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Conference Paper

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42nd Congress of the European Regional Science Association: "From Industry to Advanced Services - Perspectives of European Metropolitan Regions", August 27th - 31st, 2002, Dortmund, Germany

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Camagni, Roberto (2002) : On the concept of territorial competitiveness: sound or misleading?, 42nd Congress of the European Regional Science Association: "From Industry to Advanced Services - Perspectives of European Metropolitan Regions", August 27th - 31st, 2002, Dortmund, Germany, European Regional Science Association (ERSA), Louvain-la-Neuve

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**On the concept of territorial competitiveness:
sound or misleading?**

by Roberto Camagni

Paper presented at the ERSA Conference, Dortmund, august 2002

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ABSTRACT

In a globalising economy, territories and not just firms increasingly find themselves in competition with each other. In fact, differently from the case of countries, cities and regions compete, on the international market for goods and production factors, on the basis of an *absolute* advantage principle, and not of a *comparative* advantage principle; this means that no efficient, automatic mechanism – like currency devaluation or prompt flexibility of wages and prices - may grant each territory some role in the international division of labour, whatever its relative performance.

Competitiveness of territories emerges as a central issue, in order to secure employment stability, benefits from external integration, continuing growth of local wellbeing and wealth. The arguments put forward by Paul Krugman, defining the concept of competitiveness wrong and misleading, cannot be accepted in a territorial – regional and urban – context.

On the concept of territorial competitiveness: sound or misleading?¹

Roberto Camagni

1. Introduction

In an era of globalisation, the issue of territorial competitiveness is of increasingly central importance for regional development policies. This paper aims to deal directly with the issue from a theoretical viewpoint, in particular examining two related questions more thoroughly: the question of the soundness of the concept of territorial competitiveness itself in terms of economic theory and the question of the new foundations on which this competitiveness is based, using a cognitive-evolutionary type approach.

I feel this to a large extent as a counter-argument, due to the fact that the concept of competitiveness, referring to the national level, has been strongly challenged by a well-known authority on international economics, Paul Krugman (1998), who has been dedicating an increasing amount of attention to the issue of spatial development. His sceptical and provocative comments have perplexed experts in the field of regional economics as to their validity in more restricted contexts than the national context (*International Regional Science Review*, 1996; *Urban Studies*, 1999) but they have never been explicitly and analytically evaluated in a critical way; so it appears right to state that the theoretical legitimacy of the concept still remains uncertain.

The argument proposed here asserts that the concept of territorial competitiveness is theoretically sound, considering not only the role that the territory plays in providing competitive “environmental” tools to individual companies, but especially the role that it plays in the processes of knowledge accumulation and in the development of interpretative codes, models of co-operation and decisions on which the innovative progress of local companies is based. In particular, a primary role is played by processes of “collective learning” (Camagni, 1991a; Capello, 1999; Keeble, Wilkinson, 1999): these processes result in a “socialised” growth of knowledge, which is embedded not only in the internal culture of individual companies but, particularly, in the local labour market (or, as used to be said in the past, in the local industrial atmosphere).

This conclusion is supported by different aspects of the economic concept of “territory”. It is at the same time:

¹ This paper builds upon the presentation made by the author at the High Level Seminar on “Spatial development policies and territorial governance in an era of globalisation and localisation”, organised by the OECD and the National Land Agency (Japan), Paris, 10-11 april 2000

- a system of localised technological externalities, i.e. an ensemble of material and immaterial factors which, thanks to proximity and the resulting reduction in transaction costs involved, can also become pecuniary externalities;
- a system of economic and social relations, which make up the *relational capital* (Camagni, 1999) or the *social capital* (Putnam, 1993; World Bank, 2001) of a certain geographic space, and
- a system of local *governance*, which brings together a collectivity, an ensemble of private actors and a system of local public administrations.

The second argument proposed regards the fact that some laws that govern the economics of inter-national trade do not operate at the sub-national level, and this once again makes the concept of territorial competitiveness relevant. I refer in particular to the Ricardian principle of comparative advantage, which assigns a role to every country in the international division of labour, whatever may be the level of efficiency and of competitiveness of its productive sectors. I maintain, however, that at the more finely detailed territorial level - and therefore in economies open not only to trade but also to the movement of factors – the principle that governs production, specialisation and trade is an absolute advantage principle; if a certain level or rate of growth in competitiveness is not assured, the fate of that economy may be crisis, depopulation and desertification.

Therefore, it does not seem unreasonable to claim that territories compete with one another, both to attract direct foreign (or external) investment and in defining a productive role for themselves within the international division of labour, without any automatic assurance of such a role. Both attractiveness and local competitiveness depend on similar common factors, which are not only found in physical externalities, accessibility or environmental quality, but also in relational capital and the learning capacity expressed by the territory. It is obvious that individual companies are the entities that compete and act in the international market, and that their innovativeness can never be separated from the presence of a Schumpeterian entrepreneur; but these companies and these entrepreneurs are to a large extent generated by the local context and, in order for them to govern and live with uncertainty, their decision making processes are firmly based on socialised processes and/or explicit collective action .

2. Globalisation and localisation

This theoretical reflection is strictly tied with the debate on the spatial effects of the globalisation process, intended as the increasing planetary integration of markets for goods and services, markets of such production factors as technologies and information and markets of location sites for economic activities (Scott, 2001; Camagni, 2001a).

In this field, two opposite and extreme positions confront each other. On the one side, the pessimistic one, merging (and sometimes adding up) different and disparate concerns, from the survival of local cultures to the fear about the economic and political power of multinational corporations, from the possibility of environmental dumping to the challenge of emerging countries to employment levels in rich countries. On the other side, the optimistic, “don’t worry” position, claiming that open markets have

sufficient self-adjusting mechanisms to ensure local wellbeing and that the law of comparative advantage will assure each country a role in the international division of labour, no matter which could be its international competitiveness.

On the political side, what has been called “localisation”, namely “the growing desire of people for a greater say in their government” (World Bank, 1999) through higher levels and effective ways of participation in decision-making (OECD, 1999a) derives exactly from a growing feeling of insecurity by citizens about the capability of governments to take care of them and rightly interpret their needs. In fact, globalisation hits in many respects their lives, destroying the shelters once provided by physical space (local captive markets), by local specificities (consumption and production habits), local organisational models, “patriotism” of local firms. On the other hand, national governments increasingly give up policy tools that in the past proved effective, from monetary policies (attributed to supra-national authorities, managing wide - optimal? - currency areas), to fiscal policies (due to tight budget constraints), from exchange rate policies (in monetary unions) to many industrial policies (replaced by common supra-national regulations and trade agreements). Concerns are real, at least because they in fact exist, and are rational under many respects, as it will be shown later in the paper; demands for greater participation and regional federalism are also perfectly correct, the danger residing in possible policy outcomes totally oriented towards defensive attitudes, separatism and closure - the regional equivalent of national protectionism.

