European Integration as an Answer to Technoglobalism

Luc Soete

1. Introduction

Parallel to the process of economic integration, as it has taken place over the last twenty years and particularly within the framework of the creation of the large European "Single Market", European economies have been confronted by a significant increase in the degree of structural change at the world level. The last ten years can indeed be described as a period of historic, major structural change at the world level: the collapse of the former socialist countries and their rapid opening up to market-led economic incentives; the shift in world market growth from the North Atlantic OECD area to the Pacific basin area with an increasing number of Asian economies outperforming the developed countries' growth performance; the creation of new regional trading blocks in North and South America, in Asia, in the Middle East and in Southern Africa, with more rapid growth in trade within than between such integrating trade areas; the surge in foreign direct investment in these trade blocks with large global firms aiming at presence in each of these markets; and last but not least the dramatic reduction in the costs of information and communication processing, opening up an increasing number of sectors to international trade and giving at least the impression of a dramatic reduction in physical distances -- the world as a village.

This fast-paced global restructuring process raises some fundamental policy challenges at both the national and European levels. At the national level, it has made policy makers much more aware of the increased international implications of their policy actions. Policies that might appear "sustainable" within a national or even European context, might increasingly appear less so in an international context. While the impact of opening up to global international restructuring might still be in its initial stages, it has rapidly brought to the forefront how degrees of freedom of policy actions have been dramatically reduced in a wide variety of different fields. This does not only hold for traditional macro-economic policy, but also for social policy, tax policy, social security policy and other policies traditionally preserved at the national level.

At the same time, globalisation is also raising fundamental questions with respect to Europe's own integration process. The latter is characterised by economic aims which appear increasingly overtaken in their purpose and speed of implementation by the broader world wide integration process (one may think of the recent WTO Singapore agreement on the liberalisation of information technology trade). It brings to the forefront the question of whether the old process of economic integration whereby the central aim is the reaping of the scale advantages of the large European market with its
350 million consumers, is not, at least in the area of manufactured goods, entering into its decreasing marginal return phase and is now not in need of new policy reflection and possible policy action.

In this paper I briefly discuss some of the main interactions between countries' growth dynamics and firms' innovative and technological capabilities, as they have evolved in this increasingly global environment and the challenges they raise with respect to national technology support policies. The analysis points to the complexity and historically grown importance of the science and technology institutional framework, what has been described as the national system of innovation (Freeman, 1987, Lundvall, 1992, Nelson, 1992). The effectiveness of such national institutional framework is clearly being challenged by the increasingly global behaviour of private firms; it is, however, also become challenged by the growing role and importance of regional conditions, including regional policy making, for creating and maintaining locational advantage.

The voluminous literature points to the variety of conditions both with respect to the nature of the new technology (radical, incremental) and the different sectors (science-based, process-oriented, etc.) likely to exist and their normative, national policy implications. This variety of conditions is not just reflected in an impressive variety of national institutional set-ups governing the creation and diffusion of innovation and technological capabilities, it also highlights the difficulties in identifying "best practice" policy. Hence, despite the obvious advantages to international co-operation and the identification of some "global level playing field" in this area, the scope and nature of policy competition versus harmonisation remains an issue open to debate.

In the final section I then turn to some of the new European economic integration policy challenges. These are admittedly somewhat short in practical content. At this stage the aim is really only to wet the policy maker's appetite.

2. "Global" Firms, Technological Capabilities and Countries' Growth Dynamics

The structural change pressures described above have led to a shift in the form of globalisation. Apart from the globalisation induced by the rapid international financial liberalisation, not discussed here, globalisation appears indeed no longer simply a question of "globalising" sales with its accompanying services such as marketing, distribution and after-sales service, but involves to a greater extent production, including production of component suppliers; investment, including intangible investment; merger acquisitions, partnerships, so-called "strategic" alliances; etc.
As discussed in many recent contributions in the international business literature, the aims of firms is increasingly directed towards global presence strategies which find a balance between reaping some of the scale advantages of global markets increasingly associated with intangibles (research, communication, marketing, logistics, management), yet exploiting also the often geographically determined diversity of consumers and production factors. The large multinational firm's organisational, as well as production technology will give it the necessary flexibility to confront this diversity. The decentralisation of its production units and even new product development, together with a diversification of sub-contractors, will enable it to take full advantage of this diversity. This explains a.o. the apparent contradictory "glocalisation" trend based on physical presence under what appears sometimes rather "autarchic" production conditions in the various large trade blocks (EU, NAFTA, ASEAN, China) with often highly differentiated "local" products, yet increasing global exchange of some of the core technological competencies of the firm, including the establishment of alliances, networking with other firms and other forms of international exchange of relevant information.

