitute an European civil society, that we could see the emergence of a new European identity in a few years from now. The description of some of the potential processes that could induce such identity will help to make this discussion a matter of concrete policy.

### 3. Questions of method: Building identity by making society

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First, who are the actors of this identity construction process? Let me be clear. In the current state of affairs they can only be the European national governments, acting through the council of ministers of the European Union. The Commission can only be a relatively autonomous manager of shared political decision making. Any attempt to make the Commission the center of power and sponsor of new identity will ultimately provoke the revolt of national and local identities, thus jeopardizing the European Union. The European Union is not, and will not be, a classical federal state. It is a new form of state. And in this new form of state, the connection to societies, is in the various nodes that assume direct political representation. The construction of European identity, if it ever happens, will be the fact of European societies, under the strategic impulse of the Council of Ministers, reflecting a common project shared across the political spectrum by the countries participating in it. To say so is to say that there cannot be an





agreement on the content of European identity (for instance, between conservatives and socialists, between ultra-nationalists and greens etc.) **But a consensus could be built on the method**, on the mobilization of societies towards new, shared values that would be widely diffused throughout Europe, so that every party, interest group, or ideology, would hope to win in the process: it is a similar matter to the sharing of democracy as a method, without having to agree on the substance of politics. Democracy, besides being a principle, is, in practical terms, a method, a method of political representation and governance. What could be the method of identity building in a shared consensus between countries and political forces throughout Europe? Here is where this paper must dare to become speculative and prospective, since these are entirely uncharted waters.

#### 4. Social and institutional processes of European identity building.

Remember: all processes of production of identity are based on a common methodology. We build identity by sharing cultural and social practices throughout Europe, letting the outcome of this sharing emerge from the experience. In other words, we do not know what this European identity will be, but we create the material possibilities for its emergence from society, then reinforcing and communicating emerging embryos with the help of European institutions. I certainly know that some of the elements of the mechanisms proposed are already in practice in Europe. I am simply emphasizing them, and adding other proposals which are less diffused or non existent.

The first, and most obvious, of such mechanisms is **education**. We must introduce in all levels of the education system of every country, some common elements, including the history, and culture, and language of other countries in the programs of all schools. Hopefully larger proportions of teachers and students will spend periods of their school activity in other countries, along the lines pioneered by the Erasmus program for university students. Yet, a true



interpenetration of education systems requires a serious effort, and a concerted policy of European countries in this direction. Equivalence of pedagogic systems and programs (which does not mean the uniformization of all programs, quite the contrary) will allow passages from one system to another, and will make possible to use the degrees obtained in one country in the entire European market, in real terms (current possibility is only on paper, since in most cases, qualifications and language skills are not really equivalent, from the perspective of employers. Indeed: less than 3% of European Union citizens work outside their country)

The second mechanism, still to be explored, is the widespread diffusion and use of **Internet** in the population at large. Internet is a privileged tool of communication and access to information. It is not just a technology, it's the economic, cultural, and political backbone of the information age. An Internet-literacy campaign (forget about computers, which are the past), aimed mainly at the adult population (the children will have it at school) would provide the communication bridge among Europeans, and would bring all societies on the same technological level. The model experience of Finland in this sense could be an example from where to build.

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The third mechanism is a **pan-European linguistic policy**, aiming at the cross-cultural diffusion of all languages in all countries, through the education system at all levels, via Internet, by cultural programs etc. I am always chagrined when I see how in American leading universities students can learn not only major languages, such as Portuguese or French, but also Catalan, Finnish, or Swahili. True, most American students do not learn languages. But, with cultural and educational incentives, European students would. And this multi-linguistic web could be a source of true multiculturalism.