On the purely economic side, one may judge opportunities and threats generated by globalisation as equivalent, balanced and therefore neutral in terms of spatial effects. But this judgement changes radically if one considers some new, qualitative aspects of the present international economic picture: the increasing importance of knowledge factors, of immaterial elements linked to culture, taste and creativity in present economic processes and the characteristics of what could be called the production function of these elements and the ways of their accumulation. In fact, these immaterial elements develop through slow learning processes, fed with information, interaction, long term investments in research and education (Amin, Wilkinson, 1999; Keeble, Wilkinson, 2000). Like all learning processes, they are inherently localised and cumulative, as they embed in human capital, interpersonal networks, specialised and highly skilled local labour markets and local innovative *milieux* (Camagni, 1991b; Lundvall, Johnson, 1994; Asheim, 1996).

When analysed in an international perspective, technical progress ceases to be a public good, perfectly mobile and accessible to everybody; on the contrary, it circulates rapidly only inside some restricted networks, as it requires high quality immaterial assets in order to be properly adopted and its profits appropriated (Savy, Veltz, 1995, Introduction). “While firms can access an increasing stock of codified knowledge, they require greater investments in tacit knowledge, such as human capital, management and organisation, to derive tangible benefits from technological change and innovation. (...) Firms may now benefit less from imitation and ‘free’ technology spillovers, as they require substantial investments in innovation and in co-operation and networking to access the stock of global knowledge” (OECD, 1999b, p. 3).

We see here a complex dialectics and confrontation between the hyper-mobility of some production factors and the territorial “anchorage” of some others, which act as crucial location factors for the more advanced production processes. The likely result is the cumulative strengthening of the centripetal forces of growth (scale and scope economies, all sorts of increasing returns) and the centrifugal forces of territorial exclusion and decline. It is perfectly true that technologies and capital goods may be marketed and utilised almost everywhere (better: they *have* to be used everywhere, as they impose internationally shared standards in product and process quality) and that telecommunication networks and facilities are (more or less) ubiquitous, but the skills and relational capital required for their proper or innovative use are by no means available everywhere (Graham, 1999).

Endowment with human, social and relational capital emerge as the sources of the competitiveness of territories, necessary preconditions to secure employment stability, benefits from external integration, continuing growth of local wellbeing and wealth. But a number of theoretical and operational problems stem from this issue:

- the actual necessity and usefulness of competitiveness policies,
- the possible targets and tools of such policies,
- the possible emergence of zero-sum games and beggar-my-neighbour attitudes among territories.

3. Territorial competitiveness: “obsession” or sound concern?

For sure globalisation is raising the competitive climate within which firms are confronting each other. This is likely to cause important shake-ups in industries and on territories, as strong selection processes are being launched, jeopardising existing and long lasting equilibria (both in industries, in terms of firm structure, and on territories, in terms of firm/society relationships). Does this allow us to affirm that territories do actually compete with each other, trying to attract new firms or helping existing ones to stand transformations in the general economic environment, to survive and prosper? Are we allowed to think, in development policy terms, about enhancing competitiveness of territories?

On this subject, an important debate has been carried out in the last half-decade, thanks to the provocative argument put forward by Paul Krugman, a debate which was started considering the case of nations, but recently enlarged to regional and territorial entities². Given the wide differentiation in scientific backgrounds, logics and languages of the participants (international economists, business administration experts, regional scientists) no surprise if the result of that debate was, in my opinion, strikingly inconclusive, the different arguments being often added and juxtaposed, never really confuted, the different territorial levels being

² This last part of the debate was hosted by the *International Regional Science Review*, n. 1-2, 1996 and by *Urban Studies*, n. 5-6, 1999. Krugman has recently collected his interventions on the subject in (Krugman, 1998).

always mixed up, as if the same economic “laws” could apply equally for cities, regions and nations³.

The question at stake is not at all abstract and removed from present issues concerning spatial development: from the answer to it derives the economic rationale for development policies at the local level, addressed to enhancing competitiveness and attractiveness of territories, their capability of meeting the demand of both citizens and firms in terms of wellbeing and general efficiency.

I believe consequently that a thorough reflection is worth, underlining the good things following from each position, but considering the entire issue through a unique and sound theoretical framework.

Krugman’s provocative view is widely known. He contests the growing “obsession” with international competitiveness, denying, on both theoretical and empirical grounds, that “a country’s economic fortunes are largely determined by its success on world markets” (Krugman, 1998, p. 5). He holds that:

- “countries do not compete with each other the way corporations do”; they “do not go out of business” (p. 6);
- “while they sell products that compete with each other, are also each other’s main export markets and each other’s main supplier of useful imports” (p. 9);
- the main role of exports is to provide the means to pay for imports, which represent the true element that enhances local wellbeing as it allows the availability of goods at lower prices with respect to local production;
- following Ricardo’s textbook model in international trade theory, “a country will always find a range of goods in which it has a ‘comparative advantage’, even if there are no goods in which it has an ‘absolute advantage’” (ibid., p. 91).

Therefore, he argues, not only the competitiveness goal proves “flatly wrong”, but also “dangerously misleading”, as, whenever national authorities try to intervene in affecting the competitive advantage of their territories, they end up with a sort of neo-mercantilism, detrimental to the fair allocation of resources which should be based on objective elements, neutrally evaluated by the market. The traditional “infant industry” argument for justifying (temporary) protectionist policies and the more modern “strategic trade policies”, which justify export subsidies and temporary tariffs in order to let local industries “create their own comparative advantage, through a process of positive feed back”, including increasing returns and external economies (technological and pecuniary) (ibid., p. 96-97), are considered and accepted, as parts themselves of Krugman’s recent contribution to the new trade theory, but with “strong warning against overuse” (p. 99).

I will take up these and others among Krugman’s arguments, underlining what is acceptable and fruitful in the construction of a theoretically sound development strategy for territories and what is not.

³ The editors of the Urban Studies issue affirm: “It will be clear that the authors contributing to this Review broadly believe that cities and other places compete with one another. (...) The consequences for national economies remain uncertain”. (Lever, Turok, 1999, p. 792).