As made explicit in the term "multi-domestic" firm, the actual location of the firm's plant will depend heavily on local environment factors. Whereas the locational choice will often depend on the availability of local skills, infrastructure and access to knowledge, the firm itself will of course contribute to the long-term growth and availability of human resources, access to knowledge, local suppliers' know-how and networks. These often scarce and sometimes geographically "fixed" factors contribute to create the increasing return growth features of long term development.

These apparently opposing trends raise a number of important policy issues, not in the least with respect to the level at which policy should be implemented so as to be most effective. It is obvious that global or multi-domestic firms question increasingly the meaning of much national policies. In many cases such firms might behave in an as good "citizenship" manner than national firms, in other cases apparently not. It is difficult if not impossible for governments to draw lines here: the current OECD guidelines with respect to foreign direct investment provide little more than a voluntary "standard" of good international behaviour.

In the late 1980's, proposals were made to use, for national policy purposes, some notion of the "degree of globalisation" of firms, measured e.g. in terms of the composition of boards, the international breakdown of key management posts, of research laboratories and more generally physical and intangible investment. Given the ongoing debate in the literature on the extent and nature of "globalisation", such measure could be useful in assessing the nature of mergers and acquisitions particularly in areas which had been the subject of national industrial and technology support: if a

---

firm, with a foreign headquarters, had a low degree of globalisation, the integration of a
national firm into the former could be described in terms of it coming under foreign
control. By contrast a national firm with a low degree of globalisation becoming part of
a more global company, might provide it with new, global market opportunities.

But it will also be obvious from the description above that such measures are likely to
become quickly eroded by the many practical ways in which such explicit expressions
of globalisation can become faked or hidden. There is an obvious need for a more
international policy response. The need for some international rules of the game, in
particular with respect to competition policy arises precisely from national differences
in competition policy and the absence of an international regime for overseeing
transnational investment, acquisitions and mergers. At the risk of increasingly
becoming a source of international conflict in the few areas of international
harmonisation and institutional authority (such as trade policy and WTO), such
international policy should aim at counter-acting the emergence of world wide cartels
between global firms; reduce the divergence between national competition policies,
and monitor more closely the degree and extent of globalisation of such firms.

At the same time, and maybe paradoxically, the multi-domestic firm also questions the
relevance of national policy making from a regional, local perspective. As indicated
above, multi-domestic firms will both take advantage and contribute to the emergence
of locational infrastructural advantage. Of particular importance in this context is the
infrastructure linked to the innovation system. It is this infrastructure which provides
the major incentives for private investment in intangible resources, including human
resources; for linking up with public research institutes (possibly assisting in setting up
specialised centres of excellence, training partnerships, technical information agencies,
etc.), that might lead to a local interactive learning cluster and possibly even the
establishment by such firms of a global so-called "competence centre" in a particular
product or market niche.

The effective exploitation as well as the contribution of multi-domestic firms to such
locally created advantages raises again a number of important policy issues. At the site
level this might often translate into rivalries concerning the services offered to firms
and there will in effect be no limit to the bidding. As a result, there is, as is evident
from European experience, a multiplicity of new growth sites, science parks or
technopoli, being set up; none developing the necessary size to reach some of the
essential externalities and increasing returns growth features and all increasing the cost
of communicating and interacting.