Fourth, we need a **paneuropean media policy**. The coming of multimedia may be dominated by Hollywood and San Francisco and New York multimedia designers, and by global mega-conglomerates such as the one prefigured by



AOL/Time-Warner. The European reaction is nationalistic, defensive, and ultimately doomed in a market economy. In the age of Internet and satellite communication is not by imposing quotas that we will bring people to alternative sources of culture and communication, different from the ones currently dominating in the business world. Europe should not subsidize private groups just because they are European, but we should allow their merger and strengthening, or they will not be competitive. But where European governments should act is in favoring the development of high-quality, competitive, publicly subsidized, multimedia groups operating independently under a charter. Modelled upon the exemplary performance of the BBC, an independent, high-quality, globally competitive, media group, a network of joint ventures among public European TVs and studios should be able to develop. It should also open up, from the beginning to private Internet Service Providers, to position European cultural senders in the coming process of technological convergence in the media system. A paneuropean media system, both public and private, will be the corner stone of an emergent European culture.



Not everything is culture: **geographical mobility of labor** is essential to build a common European experience. The conditions under which Southern Europeans emigrated to Northern Europe must not be repeated. The integration of a labor market would require access to housing and social services, equivalent professional qualifications, and equal rights. If we truly can work everywhere in Europe, not only the economy will reap extraordinary benefits, and unemployment may be resorbed, but we will experience in real terms other life styles, other cultures. If this is accomplished in conditions of equality and non discrimination, the Europe that works together will learn to live together.

On the condition that we tackle up front **the issue of multiethnicity and multiculturalism**. Europe is fast becoming a continent of ethnic minorities. The proportion of foreign born population in Germany is already almost the same than the African-American population in the US, at about 12%. And, as American



blacks, most people from ethnic minorities concentrate in the largest metropolitan areas, thus increasing their visibility. Because of the differential birth rate vis a vis native populations, the coming two decades will bring an spectacular increase of multiethnicity throughout Europe. If we add the future integration of Eastern European and Turks in the European Union, we must design from now on specific policies of cultural integration, based on equal rights, and respect of differences, that should be applied throughout Europe. In addition, Europe needs a new immigration policy that, could attract the necessary talent that exists around the world, and would be open to genuine political refugees, but, at the same time should clamp down on illegal immigration, and particularly on the mafias that are bringing into Europe about half a million undocumented immigrants every year. In addition, policies of easy naturalization for lawful residents should be designed, and applied in similar terms in all countries. The building of an European identity can only proceed on the basis of the acceptance of its multi-ethnic, multi-religious, and multi-cultural character, and this acceptance needs a material basis in immigration and naturalization policies, in multiculturalism in the education system, and in the openness of the media, and of cultural institutions to the diversity of cultural expressions.

Building bridges in Europe means also building **bridges between European cities and between European regions**. There are already a number of dynamic networks and dynamic institutions, including the Committee of Regions in the European Commission. National governments should accept, and encourage the initiative of sub-national governments to establish their own European networks. A defensive attitude from national governments in this matter will lead to endless internal conflicts, while cities from different countries will be competitors rather than cooperators. Inter-municipal, and inter-regional European networks are essential sources of reconstructing culture, besides yielding considerable economic benefits.



Similar **pan-European networks exist among business organizations, labor organizations, cultural associations (such as European artists), and citizen groups.** With or without governmental support, the creation of this European network of social actors is another layer of identity construction.

More complex is the issue **of political identity.** It cannot be built through allegiancy to an unlikely European federal state. In this sense, the European democratic deficit does not come from the powerlessness of the European parliament. The strenghtening of the Parliament would lead to true supranationality and federalism, something that most public opinions, and most political parties would not tolerate. The European commission does not have to be submitted to the European Parliament, but to the European governments, to the Council of Ministers. The key democratic issue is the transparency for citizens of what the Council of Ministers does, and the explicit inclusion of European policies in the political platforms of parties in the national, regional, and local elections. **European democracy is not accomplished by removing institutions from their roots of representation, but by bringing European institutions down to where citizens live and feel.** However, increasing the activity and role of the European parliament, and connecting it more explicitly to a European constituency, is one element, among others, in the building of a shared identity.