The theoretical situation is filled with paradoxes, which partly depend on the viewpoint adopted (macroeconomic or microeconomic, static or dynamic), partly on the assumptions and hypotheses of the theoretical reference models (for example: full employment or non-full employment), partly on the complexity and multidimensionality of the concept of competitiveness itself⁴. Consider, for example, the most striking paradox: competitiveness in a macroeconomic statistical sense is measured by the ratio between the general level of import prices and the level of export prices expressed in a common currency; competitiveness therefore increases when the denominator is reduced (due to a devaluation or a reduction in export prices) and tends to generate growth in exports (in volume) and employment. But when you wish to measure the advantage of international trade for a country in terms of real income, you observe the opposite relationship (export prices on import prices), i.e. the *terms-of-trade* and in this case a reduction of export prices, and therefore an increase in competitiveness, result in a reduction of welfare⁵.

However, the paradox can be resolved by turning to a different measure of competitiveness: if it is true that “it is better to sell with prices rising rather than falling” and that the problem consists in dealing with the expected fall in demand in a situation of rising prices, the answer, both conceptual and operative, is of increasing the attractiveness of local products by taking action on innovation, thereby breaking the static context, both conceptual and operative, of price competition. We thus come up against a concept of *non-price competitiveness*, which I shall refer to in the following pages.

I will order my critical reflections in increasing order of importance, holding a spatial perspective, both inter-national and intra-national.

- a. Krugman rightly shows us that the true purpose of trade is imports, not exports. Exports are a cost, the way of financing cheap imports, “which is worth doing because it is more efficient than producing our imports for ourselves” (Krugman, 1996, p. 19). Spatial division of labor – including the most spectacular, between city and countryside – is based exactly on this principle, which allows each partner to fully exploit the benefits of specialization (from static scale economies to dynamic learning economies), increasing its own and each other’s level of wellbeing. But the *terms-of-trade*, the relative prices at which goods are exchanged, is highly relevant for each partner: increasing the efficiency

⁴ When a full employment situation is assumed – resulting from flexibility in prices and wages – as in the classical Ricardian model or in neo-classical models, or when outmigration is considered as a beneficial re-equilibrium mechanism, as in neoclassical regional models, the main attention is paid to per-capita income levels, and therefore the favorable effects of imports on real income are underlined and devaluations opposed. When the possibility of non-full employment equilibria is considered and outmigration is considered as an economic and social cost, as in the models of broadly keynesian inspiration, attention is paid to income and employment growth, to the elements of aggregate demand and therefore the beneficial role of exports is emphasized.

⁵ Even at the time of Stuart Mill the paradox called “impoverishing development” was well-known: if, due to overall development or the development of certain export sectors, economies of scale are achieved and therefore export prices fall (improving “competitiveness”), the terms of trade worsen and, under certain conditions, the country could see its real income fall instead of rise (while its trading partners would benefit from its price falls).

of the export sector means being able to import the same amount of goods employing a lower quantity of local resources (it is mainly the case of process innovation)⁶, or to import more with equal utilization of local resources (it is the case of product innovation, product differentiation, etc.). Efficiency of the export sector, or competitiveness, maintains therefore some meaning. Is this a mercantilist attitude? Yes, in the positive, historical meaning of the term. Is this a zero-sum game? No, as a part of the increase in efficiency will result in a decrease of export prices (depending on the degree of competition in the sectors involved), and will go consequently to the advantage of the trade partners.

- b. Krugman rightly reminds us that one of the main constituents of local welfare is represented by the efficiency of the “residential” sector, producing goods and services for the domestic market. This is particularly true in a country like the U.S., in which exports represent about 10% of GDP. Therefore, internal productivity makes the difference, not external competitiveness. All this sounds right, but the relevance of domestic productivity for local welfare depends crucially on the size of the country and on its openness to international trade. Taking the example of a small country, like an island specialized in fishing or tourism, the competitiveness of the export sectors determines the employment level, total income level and consequently the amount of real local consumption, almost totally dependent on imports⁷. European countries are 3 to 6 times more open to international trade than the U.S.; most firms sell both on the internal and the international market; many apparently “residential” sectors, like retail trade or hotels, sell their services also on the international tourist market. This is why in these countries the two concepts of internal productivity and external competitiveness, which Krugman rightly keeps separate, sound much more similar. Furthermore, coming down to the intra-national, regional level, the share of external trade increases rapidly, and the efficiency of the exposed sectors widely determine employment opportunities and economic welfare of local communities (this argument will be touched on again later).
- c. Krugman warns us against a fast acceptance of the policy implications of the “strategic trade theory”, to which he himself gave relevant contributions. In a world of increasing returns (at the firm level and at the level of the local *milieu*), where history, chance, accident and policy intervention explain international specialization and trade patterns better than factor proportions or the attributes and inherent differences of the single countries, strategic industrial policy could be very effective and justified. Krugman’s opposition in this case regards the difficulty, costs and risks involved in attributing a public administration the choice about

⁶ Provided that export prices, which are defined on the whole international market, remain unaffected.

⁷ This argument is similar to the one exposed by Thirlwall in a wellknown article (Thirlwall, 1980, p. 422), where he claims that “export demand is a vital element in regional demand, (...) necessary to compensate for a region’s appetite for imports, in the absence of other compensating expenditure”.

sectors and products that will prove successful in the future. I think though that some risks are worth taking up, especially if the target is not a product but a technological *filière*, and if the strategic approach means taking into account the potential effects of general political decisions, not directly concerned with tariffs or export support.

In the late 1950's and early 1960's, the explicit political decision by the Italian government to postpone the introduction of color-tv broadcasting meant imposing a competitive disadvantage to domestic electronic industry that was never caught up later, with wide negative external effects on the entire technological trajectory. Conversely, in many countries the early introduction of environmental regulations on emissions meant the early development of an environmental technology industry, taking advantage of all kinds of positive feed back effects. For sure, a careful assessment of alternative strategies should be made (e.g.: military expenditure vs. medical care and research), but it is the kind of evaluations that public administrations should normally make, in all intervention fields (like infrastructure provision, etc.). Moreover, intervention policies may well be horizontal, non-sectoral policies, as those addressed to the improvement of the quality of production factors: human capital, social overhead capital, regional accessibility, information and communication networks, to which we can add institutional interventions on rules and regulations. These are not policies targeted (selectively and "strategically") to specific sectors, but may be crucial for many important ones⁸.

Is this neo-mercantilism? Once again, yes, in the progressive sense of the historical mercantilist thought and practice. We owe to the mercantilist view the abatement of feudal restrictions to goods mobility inside each country, the improvement of internal infrastructure in order to enhance accessibility to (national and international) markets, the utilization of the trade surplus in order to widen money supply, reduce interest rates, speed up investments, encourage entrepreneurship (Tiberi, 1999).