The desire of local authorities to attract at the local level such high tech learning centres
illustrates to some extent the further erosion and relevance of national policy making in
this area. Nowhere is this becoming more obvious than in cross-border peripheral
regions where the national central interests are unlikely to coincide with local interest.
In my own region (South-Limburg in The Netherlands) e.g., national policy and
priority setting e.g. with respect to infrastructure or foreign investment attraction, is increasingly perceived as a form of "randstaddemocratie." While the intensification of global competition has made the role of regional conditions, including regional policy, more important, the individual citizen is increasingly identifying such local conditions - the quality of the environment, children's education, availability of social and cultural services - as the essential features of his welfare and quality of life. Hence the growing political pressure for decentralisation or devolution of policy responsibilities, including the necessary financial means, away from the national centre towards local communities (regions, cities, etc.). With the erosion in national government responsibilities, citizens themselves appear increasingly to request that a larger part of their national tax payments contribute directly to the improvement of their local living conditions. The effectiveness of such policies can then also be assessed in a much more direct and immediate way.


From a national policy perspective, economic and social progress can be said to depend on widespread capacity to compete in increasingly global markets and the dynamic turnover of winners and losers as efficiency in exploiting new economic opportunity shifts between enterprises and nations. This has been to some extent the bread and butter of national economic policy. The competitiveness question is whether technology is today such an important element in the process of structural change and globalisation that differences in the capacity to bring technology into the market are a matter of priority concern for enterprises and governments? And whether it is simply a matter of enterprise strategies and capabilities, or whether public authorities need to intervene to ensure that their enterprises can compete in the international market?

The old debate about different North American, European and Asian capabilities can be seen in this light. It is not so much an issue of access to technology but to the capacity to innovate and to diffuse technology. These capacities depend then on a wide range of conditions and institutions, some of which might be strongly influenced by government policy, although the essential feature of success is likely to be entrepreneurship, involving technology, management and financial innovation.

Given the great variety of institutional set-ups, can one identify some regularities across industries and across countries? In order to provide some tentative answers, it is essential, as has been pointed out by many economists in the (neo-)Schumpeterian tradition (from Dosi, 1984 to Howitt, 1996) to distinguish between "normal" technical

---

2 A term used by the chairman of the local Chamber of Commerce.
progress which proceeds along the trajectories defined by an established paradigm and those "extraordinary" technological advances which relate to the emergence of radically new paradigms.

As regards the latter, it is generally acknowledged that market processes are generally rather weak in directing the emergence and selection of these radical technological discontinuities. When the process of innovation is highly exploratory, its direct responsiveness to economic signals is rather loose and the linkages with strictly scientific knowledge have been quite strong. In such case non-market organisations appear to have played an important role, providing often the necessary conditions for new scientific developments and performing as ex-ante selectors of the explored technological paradigm within a much wider set of potential ones. One may remember in this context the case of the semiconductor and computer technologies and the influence of both military agencies and big electrical corporations in the early days of the development of these radically new technologies. Somewhat similar cases can be found in the early developments of synthetic chemistry, or more recently the development of bioengineering, new materials or even the Internet.

In general, the features of the process of search and selection of new technological paradigms are such that the institutional and scientific context and existing public policy are fundamental in so far as they affect (a) the bridging mechanisms between pure science and technological developments, (b) the criteria and capabilities of search by the economic agents, and (c) the constraints, incentives and uncertainty facing would-be innovators.

The counterpart of this proposition at the international level is that, when new technologies emerge, the relative success of the various countries or regions in the world will depend on the successful matching between each country's scientific context and technological capabilities; the nature of their "bridging institutions"; economic conditions (relative prices, nature and size of the markets, availability/scarcity of raw materials, etc.); and the nature of the dominant rules of behaviour, strategies and forms of organisation of the economic actors. All these variables are also but to different degrees affected by public policies, either directly (e.g. procurement policies or R & D subsidies which obviously influence the economic signals facing individual firms), or indirectly (e.g. through the influence of the educational system upon scientific and technological capabilities, the effect of taxation policies on the emergence of new firms, etc.).

As regards "normal" technical progress, the variety in the organisational patterns of innovative activities is of course much greater and makes it difficult to draw some general trends. Two have been highlighted in the literature.