And last but not least, **European identity will be built around a common international policy, which includes a common defense policy.** Only if citizens realize that by being Europeans they can act upon global issues in terms of their own values and interests, will they realize how important it is. Under current conditions, European international policy is confused, non existent, or powerless. And, among other things, it is powerless because it is entirely subordinated to NATO in terms of defense. Europe needs an independent European armed forces, with full technological and operational capability, although in close cooperation with NATO and with the United States. But to be





able to assert this independence, Europe needs to invest in technology, to increase its military budget, and to train a multinational, professional armed forces. It is hypocritical to resent "American hegemony", and then call upon the United States each time there is a serious security crisis, letting the U.S. foot the bill in resources, and personnel. If Europe wants autonomy, it has to assume its fair share of the Western defense burden. The recently created Rapid Deployment Force is a good beginning, but too modest and without the actual military capability for acting independently. To assert itself in the international arena, as a unit, would clarify for Europeans the values and strategic goals for which Europe stands. But for this not to be empty rhetoric, and then being able to permeate down the consciousness of citizens, European governments would need to set up a common system of international representation, coordinating their presence in international institutions, and provide Europe with the financial and military means to back up its positions. Only then could emerge, truly an European political identity, as one of the dimensions of European identity.

Finally, since all these mechanisms are very indirect approaches to the building of an European identity, European institutions should be able to monitor their development, and to identify the actual elements of European identity as they emerge from practice in society. So an **European Identity Observatory** should be constituted, based on a network of observers and analysts, with a very light infrastructure, very economical means, no power, and as independent as possible. It should report on an annual basis on the level of development of European identity, and on the substantive elements that appear to configurate the emerging model. European institutions could start modelling themselves according to the cultural expressions and organizational forms emerging from civil societies throughout Europe. Maybe then new forms of democracy could emerge, as states learn to follow and adapt to the evolution of society.





# EUROPE AND THE LEARNING ECONOMY – ON THE NEED FOR REINTEGRATING THE STRATEGIES OF FIRMS, SOCIAL PARTNERS AND POLICY MAKERS

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*"..Both the pace and the acceleration of innovation are startling; nay terrifying....No-one can predict the ... range of skills which will need to be amassed to create and take advantage of the next revolution but one (and thinking about the next but one is what everyone is doing. The game is already over for the next)."*

*(Bob Anderson, Director, Rank Xerox Research Centre, Cambridge Laboratory, "R&D Knowledge Creation as a Bazaar Economy", paper presented at OECD-IEE workshop on Competition and Innovation in the Information Society, 19th March, 1997)*

## **The basic hypothesis – a speed up of the rate of change and learning calls for reintegrating narrow perspectives and strategies<sup>1</sup>**

There is growing agreement that knowledge is now at the very core of economic development. This is, for instance, reflected in OECD-publications referring to the *knowledge-based economy* (OECD, 1996, Foray&Lundvall, 1997). A related but alternative concept promoted here is the 'learning economy'. It is based upon the hypothesis that during the last decades an acceleration of both knowledge creation and knowledge destruction has taken

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<sup>1</sup> The paper is a synthesis of my experiences from crossing borders between academia and policy making. After almost twenty years of doing research on innovation at Aalborg University, I spent 1992-94 working at OECD as Deputy Director for the DSTI. Since I returned to academia in 1995, I have co-ordinated research on innovation and learning, while, at the same time, operating in interaction with policy makers in Denmark (Ministry of Business), the EC (TSER) and at OECD (CERI). The main conclusion, reflected in the notes, is that specialisation in science, policy making and management may be necessary but also that it is quite costly and that currently there is a need for reintegration.



place. Individuals as well as firms need to reconstruct their competences more often than before, because the problems they face change more rapidly than before. Therefore, what constitutes success is not so much having access to a stock of knowledge. The key to success is, rather, rapid learning and forgetting (sometimes old ways of doing things get in the way of learning new ways). Narrowly defined skills may actually hamper rather than support economic success.

This new context of accelerating change calls for new strategies at the level of the firm, the region, the nation state and the European Community. It also requires a rethinking of industrial relations and the role of trade unions. While knowledge production and policy making through decades have been characterised by growing specialisation in knowledge production and in the economy at large as well as by more narrow fields of responsibilities for policy makers, the learning economy calls for lateral thinking and for a reintegration of separate perspectives and strategies. In this paper, I will focus on the need for integrating organisational change, labour market dynamics and innovation at the level of the firm and on the implications for European policy strategies. To begin with, I present the major concepts and elements of the learning economy.