- d. Considering not just international trade patterns (as in international trade theory) but also factors movements, and international capital flows in particular, a competitive production system may mean not just a good export performance but more interestingly an international attractiveness with respect to both "real" and "financial" capital. This last fact may easily turn a potential export surplus into a trade balance deficit, allowing the country to pay for its (cheap) imports and for a rising standard of living through the international trust of the capital markets (present U.S. condition of external accounts comes close to this last picture).

⁸ It is common wisdom in Italy that in the early 1980's the development of the Milan stock exchange and related financial sectors were widely hampered by both the existence of limitations on international capital movements and by the low efficiency of communication networks.

This is why competitiveness and technical change should never be hampered in an open country, through any sort of social resistance to change. David Ricardo, the father with Robert Torrens of the comparative advantage principle, even if convinced of the job-killing nature of technology, in his famous chapter “On machinery” affirmed: “The employment of machinery could never be safely discouraged in a State, for if a capital is not allowed to get the greatest net revenue that the use of machinery will afford here, it will be carried abroad, and this must be a much more serious discouragement to the demand for labour, than the most extensive employment of machinery” (Ricardo, 1817, p. 388 of the 1971 edition)⁹. Leaving the assumption of factor immobility of the abstract model of international trade and assuming a dynamic perspective, the relevance of concerns about the efficiency of the local production sectors *vis-à-vis* the other countries appears very clearly: not only a reduced efficiency will hamper external demand but will force both capital and labour to migrate, as it will be shown later on.

4. Absolute advantage and comparative advantage.

Finally and most importantly from a theoretical point of view, there exists a relevant case where a position *à la* Krugman cannot be maintained: the case of interregional confrontation and competition among local territories. From the beginning, I want to underline that Krugman, in his contributions quoted here, referred explicitly to the case of nations and not of regions; therefore my remarks refer mainly to the subsequent debate among regional scientists, where the two levels, the national and the regional or local one, were mixed up and their profound difference as far as our issue is concerned never really underlined¹⁰.

In my opinion, the law of comparative advantage does not hold in case of confrontation among local economies (inter-regional trade), and consequently the conclusion that each region will always be granted some specialisation and role in the interregional division of labour is not valid. A region can well be pushed “out of business” if the efficiency and competitiveness of all its sectors is lower than that of other regions, for the following reason: at the inter-regional level the two adjustment mechanisms that in a theoretical setting allow to pass from an ‘absolute advantage regime’ to a ‘comparative advantage’ one, namely price-wage flexibility and exchange rate movements, either do not work properly or do not even exist. On the contrary, a different, much more effective and punishing mechanism works, namely inter-regional migration of mobile factors, capital and labour.

The reasoning is as follows. Ricardo’s model is a model of barter, which operates in terms of *relative* costs/prices of two goods in two countries; in this context the normative aspect of the principle (or paradox) of Ricardo is

⁹ On this point too Krugman would probably agree. He writes: “Maintaining productivity growth and technological progress is extremely important; but it is important for its own sake, not because it is necessary to keep up with international competition” (Ibid., p. 101). We add that it is also important for the competitiveness of exports and for the attraction of foreign investments.

¹⁰ A paper in which Krugman assumes a “regional” perspective will be considered at the end of this paragraph.

easy to demonstrate, and states that both countries have an advantage from specialisation and trade ¹¹.

But, passing from the normative to the positive side, can we be sure that the exchange will really occur? In normal practice the exchange occurs as a result of international operators who carry out comparisons between *absolute* prices and not between relative prices of two goods as in a barter (they compare the price of the same good in the two countries in a common currency) ¹², and therefore between values in which the cost of production (in labour days) is multiplied by a monetary wage and by an exchange rate. If the more efficient country presents lower prices in all goods, how could the exchange take place?

In two separate countries, between which mobility of factors is not possible and which are moving, in a logical sense, from a condition of autarchy to one of international trade, it is conceivable that, beyond a comparative advantage, there could also be an absolute advantage for each country in one of the two goods (and that therefore the absolute price, in addition to the relative price, of that good is lower than that in the other country). In fact, real wages before trade will necessarily be commensurate with the average productivity of each country and therefore the more inefficient country will have lower wages ¹³; but if the lower productivity is balanced, on the average, by lower wages, the country will show an absolute advantage in the good in which productivity is above average, i.e. the good in which a comparative advantage exists. After trade, the rate of exchange will be such as to assure equilibrium in the trade balance.

So, in the case of countries, trade would occur; but what would happen if a disturbance caused wages to increase or the exchange rate of a country to appreciate? In the short term, the absolute advantage could disappear ¹⁴, and the country would therefore not export any goods, while it would import

¹¹ Even if a country (let it be S) has higher costs in the production of both goods A and B because it is more inefficient (requires, for example, 2 labour days for A and 4 for B compared to N which requires one day for both goods), in relative terms it will always have a comparative advantage in one of the goods (in this case in A) in which it is relatively less inefficient. Under these conditions, where the good B is traded for A at a ratio of 1:1 in N and $4:2 = 2$ in S, if the relative price of B at the international level is fixed at an intermediate level, let us say 1.5, it is shown that it is an advantage for both countries to specialise (S in A and N in B) and to perform international trade. In N in fact, the more efficient country in all production, the opportunity cost of moving a unit of labour from producing A to producing B is 1 (one unit of A is lost), while trading the additional unit of product B on the international market results in 1.5 units of A; the *gain from trade* is measured by a saving of one half labour day. The same reasoning applies for the country S: the opportunity cost of moving a unit of labour from B to A is $\frac{1}{4}$ B, while by trading on the international market the increased production of A thereby obtained, equal to $\frac{1}{2}$ A, is possible to obtain $\frac{1}{3}$ B ($> \frac{1}{4}$ B). In this case, the *gain from trade* for country S is equal to $\frac{1}{3}$ labour day.

¹² Ricardo himself reminds us that “every transaction in commerce is an independent transaction” (Ricardo, 1971, p. 157); “monetary precondition for an exchange is a difference in absolute costs” (Onida, 1984, p. 81; our translation).

¹³ This is for the simple fact that, in terms of remuneration of factors, it is not possible to distribute more than is produced in real terms.