---

3 For more details see Freeman and Soete, 1997.
First, there is a technology and country specificity of the balance between what is co-
ordinated and organised through the visible hand of corporate structures and what is
left to the invisible hand of the markets (Pavitt, 1984, Tidd et al., 1997). In science-
based industries for instance, whenever technological paradigms become established,
the process of Schumpeterian competition tends to produce rather big oligopolies
which also internalise considerable innovative capabilities (e.g. computers,
semiconductors, synthetic chemicals, software, content, etc.). In production intensive
industries in somewhat similar fashion, the "visible hand" of big corporations puts
the organisation of technological advances at the core of their strategic behaviour (e.g.
automobiles, most other consumer durables, etc.). In the case of specialised suppliers,
technological advances are generally organised through the matching between the own
specific technological skills and intense (often arm-length and untraded) relationships
with users or component producers. Finally, only in supplier dominated sectors do the
mechanisms of organisation and co-ordination of technological progress appear to
retain some significant similarities with the classical view of the "invisible hand":
technological advances are generally available on the market in the form of new capital
goods, there are many firms generally with weak strategic interactions, etc.

Second, there are significant intersectoral differences in the balance between public
institutions and private organisations in the process of innovation (Mansfield, 1995).
Some sectors rely on an endogenous process of technological advance while others
depend heavily on public sources of innovation. In Dosi, Pavitt and Soete (1990), we
suggested the following empirical generalisation: the higher the role of the visible hand
of oligopolistic organisations, the lower the requirement for strictly public institutions
in the processes of economic co-ordination and technological advance. And vice versa:
the nearer one activity is to "pure competition", the higher its need for strictly
institutional forms of organisation of its "externalities" and technological advances.
Agriculture is a well-known case in point: historically, a significant part of its
technological advance, at least in the US, has been provided by government sponsored
research. By contrast, many oligopoly dominated manufacturing sectors have produced
endogenously a good part of their "normal" technological advance, and have appeared
to coordinate their price/quantity adjustments rather well.

The foregoing discussion suggests in other words that in the post-war economic
development non-market agencies on the one hand have been a major actor in the
emergence of new technological paradigms, whereas on the other hand the conditions
of technological opportunity and appropriability have been such as to guarantee rather
sustained rates of "normal" technical progress endogenously generated through
manufacturing oligopolistic corporations. It is important to note though that every
government, has intervened, in forms and degrees that depended on the sectors and
countries, so as to strengthen the incentives to innovate.
This is also the case with respect to the European economic integration process, discussed in the next section. Until the early 1980s, science and technology policy in Europe was dominated by national programmes. The role of the European Commission in R&D was limited to nuclear research supported by the Euratom Treaty of 1957. After the early 1980s various research policies were developed and again given civil legal support by Title VI of the 1987 Single European Act. The focus of most of these research policies, developed, implemented and monitored by the European Commission was, as in other areas, primarily directed towards programmes to overcome the fragmented, national structure of European industry and markets. One of the main purposes of these policies was to permit economies of scale. However, no European "national system of innovation" emerged as yet (Caracostas and Soete, 1996); on the contrary the European institutions were often simply added to existing national and regional institutions and instruments.

Confronted with this variety of organisations, degrees and forms of public intervention, can one make any normative statement linking institutional forms, degrees of public involvement and economic performance which might be of relevance to a discussion of future growth and developments paths particularly within the framework of the European integration process?

In a rapidly changing complex world with not just a gradual planned process of European integration but also of increased globalisation, one can hardly reach definite conclusions on "optimal" set-ups. Leaving for the moment the particular issue of European integration for a separate discussion in the next section, one can, at best, define some trade-offs involved in each national organisational configuration. A good example of such a trade-off analysis was the "Challenging Neighbours: Rethinking German and Dutch Economic Institutions" project of the Netherlands Bureau for Economic Policy Analysis, a project started a couple of years ago from the perspective that Dutch institutions could learn a lot from what were perceived as "best" or at least "better" practice German institutions, but once finished providing more the opposite inside to policy makers in both countries.

Within the context of technology policy three such trade-offs appear essential. First, at the very essence of the innovative process undertaken by profit motivated agents there is necessarily some sort of "market failure" in a static sense. Varying degrees of appropriability are the necessary incentive to innovate, but imply at the same time "excess profits" and "sub-optimal" allocation of resources. Best practice techniques and better products diffuse throughout the (national and international) economy after a lapse of time and the gap between the technological frontier and the infra-marginal techniques also measures to some extent the static inefficiency of any pattern of allocation of resources.