### Defining the learning economy

In the present context we define learning as *the acquisition of competences and skills* that make the learning agent – be it an individual or an organisation – more successful in pursuing his/its own goals.

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ON THE IMPORTANCE OF KNOW-HOW AND KNOW-WHO

The choice of definition reflects that it is especially important to make the distinction between information and knowledge in the current information society era. *Know-how* – and not least skills in selecting and using information – grows in importance as information becomes more complex and abundant. It plays a key role in all activities in the economic sphere. What distinguishes the successful businessmen and great scientists from more mediocre colleagues is *know-how*, for instance in the shape of experienced based capabilities to interpret and give meaning to emerging complex patterns and to act purposefully on the basis of this insight.

*Know-who* has also become increasingly important. The general trend towards a more composite knowledge base where a new product typically has to combine elements rooted in many technologies, while each technology is rooted in several different scientific disciplines, makes it crucial to have access to many different sources of knowledge. *Know-who* involves information about who knows what and who knows to do what. But it also involves the social capability to co-operate and communicate with different kinds of people and experts. This one aspect of the move toward a *Network Economy*.





#### COLLECTIVE COMPETENCE AND TACIT KNOWLEDGE

Normally we think about know-how as personal and individual. But it can be embedded also in regions and organisations (Arrow, 1994). The shared routines, the common codes for communication and the formation of social relationships within teams may be regarded as different modes of embodying the *know-how into collective units*.

The distinction between *tacit* and *explicit* knowledge is important because tacitness implies that it is not possible to separate the knowledge from its carrier (either an individual or an organisation). Tacit knowledge can be accessed only by hiring skilled people or through merger with other organisations. It can not be transferred and sold as separate items in the market. In the learning economy, where the pace of change is high, tacit elements remain at the core of individual as well as collective knowledge. Since codification is costly it is most adequate to embark upon it when there is continuity in the problems to be coped with.

#### THE INFORMATION TECHNOLOGY REVOLUTION STIMULATES CODIFICATION BUT IT ALSO INCREASES THE RELATIVE IMPORTANCE OF TACIT KNOWLEDGE

The radical development of information and communication technologies has an equivocal impact on the codification of tacit knowledge. On the one hand it gives stronger incentives and more effective procedures for codification. On the other hand the very growth in the amount of information made accessible to economic agents, increases the demand for skills in selecting and using information intelligently. The major impact of the information technology revolution is that it speeds up the process of change in the economy. For this and other reasons, experience based learning tends to become even more important than before.

#### PROTECTING AND WIDENING THE KNOWLEDGE BASE OF THE FIRM

The competitive advantage of a firm is rooted in a set of competences not easily imitated by potential competitors. Elements of collective tacit knowledge are at the very core of the competitiveness of the firm. The tacit knowledge embodied in individuals can easily disappear in fluid labour markets while codified knowledge may be more easily copied by outsiders.

Intellectual property rights such as patents represent one way to limit the access of competitors to the core competences of the firm. They play different roles in different sectors but on average the move toward a 'learning economy' tends to make them less adequate – at least as the core of knowledge management strategies. As the speed of change accelerates, it becomes more important for the firm to get access to new sources of knowledge (through recruitment, internal learning and networking) than to hinder others to get access to its own competences. Patents are increasingly used as chips for knowledge trading between competing and collaborating firms rather than as instruments of secrecy.





Know-how is typically learnt in something similar to apprenticeship-relationships where the apprentice follows his master and relies upon him as his trustworthy authority (Polanyi, 1958/1978, p.53 et passim). Know-who is learnt in social practise and some of it is 'learnt' in specialised education environments. Communities of engineers and experts are kept together by reunions of alumnae and by professional societies giving the participant access to know-how trading with professional colleagues (Carter, 1989). It also develops in day-to-day dealings with customers, sub-contractors and independent institutes.