¹⁴ Södersten (1970), illustrating the Ricardian model in the case of many sectors, states that “the number of goods a country will export is determined by the wage rate and by the exchange rate”; if they rise, the country will lose its advantage for some goods (p. 21). He defines this last advantage as a “comparative” advantage (which, however, remains unaffected by an increase in wages or exchange rate, which act proportionately on all goods), while to all effects it is an “absolute” advantage.

them all, generating mass unemployment. In the long term however, equilibrium would be re-established, thanks to two alternative equilibrating movements:

- i) a “classical” mechanism of downward pressure on real wages and prices, triggered by the imbalance in the labour market and by the reduction of the money supply determined by the outflow of gold (to pay for the imports) (Ricardo, 1971, p. 158), and/or
- ii) a “modern” mechanism of devaluation of the exchange rate, triggered by the deficit in the trade balance.

But what happens in an intra-national, territorial context? This context is by definition characterised by three elements which distinguish it from the assumptions of the international trade model:

- a) it is not possible to assume an initial condition of autarchy as logical starting point, since trade between territories is the rule — between regions, between cities, between city and countryside;
- b) there are movements of production factors between territories (commuting workers, labour and capital movements, purchases of estate and property assets from outside), and
- c) a specific regional currency and exchange rate for each individual territory do not exist.

The theoretical effects of these three conditions are important (when giving examples, reference is made to the case of weak regions):

a'. firstly, in a macroeconomic sense, the close linkage between real wages and average productivity recorded in an isolated country in conditions of autarchy is lost. Whatever the level of monetary wages, there is no longer an internal scarcity mechanism in the market for goods which, through movements in the general level of prices, brings real wages and purchasing power to the level compatible with overall productivity: any excess demand is addressed to the purchase of external goods;

a'’. in a microeconomic sense, the level of monetary wages contractually defined by companies could not be without reference to local productivity; but this reference is not as close as that required by the model, since: i) monetary wages are largely defined through collective *national* contracts, and relate to a level (and a growth) of *average* national productivity (if not those of the most advanced regions) and not those of weak regions; ii) when the lower average productivity of a region is due to factors external to companies (poor accessibility, low quality of public services), in order to keep local products competitive workers should accept monetary wages lower than their “factory” productivity, and this is unrealistic in a context where migration is logically and practically permitted, and where the level of prices of most goods consumed locally is at the “international” or “inter-regional” level (monetary wages lower than the national average would therefore also result in lower real wages). Wages in weak regions would therefore not fall to the levels required to assure external competitiveness in at least some products;

b'. if, due to the two preceding points, a region possesses an absolute disadvantage in all goods, and therefore suffers from rising unemployment and deficit in its trade balance, it could see this condition stabilised in time and not re-equilibrated by automatic mechanisms. Taking it to an extreme conclusion, it is in fact possible to conceive of a territory that does not produce or export anything and lives on imports, where income and internal

purchasing power are assured by various alternative possibilities: by the income of commuting workers, by the sale of wealth or capital assets to foreign residents (houses, land, properties), by public transfers (pensions, unemployment benefits) or private transfers (remittances from emigrants). In this territorial context therefore, the imbalance in the trade balance does not represent a macroeconomic constraint;

b'’. a situation such as that outlined above is clearly not sustainable in the long term, but in a context of factor mobility, adjustment would occur more rapidly and more likely through emigration and depopulation rather than through a fall in real wages ¹⁵. Both capital and labour, receiving lower than average remunerations in a region as a consequence of inefficient production conditions, whenever they will cease to be supported by external territories or by the national government through loans, income transfers or subsidies, they would promptly emigrate in search for better employment conditions ¹⁶. Factor immobility is therefore crucial for the validity of the comparative advantage principle ¹⁷;

c'. the national exchange rate - assuming that it is linked only to trade movements and that the balance of capital movements is therefore in equilibrium at a national level - is defined by a weighted average of the regional trade balances, in general comprising “strong” regions, tending to be net exporters, and “weak” regions, tending to be net importers ¹⁸: the former are thus in a situation of a relatively undervalued exchange rate, and the latter in a situation of a relatively overvalued exchange rate, which does not favour their exports;

c'’. in a dynamic context, assuming an initial situation of inter-regional equilibrium (with each region specialising in some good), if one region sees its productivity (and competitiveness of export sectors) increase at a lower rate than that of other regions, given similar wage dynamics (defined at national level), it would see its competitive advantage decline and disappear and it would not be able to use the obvious instrument available to countries,

¹⁵ It is not intended to suggest here that a “real wages” effect is not set in motion; but that, given the conditions of openness to foreign trade (“international” prices of imported goods) and to factor mobility, this effect would not be sufficient or predominant.

¹⁶ Going back to the example in foot-note 11, if a unit of good B is internationally traded for 1.5 units of A, country N, specialised in B, exchanges one internal labour day with 3 labour days of S, thanks to the difference in productivity levels. But, as stated by Ricardo, a similar situation cannot exist in the case of two regions of the same country: “The labour of 100 Englishmen cannot be given for that of 80 Englishmen (...). The difference in this respect, between a single country and many, is easily accounted for, by considering the difficulty with which capital moves from one country to another, to seek a more profitable employment, and the activity with which it invariably passes from one province to another in the same country” (Ricardo, 1971, p. 154).

¹⁷ Mark Blaug, presenting Ricardo’s principle, explicitly argues: “The point of Ricardo’s analysis is to show that the conditions that make international trade possible are quite different from the conditions under which domestic trade would arise. If England and Portugal were two regions in the same country [and the former were less efficient in all productions], all capital and labour would migrate to Portugal and both goods would be produced there. Within a nation, trade between two places requires an *absolute difference* in costs but a comparative difference is a sufficient condition for the existence of international trade” [our italics] (Blaug, 1997, p. 120).

¹⁸ In terms of macroeconomic accounts, strong regions generally show a trade surplus, balanced by higher taxes, fewer public transfers, a higher savings rate and a deficit in the balance of capital movements (what Kindleberger has called “mature creditors”); weak regions generally show opposite behaviour.

devaluing the exchange rate. For the reasons already outlined, real wages would also not be flexible enough, and the region could therefore find itself without any specialisation or export sectors.

In conclusion: due to their intrinsic openness both to the movement of goods and movement of factors, regions and local territories operate in a context of inter-regional trade within a regime of “absolute advantage” and not within a regime of “comparative advantage”¹⁹. If their absolute competitiveness is inadequate or declining with respect to the other regions, the spontaneous adjustment mechanisms which in the latter regime always assure a role in the international division of labour - even to countries structurally inefficient in all production sectors - either do not exist or are inadequate to re-establish equilibrium. Weakness conditions, due to inadequacies in production factors, adverse geographic circumstances or poor accessibility, may well result in mass unemployment and, if public transfers of income are not sufficient, emigration and possible abandonment.