The asymmetries in capabilities are a direct consequence of the partly appropriable nature of technological advances. This feature also corresponds to an asymmetric
pattern of economic signals so that high technological opportunity, associated with a high degree of appropriability of technological innovation may well perform as a powerful incentive to innovate for a company which is at or near the technological frontier. At the same time such technological opportunities will be a powerful negative signal (an entry barrier) for a company with relatively lower technological capability. The current development of the software industry and its geographical concentration in the US (Steinmueller, 1996) following the increasingly successful enforcement of intellectual property world wide appears a good case in point.

A second normative issue concerns the ways each society builds its technological capabilities and appears to have translated these into innovative entrepreneurial behaviour. Again, one observes a wide international variance in both the "supply of entrepreneurship" and the ways it is institutionally formed. The difference between the "organised entrepreneurship" of Japanese firms and the self-made-man archetype in the US is a typical example; or between the formalised "production" of technological/managerial capabilities in France (the Ecole Polytechnique, etc.) and the anarchic Italian pattern. Many historians have provided suggestive descriptions of the growth of American technocracy, which highlighted the enormous changes which the contemporary economies underwent since the times of the "classical" protestant capitalist studied by Weber in Protestant Ethic and the Spirit of Capitalism. Yet more international studies on the mechanisms of formation of managers/technocrats/entrepreneurs would be needed in order to understand the social supply in the various countries of this crucial factor in innovative activities. The EU policy call for more entrepreneurship (one of the recommendations of the Jobs summit in Luxembourg, EU 1997) should be understood in this context.

A third normative issue concerns the possible trade-off between allocative efficiency and flexibility, or, more generally speaking, between "fitness" to a particular state-of-the-world and capability of coping with other (and unpredictable) environments. One can detect here an analogy with biological evolution. Extreme optimisation within a given environment might well imply a "dinosaur syndrome" and inflexibility to change. Conversely, high adaptability is likely to involve waste, "slack" and sub-optimal use of resources.

There is little doubt that the current diffusion of new information and communication technologies has substantially shifted the trade-offs between flexibility and economies of scale, increasing flexibility, lowering the minimum throughputs which allow for automated processes and shortening product life cycles. There is today a much more significant requirement for variety in capabilities, behavioural rules, and allocative processes which might allow for greater adaptability to uncertainty and change. One of the greatest strengths of capitalism has been its capability of continuously producing redundant resources, of exploring an "excessive" number of technological trajectories, of producing a wasteful number of technological/organisational "genotypes". In a sense and contrary to the old general equilibrium notion, if there is some advantage of
contemporary market economies as compared to centrally-planned ones, it is probably the fact that the former do precisely not achieve an equilibrium of the Arrow-Debreu kind but are highly imperfect and always characterised by allocative inefficiencies and technological slacks.

The policy questions are consequently - and not surprisingly - rather complex. How can a sufficient "variety" be continuously generated? On the other hand, how can the potential of new technologies be better realised? To what extent is the realisation of such potential primarily depended on individual entrepreneurship and risk taking? Is the current move towards a more stringent and world wide enforceable appropriation regime (in patent law, copyrights, authors rights) slowing down international technology diffusion and raising technology related monopoly rents? These issues become even more entangled within the framework of the slow, painstaking economic integration process in Europe within an increasingly global "planet" environment of the 21st Century.

4. European Economic Integration: from a Single Market to Diversified Technological Capabilities

Following the analysis presented in Soete (1997), the characteristics of past European economic integration can be summarised along the following three lines.\(^4\)

First and foremost, economic integration has been inspired by the obvious desire to reap the scale advantages of a large, "harmonised" internal market. In manufacturing, this process of intra-European integration has more or less come to an end. Much of the European growth and employment boom of the late 1980's, as well as the wave of foreign direct investment (FDI) inflow into the EU, can be directly associated with the expected growth opportunities of the then forthcoming Single Market. Since then, and somewhat paradoxically in terms of the 1992 timing of the formal Single Market creation process, extra-European pressures for restructuring in manufacturing have taken over and increased rapidly, e.g. through the opening-up of Eastern Europe and the rapid export-led growth industrialisation pattern of many Asian economies.