The learning economy needs a lot of trust in order to be successful. And as Kenneth Arrow has pointed out 'trust cannot be bought: and if it could be bought it would have no value whatsoever' (Arrow, 1971). The fundamental role of trust raises strong doubts about how to interpret the standard assumption in economic theory that the most efficient economy is one where individuals act as 'economic men' who *calculate* the outcomes of all alternatives in order to select the one which is best for themselves. *In the learning economy the importance of the ethical dimension and social capital increases enormously.* Little can be learnt and information cannot be used effectively in a society where there is little trust.

THE MOST IMPORTANT INHERENT CONTRADICTION OF THE LEARNING ECONOMY HAS TO DO WITH POLARISATION AND SOCIAL EXCLUSION

The most immediate benefits of intensified competition and accelerated change and learning are growing productivity, lower prices and a higher level of consumption. Another primary benefit is that the employees of innovative and flexible organisations may earn a premium or at least avoid bankruptcy and unemployment.

But there is also a clear and strong tendency toward polarisation in the learning economy. The distribution of the benefits and costs of economic development has become more uneven during the last decade, with the low-skilled of the labour force as the major losers (OECD, 1994, p. 22 et passim). Within Europe the catching-up of the poorest regions has slowed down in this period (Fagerberg et al, 1997). At a global scale inequality between rich and poor countries has increased (World Bank, 2000).

In the learning economy there is a growing tension between the process that excludes a growing proportion of the labour force and the growing need for broad participation in the change process. It is not obvious that, in the long run, a learning economy can prosper in a climate of extreme social polarisation. This is why there is a growing need at all levels of society to combine elements of the 'old new deal' with a 'new new deal' that puts the emphasis on a more even distribution of skills and competences and especially of the capability to learn (Lundvall, 1996).



Another, even broader, problem is that the speed-up of change puts a pressure on traditional communities. It contributes to the weakening of traditional family relationships, local communities and stable workplaces. This is important since the production of intellectual capital (learning) is strongly dependent on social capital. 'Social capital' – the social capability of citizens and workers to collaborate without too much friction – is not easily re-established if once devaluated. How new forms of social capital can be created and accumulated is a major issue in the learning economy.

### **Building learning organisations and integrating strategies of competence building at the level of the firm**

Our research shows that there is a strong synergy between the introduction of *new forms of organisation* and the performance and innovative capacity of the firm (Lundvall, 1999 and Lundvall&Nielsen, 1999). Establishing the firm as a learning organisation characterised by decentralised responsibility, team work, circulation of employees between departments and investment in training has a positive impact on a series of performance variables. Flexible firms are characterised by higher productivity, by higher rates of growth and stability in terms of employment and they are more innovative in terms of new products. Our research also shows that success in terms of innovation is even greater when such a strategy is combined with active networking in relation to customers, suppliers and knowledge institutions.

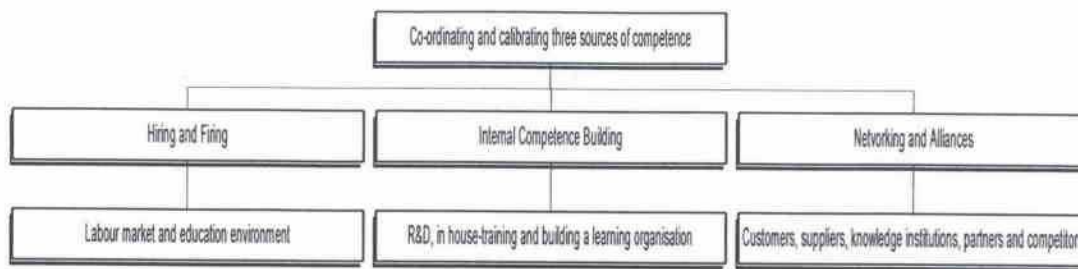
But we also find that, so far, there is only a small minority of all firms (10-15%) that have introduced the major traits of the learning organisation. There is an enormous unexploited reserve of economic competitiveness, especially in manufacturing and business service sectors in Europe. In some other sectors such as construction, agriculture, transport the efficacy of building learning organisation can be fully exploited only after a period of de- and reregulation. (Actually we found that, on average, construction firms got worse off when introducing the characteristics of the learning organisation.)