The real world is full of cases where rich exporting regions coexist with poor regions (having a trade deficit), with strong long-term divergence in the levels of unemployment, since equilibrium in macroeconomic accounts is reached through the equalising role of national fiscal policies or interregional movements of capital.

There are three possible strategies of development or survival for underdeveloped territories: carry out political lobbying aiming to secure public transfers (a strategy that is merely defensive, costly and to be rejected); improve the competitiveness of the local system, or attract investment from other regions and abroad. So, it is right and quite justifiable in a theoretical sense to be concerned with competitiveness and attractiveness, two goals that are becoming ever more relevant in the context of the European Monetary Union, where different countries find themselves in a situation like regions of a single country.

In a paper about “regional” development experience in the U.S. and the effects of adverse shocks on the specialisation sectors of the single States, Krugman looks to reflect along similar lines. In case of factors immobility, usually assumed in international trade theory, long term growth of a region hit by an adverse shock could benefit from wage and factor cost decreases, attracting new activities from outside. But, he argues, in case of factor mobility, the usual situation in an interregional context, “an unfortunate region will not have lower factor prices for very long: capital and labour will move to other regions until factor payments are equalized. This means however that there is no particular reason to expect a region whose traditional industries are faring badly to attract new industries. It can simply shed people instead (...) The story is one in which the point is not the existence of a strong force for divergence, but the absence of a force for convergence of output and employment (factor prices and per capita income do converge)” (Krugman, 1993, p. 248). “If New England had been a sovereign country, it might have devalued its currency and/or pursued an expansionary monetary policy. In fact, not only were these options not

¹⁹ Presenting the theory of interregional trade and specialisation, Armstrong and Taylor affirm: “That trade is based on comparative advantage and not absolute advantage is universally accepted and rarely tested” (Armstrong, Taylor, 2000, p. 123). In my opinion, this statement, when referred to regions, should not be accepted at all.

available, but a budget crisis forced fiscal policy to move in a pro-cyclical direction, exacerbating the slump””(ibid., p. 242).

5. The sources of territorial competitiveness

Let us consider now in more depth the logic underlying the role of exports and foreign investments in regional contexts, and the elements that can enhance competitiveness and attractiveness of territories. I can see here five main points:

- Exports are seen in all regional economics textbooks as the triggers of multiplier effects and drivers of local development. In a short-term view we can stay with this position, which sees demand as the driving force of the economy; but over the long-term, and if we wish to explain territorial development, the short-term view is no longer adequate and we have to identify the reasons for a prolonged growth of exports: we have to look at the sources of competitiveness, that is supply side factors²⁰.

In order to export, local firms have to show a higher competitiveness with respect to external firms, and territories some form of “absolute” or competitive advantage²¹. Better: this competitiveness should reside on dynamic elements, allowing the continuous recreation of the local advantage, through a flow of radical and incremental innovation (Camagni, 1996, ch. 5). On which elements does this capability fund itself? Increasingly, at least in the case of advanced countries, endowment of natural resources and relative availability of traditional factors like labour and capital play a minor role²². What really count nowadays are two orders of factors and processes: in an aggregate, macroeconomic approach, increasing returns linked to cumulative development processes and the agglomeration of activities²³; in a

²⁰ Using demand models such as that of Thirlwall (1980) to explain development – admittedly an elegant model, of relevance in a short-term approach – does not appear to be acceptable. The conclusion of the model that the development of a (small) region depends on the rate of growth of the world economy and the income elasticity of external demand for its exports (in addition to, inversely, the income elasticity of internal demand for imports) is in fact a true but banal statement, which only considers the deterministic and less interesting side of territorial development. It completely ignores the primary factor of productivity/competitiveness (which in these models only serves to mechanistically define the growth rate of employment once GDP growth is defined); however, this factor can readily generate local development even in a context of static global demand.

²¹ Porter’s concept of ‘competitive advantage’, developed outside the context of international trade theory, is close to the concept of absolute advantage. It can be usefully adopted, as its author does (Porter, 1990, 2001), to reflect about territorial competitiveness.

²² As factor endowment tends to become more homogeneous among (advanced) countries, international trade itself increasingly concerns similar products exchanged in the two directions, diversified by thin, qualitative elements (intra-industry or “two-way” trade).

²³ We can distinguish at least three families of models interpreting these processes: cumulative models of regional development based on productivity growth and increasing returns, from historic ones (Kaldor, 1970; Dixon, Thirlwall, 1975) to more recent ones (Krugman, 1991); cumulative models based on factor migration and the creation of a growing local market, from Myrdal (1957) to Krugman (1991); and models based on the creation of vertically integrated industrial complexes, from Perroux (1956) and Isard (1960) to Krugman and Venables (1995).

microeconomic and microterritorial approach, the specific advantages strategically *created* by the single firms, territorial synergies and co-operation capability *enhanced* by an imaginative and pro-active public administration, externalities *provided* by local and national governments, the specificities historically *built* by a territorial culture²⁴. As it is clear, in the latter case - which is more interesting for us - they are all artificial or created advantages, open to the pro-active, voluntary action of local communities and their governments.

- Local firms rely not only on public goods, human capital and social overhead capital, but increasingly on selected external assets and “specific resources” that cannot be easily obtained via spontaneous market developments. Therefore firms are increasingly engaged in a co-operative process with other local firms, (collective) actors and the public administration for the conception and provision of these resources (Colletis, Pecqueur, 1995; Cooke, Morgan, 1998).
- Particular territorial conditions, determined by a particular richness of inter-firm interactions or “untraded interdependencies” (using Michael Storper’s expression) (Storper, 1995), may facilitate cooperation among firms and social actors and generate cumulative learning processes enhancing the innovativeness and the competitiveness of the local territorial system. A good way of depicting this process is through the concept of innovative *milieu*, developed by GREMI²⁵ (Aydalot, 1986; Camagni, 1991b; Ratti et al., 1999). In a turbulent environment characterized by difficulty in information collection, processing and assessment, strong interdependence between the decisions of different actors and great complexity in the external environment, economic actors find in the local *milieu* the necessary support for coping with uncertainty. In fact the *milieu* – consisting of shared values, common representations and codes, a strong sense of belonging, trust, common professional background and economic specialization - helps by facilitating three crucial tasks of a cognitive nature (Camagni, 1991a; Camagni, 1999):
 - the *transcoding* of external information, its selection and evaluation – a crucial task in innovative processes - allowing more accurate interpretation and a faster utilization in decision-making and in developing new business ideas. This occurs in many ways, including informal contacts, imitation, mutual assessment of “rumors” and so on; in a word, it occurs through a “socialized” or “collective” process;

²⁴ As Porter puts it: “Increasingly, the drivers of prosperity and economic policy are moving to the microeconomic level – to the capabilities and behavior of units below the whole economy such as individuals, firms, industries and clusters. (...) There is growing recognition that company success also has much to do with things that are outside the company”, such as “supplier relationships and the benefits of partnering” (Porter, 2001, p. 140).