In services by contrast, the intra-European economic integration process is still in its very first initial stages. The much awaited upcoming liberalisation of the telecommunications sector across most member countries will be the first clear case of the opening-up of a major service facility. Most other service sectors (public utilities, transport) are still relatively closed economic sectors. The difficulties and slowness in opening-up

\(^4\) In contrast to most current debates on economic integration I do not address the issue here of monetary union.
such service sectors within the EU contrast sharply with the ease and speed of the international opening up to international trade and competition in the WTO and in many of the new entrants. While the Commission as an institution is still playing a major role in such world-wide trade liberalisation discussions, the extra-EU pressures for rapid liberalisation and world wide integration are in the process of taking over the carefully planned but slow intra-European liberalisation and integration process.

An interesting question which, in my view at least, has not received enough attention in the economic literature is the trade diversion versus trade creation impact of Europe's economic integration process as it has taken place over the last two decades. An interesting hypothesis, which I already suggested a couple of years ago when analysing the poor performance of the European electronics industry, is that trade diversion has indeed dominated some of the most technology-intensive sectors. European firms as well as the subsidiaries of foreign firms have been "diverted" towards the easy European member countries' markets, and have foregone the, from a competitive and new product point of view, tougher US and Japanese markets. The result has been an increasingly poor performance in non-EU markets in some of the most dynamic, growing sectors. The wave of foreign direct investment in the various EU-member countries, starting already in the 60s and 70s, and accelerating in the 80s in view of the forthcoming "Single Market", has generally been of the "tariff-jumping" kind, aiming at presence in the world's largest consumer market and hoping to reap the benefits of such harmonised internal market, did in effect amount to some kind of import substitution industrialisation growth process. In doing so they (the US, Japan) could simply transfer to Europe the core competence and knowledge acquired at home of producing for large standardised markets.

From this perspective the actual economic integration process as it proceed in Europe could well be compared with a gradual, unwarranted import substitution industrialisation growth process whereby the overall extra European competitiveness particularly in high tech sectors became gradually undermined. It is what could be called the "fortress paradox" of European integration: as Europe thought it would become better able to defend itself through the creation of its own large internal market, it became weaker because it left the most dynamic external markets to its competitors.

Second, to offset the possible negative effects of increased specialisation on trends towards uneven growth and regional divergence -- something many so-called new trade economists have been pointing to --, the European economic integration process has been accompanied by a clear policy of financial transfer from rich to poor countries. Hence, "cohesion" became the major second policy aim and was expressed through the creation of European Structural and Social Funds that aimed at developing better infrastructural provisions in peripheral and less favoured regions. In some of these countries/regions such funds became the most important source of public investment.
In prioritising "cohesion", the European economic union became gradually characterised by an economically integrated zone with free movement of goods, consumers and financial flows, but not of labour. Rather the contrary, despite the desire to also achieve the free movement of labour, the extent of intra-European migration declined with each new enlargement of the union. While such limited intra-European labour migration fit the objectives of European cohesion, i.e. to transfer financial resources to less favoured regions and create employment opportunities rather than have employment migrate to richer regions, the lack of intra-European migration reduced in a significant way possible adjustments in the labour market at the European level, and in particular possible adjustments to shifts in structural change, such as globalisation. Only in a limited number of high skilled areas did mobility increase in any significant way, reinforcing rather than reducing intra-European growth divergence.

It is what could be called the "migration paradox" of European integration: as goods and capital flows became more mobile across Europe, labour became more immobile, further segmenting labour markets at the national level.