Our conclusion is that a new kind of *integrated competence building strategy* is needed and that such a strategy should take into account how to combine the three different major sources of competence building: Internal competence building, hiring and firing and network positioning (see the diagram below).





Diagram: Knowledge Management in the Learning Organisation



Firms differ in how strongly they emphasise each of these elements both between and within national innovation systems. Japanese firms have emphasised internal competence building while most hi-tech firms in Silicon Valley depend on learning through high inter-firm mobility of employees within the industrial district. Hewlett Packard is one US-firm that has given strong emphasis to internal competence building but it is now moving toward a compromise strategy with more openness to hiring experienced employees from other firms. In Denmark the institutional set-up of the training system and the labour market support networking firms and high mobility in the labour market, making it attractive for firms to locate in 'industrial districts'.

There is no single optimal strategy in this respect even if the relative success of IT-based firms in the US and the weakening of the Japanese firms might be interpreted as an indication that high inter-firm mobility of labour is an advantage in the learning economy context. Under all circumstances, management needs to be aware of its priorities in this respect and the different mechanisms need to be attuned to each other so that the firm can become an efficient competence creating system.

In this context it is important to take into account that labour markets and education systems still have strong national characteristics. Strategies covering multinational operations need to take into account such differences – it is not possible to have one single global knowledge management strategy that neglects local and national specificities. This is true especially for Europe where there is a multitude of quite distinct national labour market models.

### Industrial relations and the role of trade unions in the learning economy

When Danish managers were asked about what factors stimulated or hampered the movement toward learning organisations many of them referred to shop stewards (tillidsmænd) as a positive factor and only a small minority mentioned them as raising barriers to organisational change. This indicates that trade unions at the central and local level may be a positive factor when firms need to cope with the new challenges of the learning economy. The relative strength of organised labour in Europe may be regarded as positive factor in global competition- at least potentially.





Giving workers and their representatives the right incentives to participate positively in building learning organisations may be a question of creating a minimum of security in processes of restructuring – in Denmark the unemployment support level, and its duration, has done so (in spite of high inter-firm mobility Danish workers express less worries of increased insecurity in their job situations than do workers in other European countries with much less labour mobility).

The fact that access to learning capability is what constitutes success among the members of trade unions should affect the priorities of the trade union movement. When demanding shorter working hours they could combine such demands with requiring real access to skill upgrading for their members. Agreements between business and labour on the development of new forms of work organisation and skill development becomes more and more important for both parties.

There is a risk that old priorities lead to short termism on both sides. Obtaining nominal wage increases for union members whose skill position is stagnating may be highly counter-productive to the long term interests of those involved. On the business side, routine lamenting on tax levels and government regulation might get in the way of long term considerations regarding the transformation of training systems and labour market institutions. Organisations on both sides may need to take on the task to convince their members that the advent of the learning economy involves a new game to be played according to new rules.

A special new responsibility which affects both sides is to cope with the growing tendency toward social exclusion and not least the exclusion of workers of foreign origin. There is a need at the central level of trade unions to focus on the upgrading of the learning capability of those segments of workers who have narrow skills and to find ways to shelter those segments of the workforce (older unskilled workers) that cannot take part in the learning race. In general, trade unions need to be prepared to develop new kinds of solidarity that focus on redistribution of learning capabilities.

Management also has a responsibility for this problem. Our research shows a strong Mattheus-syndrome in the human management strategy of most firms: It is primarily those with extensive training that are offered even more training within firms. It is tempting for firms to focus skill upgrading on those who are rapid learners and leave the rest to public training programmes. In the light of a growing scarcity of new entrants into the labour market and the need for broad participation of employees in learning organisation, this might need to change in the future. Under all circumstances, co-ordinated efforts between business and labour to reduce social exclusion are necessary to make the remaining tasks of governments manageable.