²⁵ The GREMI - *Groupe de Recherche Européen sur les Milieux Innovateurs* - chaired by the present author, is an international group of scholars located in Sorbonne University, Paris, for the purpose of studying innovative environments. The ‘innovative milieu’ is defined as the set of relations uniting a local production system, a set of actors and their representations, and an industrial culture, which together generate a localized dynamic process of collective learning. Some of the basic constituent elements of the local *milieu* are: mobility of specialised labour within the local labour market, innovation imitation, interfirm co-operation and linkages, common codes and conventions, and a common sense of belonging.

- the *ex-ante* coordination of private decisions in order to permit 'collective action', both in business behavior and in the provision of public or collective goods ²⁶;

- the supply of the permanent substratum for collective learning processes. Learning processes require a host of tacit, immaterial, and informal exchanges, which happen mainly *inside* large firms. But an interesting parallel to this process exists, in the case of the local *milieu*: in this case the learning processes develop mainly *outside* the individual firm (which is small and generally short-lived), but *inside* the local labour market, through the chains of professional upgrading, the mobility of skilled labor inside the area and the density of customer-supplier co-operation relations. The local *milieu* - which can be either an industrial district or a city - becomes the substratum in which long term "collective" learning processes are embedded to the advantage of the local economy (Capello, 1999; Camagni, Capello, 2002).

These effects are in part spontaneously generated, representing an important basis for the local increasing returns, and in part dependent upon specific and explicit cooperation among local actors, requiring some form of local governance. In both cases, the competitive weapons reside more outside the single firms than inside them, i.e. more in the local *milieu* than in a specific firm located in its geographical space.

- Local territories and *milieux* compete and co-operate with each other, building their own comparative or competitive advantages. This is good for the entire economy if we hold the view of a "generative" development process taking place from below, rather than a process quantitatively defined at the macroeconomic level and then attributed in a "competitive" way to each territory (only in this last case would the efforts developed by the single territories result in a zero-sum game in relation to the competitive distribution of a predefined pay-off).

Cities in particular, given their nature of clusters of public goods and externalities, enhancers of interaction and local synergy, and given also the political accountability of their elected administration, may be considered competing actors on the global scene.

- Firms use locations as competitive tools, and increasingly use global mobility to optimize production and distribution costs. Location territories, on the other hand, are not just the passive objects of location decisions by firms, but communities made up of economic subjects which act in their own interest by trying to keep or attract firms. Workers, subcontracting firms, suppliers of intermediate inputs, services and factors, are all agents which can achieve their goal not just by competing on prices and wages with other communities (sites), but also by upgrading the quality of their service through direct or indirect tools which involve the community and the local public administration.

²⁶ Some of the main obstacles to collective action are considered, by economic theory, to be the cost of information collection and the risk of opportunistic and free-riding behavior. In both cases, the existence of a local *milieu* limits these costs, thanks to geographical and organizational proximity, trust and the establishment of common codes for co-operation and for the punishment of improper behavior. When these costs reveal themselves to be excessive, the public sector may be called on to enforce some of the rules or contribute directly to the development and implementation of local schemes; its visibility, accessibility and accountability with respect to the local community reinforces the synergetic effect.

Locations are in a sense bought and sold on a global market, where demand and supply confront each other.

In synthesis. For sure, globalisation enhances the competitive climate in which firms operate. In order to cope with this condition, and with the consequent increasing level of dynamic uncertainty (about markets, technologies, successful organisational models), firms more and more rely on high-quality human capital, on devices or “operators” allowing fast information assessment and transcoding, and on forms of co-ordination and co-operation. As a consequence, directly or indirectly, through explicit locational decisions or through the selective effects of competition, they favour and support those territories that supply these new “relational” factors.

But if individual firms and individual people undertake collective activities, facilitated by (and creators of) trust and local social capital; and if significant cognitive synergies, readily apparent in the local *milieu*, result from their various interactions; and finally if these actions and these processes draw additional vitality from cooperation with local public administrations; then it appears justifiable to go beyond methodological individualism - which regards only single firms as operating and competing - arguing the logical validity of a ‘collective’ concept such as that of *territory*, and to affirm that territories compete among themselves, using the creation of collective strategies as their instrument.

6. Conclusions

In a globalising economy, territories and not just firms increasingly find themselves in competition with each other. In fact, differently from the case of countries, cities and regions compete, on the international market for goods and production factors, on the basis of an *absolute* advantage principle, and not of a *comparative* advantage principle; this means that no efficient, automatic mechanism may grant each territory some role in the inter-national division of labour, whatever its relative performance.

Therefore, weak and lagging territories - in terms of competitiveness of the economic fabric, internal/external accessibility, quality of the human and environmental factors, internal synergy and learning capability – risk exclusion and decline to a larger extent than in the past. Particularly in the present techno-economic phase, witnessing the increasing importance of knowledge factors, of immaterial elements linked to culture, taste and creativity, the innovative utilisation of the existing stock of codified knowledge and technologies requires greater investments in tacit knowledge, human capital, management and organisation, co-operation and networking; in a word, it requires conditions that are rare and not at all ubiquitous.

Hopefully, the way towards territorial competitiveness, engaging public administrations and local communities in the creation of a widening spectrum of “preconditions” – from hard to soft, from competitive to co-operative ones – does not mean at all a wasteful zero-sum game, as:

- competitiveness reached through territorial quality and public service efficiency brings benefits to all local economic activities, both originating from inside or from outside;

- competitiveness reached through spatial specialisation means widening roles for complementary specialisations, developed in complementary territorial contexts;
- competitiveness reached creating local synergies among actors, or integrating and embedding external firms into the local relational web, exploits technological and organisational spillovers and generates increasing returns that are at the very base of economic development, in its “generative” sense.

In these conditions, roles and responsibilities of the local development policies and spatial planning widen, facing new political and cultural challenges. Integrating economic and spatial goals; integrating different sectoral tools; stimulating local co-operation networks and partnerships; guaranteeing a real and effective participation of people and citizens to the construction of territorial ‘visions’ and strategies; enhancing local competitiveness through appropriate policy tools addressed to collective learning and local relational capital; all these new tasks represent relevant challenges and ask for a rapid evolution of our models of territorial governance (Camagni, 2001b; Guigou, Parthenay, 2001).