Third, the economic integration process was accompanied by a set of specific European industrial and technological policies, fostering intra-European co-operation in the field of pre-competitive R&D. university researchers, students, and various support programmes for particular technology fields: the so-called framework programmes and other related technological support programmes. Interestingly, these policies that aimed at strengthening European competitiveness in high tech sectors have probably been most successful in some of the "big science" RTD areas, where essential scale economies could indeed be achieved. In most other areas though, the EU resources available when compared to national resources were too limited to make any impact in shifting or redirecting countries' own national priorities in supporting investment in knowledge accumulation (both education, training and research). At the same time, the international accessibility to codified knowledge increased dramatically through the use of ICTs. While support for intra-European research collaboration might still be welcome in many cases, the essential research collaboration will often be of a much more global nature, going well beyond the European borders. Here too, there could be a case of knowledge acquisition "diversion", the intra-European exchange having taken place at the expense of extra-European exchange. In the more basic research areas where open international access has always existed, such "diversion" might have ultimately had little impact; in the more applied business research areas, it might well have been one of the factors behind the dramatic growth in so-called "strategic alliances" between large European, US and Japanese firms trying to source knowledge more globally while at the same time benefiting from various national or supra-national support programmes.
It is what could be called the "European paradox": as Europe invested in intra-European research, in the collaboration and exchange of scientific knowledge among European scientists, or even in the technological strengthening of the competitive potential of European firms, the advantages of such geographically "bounded" collaboration have become marginal, given the dramatically increased opportunities for the fast exchange of information and co-operation.

In listing these, for the unwarmed reader, somewhat peculiar characteristics of Europe's economic integration process, I realise of course that I have painted a rather one-sided picture of what I consider to have been some negative side effects of the process of economic integration as it has taken place in Europe over the last ten to twenty years. My main point will hopefully be clear: the "diversion" effects accompanying intense integration processes such as the forming of the European Union, can take many forms. In the case of Europe, the simple fact that this integration process was accompanied by a much faster "external" world economic integration process might well have led to a systematic diversion away from some of the most significant new trade opportunities linked to globalisation.

5. Conclusions

The new challenges brought about by globalisation imply to some extent the need for policies which focus more on the peculiar characteristics of the enormous variety in European development, and try to build upon these to develop new dynamic growth opportunities. It means in the first instance acknowledging that the reaping of industrial scale advantages and the need for regulatory harmonisation which have characterised European economic integration so far have to some extent reached their natural limits and can be further pursued within the broader world economic context. In a more general sense it also means recognising that there has been an over-preoccupation in Europe with labour efficiency improvements and process-oriented technological change, reflected e.g. at the macro-level in a systematically lower capital labour substitution elasticity than in the US or Japan. While there is little doubt that the achievement of scale advantages will continue to be one of the major challenges in many new sectors, such as new information services and products heavily dependent on scale economies, there is also little doubt that European competitiveness and extra-European growth opportunities will have to depend on something more, something specific to Europe.

Indeed, the economies of scale in many information goods are often even more dramatic and significant than in the case of manufactured goods. The lack of a harmonised European market in many basic services sectors is a major cost factor and has undoubtedly an overall negative impact on European competitiveness in many other sectors. In information services the fragmented European market is undoubtedly a
major barrier not just for the rapid diffusion of information services but also for the emergence of a competitive European multi-media industry. But even in this case it will be obvious that policies which would simply aim at reaping the advantages of scale economies would in the end undermine some of the essence itself of European competitiveness based on its widespread cultural, educational and social diversity. The guiding policy principle can to some extent no longer be that the EU contains one of the world's largest consumer markets of 350 million, but that the EU contains one of the most culturally, educationally and socially diverse markets with, as David Putnam put it "a potential of 350 million producers". From this perspective, the current world economic integration process signals the need for Europe to develop a new, different economic integration process. This process no longer puts the sole emphasis on the need for the standardisation and harmonisation of products and services, access to "open" infrastructure, and improved transparency of markets across Europe. Instead it recognises and nurtures the many differences in tastes, cultures and talents.

The extent to which such new policies, reflecting in many ways the desire for more decentralised, nearer to citizen decision making both in business and government, can indeed enhance this "productive" potential of Europe's enormous variety into competitive advantage is likely to become the central question that will have to be addressed in the coming years. It relates to the degree to which the size advantage of the more than 350 million inhabitants is not only translated into the satisfaction of common material and information needs at lower prices, but also into a productive creativity potential and communication and exchange needs of diversity and variety. It is in this sense that location of production does indeed matter, even in a world which increasingly looks like a village.

References