Also in the field of industrial relations there is a need for reintegrating functions and responsibilities. Traditional interests in terms of pay, working time and job security must be linked to and assessed in relation to

competence building and the distribution of learning capabilities. Again, European traditions of concertation between government, business and labour may prove to be a comparative advantage if there is a willingness on all sides to take up these challenges.

### **The challenge of the Learning Economy and the need for a new type of policy co-ordination at the European level**

As pointed out in the introduction, there is a growing consensus on the need to focus on long term competence building in firms and in society as a whole. At the same time, the prevailing institutional set up and global competition tend to give predominance to short term financial objectives in policy making. At the institutional level this is reflected in the fact that ministries of finance have become the only agency taking on a responsibility for co-ordinating the many specialised area policies. Area specific ministries tend to identify with their own 'customers' and take little interest in global objectives of society.

The concept 'the learning economy' has its roots in an analysis of globalisation, technical innovation and industrial dynamics (Lundvall&Johnson, 1994 and Lundvall&Barras, 1999). But the concept also implies a new perspective on a broad set of policies including social policy, labour market policy, education policy, industrial policy, energy policy, environmental policy and science and technology policy. Specifically, the concept calls for new European and national development strategies with co-ordination across these policy areas.

*Social and distributional policies* need to focus more strongly on the distribution and redistribution of learning capabilities. It becomes increasingly costly and difficult to redistribute welfare, ex post, in a society with an uneven distribution of competence. Therefore there is a need for stronger emphasis on a 'new new deal' where weak learners (regions as well as individuals) are given privileged access to competence upgrading.

The effectiveness of *labour market institutions and policy* has so far been judged mainly from a static allocation perspective. There is a need to shift the perspective and to focus on how far the labour market supports competence building at the individual level and at the level of firms. This implies for instance that some dimensions of flexibility and mobility are more productive than others and that there may be third roads aside from Anglo-Saxon maximum flexibility and Mediterranean contractual job security – cf. for a Danish model characterised by a unique combination of relative income security, high participation and mobility rates.

*Education and training policy* needs to build institutions that promote simultaneously general and specific competences, learning capability and life-long learning. This points toward a new pedagogy that combines individual learning plans with collective problem-oriented styles of learning. A real commitment among employers, employees and policy makers to life-long





learning with a strong interaction between schools and practise-based learning is necessary.

*Industrial policy* needs to adjust to each other competition policy and policies aiming at developing learning organisations and competence building networks. Intensified competition may stimulate superficial change rather than competence building if not combined with organisational change and new forms of inter-firm collaboration. *Energy and environment policies* need to take into account their impact on competence building in the economy.

*Science and technology policy* needs to support incremental innovation and the upgrading of competence in traditional industries as well as the formation and growth of high technology industries. For instance, the reallocation of academically trained workers toward small and medium sized firms is a key also to the formation of networks with universities and other knowledge institutions.

These area specific policies need to be brought together and attuned into a common strategy. In the learning economy it is highly problematic to leave policy co-ordination exclusively to ministries of finance and to central banks – their visions of the world are necessarily biased toward the monetary dimension of the economy and thereby toward the short term.

Europe could decide to establish a *European High Level Council on Innovation and Competence Building* with the President of the EU as its chairman and with at least as much political weight as the European Bank. Such a new institution could have as one of its strategic responsibilities to develop a common vision for how Europe should cope with the learning economy. The basis of such a vision must be a better understanding of the distinct European national systems of competence building and innovation. In the framework of such an understanding international bench-marking and policy learning at the European level becomes meaningful. Similar and corresponding new institutions need to be built at the national and regional levels within member states.

Even the most recent framework programme – the fifth - remains focused on the creation and use of *scientific* knowledge. Even if it is structured with reference to social and ecological needs it is still the scientific community and research ministries in member states that dominate when it comes to the detailed design and implementation. Europe could decide to develop a *Framework programme on Innovation and Competence building* where science is treated as only one among several sources to competence building. The European High Level Council could be in charge of the design of the main lines of the programme. Again, similar efforts at the national and regional level within member states would make the initiative more forceful.



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