Coming back to the central theoretical issue of the present reflection: external competitiveness matters in a regional and urban context. “Pop internationalism”? I would rather claim: *vox populi, vox dei* (“Pop voice, god’s voice”).

References

Amin A., Wilkinson, F. (eds.) (1999), “Learning, proximity and industrial performance”, Special Issue of *Cambridge Journal of Economics*, 23, 121-260

Armstrong H., Taylor J. (2000), *Regional economics and policy*, Blackwell, Oxford

Asheim B. (1996), “Industrial districts as learning regions: a condition for prosperity?”, *European planning studies*, 4, 379-400

Aydalot Ph. (ed.) (1986), *Milieux innovateurs en Europe*, GREMI, Paris

Blaug M. (1997), *Economic theory in retrospect*, 5th edition, Press Syndicate of the University of Cambridge, Cambridge U.K.

Camagni, R. (1991a) “Technological change, uncertainty and innovation networks: towards a dynamic theory of economic space”, in Camagni, R. (1991b), 121-144

Camagni R. (ed.) (1991b), *Innovation networks: spatial perspectives*, Belhaven-Pinter, London

Camagni, R. (1996), *Principes et modèles de l'économie urbaine*, Economica, Paris

Camagni, R. (1999), "The city as a *milieu*: applying GREMI's approach to urban evolution", *Revue d'Economie Régionale et Urbaine*, 3, 591-606

Camagni R. (2001a), "The economic role and spatial contradictions of global city-regions: the functional, cognitive and evolutionary context", in Scott A.(2001), 96-118

Camagni R. (2001b), "Policies for spatial development", in OECD, *Territorial Outlook*, Paris

Camagni R., Capello R. (2002), "Milieux innovateurs and collective learning: from concepts to measurement", in Acs Z., de Groot H., Nijkamp P. (eds.), *The emergence of the knowledge economy: a regional perspective*, Springer Verlag, Berlin

Capello R. (1999), "Spatial Transfer of Knowledge in High-technology Milieux: Learning vs. Collective Learning Processes", *Regional Studies*, Vol. 33, n. 4, pp. 353-365

Colletis G., Pecqueur, B. (1995), "Politiques technologiques locales et création des ressources spécifiques", in Rallet A., Torre A. (1995), 445-463

Cooke P., Morgan K. (1998), *The associational economy. Firms, Regions and innovation*, Oxford University Press, Oxford

Dixon R.J., Thirlwall A.P. (1975), "A model of regional growth differentials along Kaldorian lines", *Oxford Economic Papers*, 27, 201-214

Graham, S. (1999), "Global grids of glass: on global cities, telecommunications and planetary urban networks", *Urban Studies*, 5-6, 929-49

Guigou J.-L., Parthenay D. (2001), "De la France éclatée à la France maillée: la nécessaire modernisation de nos cadres territoriaux d'action publique", in Conseil d'Analyse Economique, *Aménagement du territoire*, La Documentation Française, Paris, 11-44

International Regional Science Review (1996), Special issue on Regional Science and Development, n. 1-2

Isard W. (1960), *Methods of regional analysis*, MIT Press, Cambridge Ma.

Kaldor N. (1970), "The case for regional policies", *Scottish Journal of Political Economy*, n. 17, 337-348

Keeble D., Wilkinson F. (1999), "Collective learning and knowledge development in the evolution of regional clusters of High-technology SMEs in Europe", *Regional Studies*, vol. 33, pp. 295-304

- Keeble D., Wilkinson F. (2000), *High technology clusters, networking and collective learning in Europe*, Ashgate, Aldershot
- Krugman P. (1991), *Geography and trade*, MIT Press, Cambridge Ma.
- Krugman P. (1993), "Lessons of Massachusetts for EMU", in F. Torres, F. Giavazzi (eds.), *Adjustment and growth in the European Monetary Union*, Cambridge University Press, Cambridge, 241-261
- Krugman P. (1996), "Making sense of the competitiveness debate", *Oxford Review of Economic Policy*, 12, 3, 17-25
- Krugman P. (1998), *Pop internationalism*, MIT Press, Cambridge Ma.
- Krugman P., Venables A. (1996), "Integration, specialisation and adjustment", *European economic review*, 40, 959-967
- Lever W.F., Turok I. (1999), "Competitive cities: introduction to the review", *Urban Studies*, 36, 5-6, 791-93
- Myrdal G. (1957), *Economic theory and underdeveloped regions*, General Duckworth and Co., London
- OECD (1999a), "The OECD Territorial Reviews: a conceptual framework", Territorial Development Service, DTPC, november
- OECD (1999b), "Innovation and growth in the knowledge-based economy: proposed outline", Directorate for Science, Technology and Industry, STP/TIP, april
- Onida F. (1984), *Economia degli scambi internazionali*, Il Mulino, Bologna
- Perroux F. (1955), "Note sur la notion de pôle de croissance", *Economie Appliquée*, n. 1-2, 307-320
- Porter M. (1990), *The Competitive advantage of nations*, The Free Press, New York
- Porter M. (2001), "Regions and the new economics of competition", in A. Scott. (2001), 139-157
- Putnam R. D. (1993), *Making democracy work*, Princeton University Press, Princeton
- Rallet A., Torre A. (eds.) (1995), *Economie industrielle et économie spatiale*, Economica, Paris
- Ratti R., Bramanti A., Gordon R. (eds.) (1997), *The Dynamics of Innovative Regions*, Ashgate, Aldershot

Ricardo D. (1971), *Principles of political economy and taxation*, Penguin Books, Harmondsworth

Savy M., Veltz P. (eds.) (1995), *Economie globale et réinvention du local*, Datar/Editions de l'Aube, Paris

Scott A. (ed.) (2001), *Global city-regions: trends, theory, policies*, Oxford University Press, New York

Södersten B. (1970), *International economics*, Macmillan, London

Storper M. (1995) "La géographie des conventions: proximité territoriale, interdépendances non-marchandes et développement économique", in A. Rallet, A. Torre (1995), 111-127

Thirlwall A.P. (1980), "Regional problems are Balance-of-payments problems", *Regional Studies*, 14, 419-425

Tiberi P. (1999), *Dal mercantilismo alla globalizzazione*, Il Mulino, Bologna

Urban Studies (1999), Special issue on competitive cities, n. 5-6

World Bank (1999), *World Development Report*, Washington D.C.

World Bank (2001), "Understanding and measuring social capital: a synthesis of findings and recommendations from the social capital initiative", *Social Capital Initiative Working Paper n. 24*, april, Washington D.C.