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Social Capital, Culture and Innovation: a different perspective

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Social Capital, Culture and Innovation: a different perspective

Paolo Pasimeni, European Commission – DG Regional Policy ¹

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¹ The opinions expressed in this article do not necessarily reflect the positions of the institution to which he belongs.

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Social Capital, Culture and Innovation: a different perspective

Paolo Pasimeni, European Commission – DG Regional Policy ²

The notion of social capital

The notion of Social Capital is more and more at the core of the economic debate. The reason for such a prominence is twofold.

First of all, social capital is being recognised as an important factor affecting economic performance; much of the differences in trends of economic development among countries or regions are considered to depend, to some extent, on social capital. Just like other forms of capital (physical, financial, human) it facilitates productive activities, contributes to economic growth, at both microeconomic level (with its ability to improve market functioning) and macroeconomic level (affecting the global organisation of production). To some extent, it has become a concept for defining ‘the missing ingredient’ in successful practice that economics cannot explain (Cooke and Clifton 2002 in Landabaso et al. 2004). It is seen as a relevant, collective and strategic asset for innovation, an economic resource and an important factor of production.

The second aspect is that there is no complete and widespread agreement about its concept and definition. Economists, sociologists, political scientists and anthropologists have attempted to define it, each one focussing on some aspects or characteristics of this relatively new, fascinating and powerful analytical tool. Moreover, many difficulties arise when we try to measure it or to exactly determine its direct effects on the economy. Even if it is recognised as a very relevant economic asset, it is not likely to be quantified and handled as an arithmetic data. Nevertheless it counts. And its relevance and influence on innovation is well known.

All these issues, evidently, make the debate more and more animated. In this chapter the concept of social capital will be analysed, trying to encompass different visions from different disciplines, but then focussing on its effect in the economy, and in particular on the innovative capacity of a country.

The methodological idea underlying this work is that it seems not convenient to analyse a sociological and anthropological concept starting from the economists’ principles of rational action driven by purely economic purposes, scarce resources, and maximising utility. In a classic and pioneer work on social capital, J.Coleman (1988) explains his approach by saying: “(the aim) is to import the economists’ principle of rational action for use in the analysis of social systems proper”. The approach used here will be the opposite: to review and summarise what has been

² The opinions expressed in this article do not necessarily reflect the positions of the institution to which he belongs.

studied about the concept of social capital, from sociologists, anthropologists, political scientists and economists, to then analyse its effect in the economic sphere, being aware that most of the relevance of social capital for innovation is not likely to be quantified and handled as an arithmetic data.

Social capital is mainly a non-economic concept, which has economic as well as non-economic outcomes. Both are extremely relevant in the analysis of the innovative capacity of a system. "Much of what is relevant to social capital is tacit and relational, defying easy measurement or codification. Individual attitudes (e.g. trust) or behaviour (e.g. joining organisations and voting) provide proxy measures of social capital, but these measures should not be confused with the underlying concept" (OECD 2001).

Definitions

Many definitions of social capital have been given. Some have identified it with social features and attitudes like trust, others have focused on shared norms driving people behaviours, and others have considered its materialisation in social networks.

According to Coleman (1988) "Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors (whether persons or corporate actors) within the structure. Like other forms of capital, social capital is productive (...). Like physical capital and human capital, social capital is not completely fungible but may be specific to certain activities".

Robert Putnam (1993) in his well known work on the functioning of democracy in Italy, highlighted the role of social capital in explaining the different level of economic development between the north and the south, defining it as: "features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993: 167). Putnam identifies social capital with those horizontal associations among people that affect the productivity of the community. These associations include "networks of civic engagement" and social norms.

Serageldin and Grootaert (2000) considered the last view as the narrowest, and the Coleman's one more comprehensive, since it "captures not only social structures at large, but the ensemble of norms governing interpersonal behaviour". And they present a third more encompassing view that "includes the social and political environment that enables norms to develop and shapes social structure. (...) this view encompasses formalised institutional relationships and structures, such as governments, political regimes, and the rule of law, court systems and civil and political liberties".

The OECD (2001) gives the following definition of social capital: “networks together with shared norms, values and understandings that facilitate co-operation within or among groups”. “Social capital is likely to have positive economic, social and personal benefits based on a wide range of empirical studies in a number of countries”. “Social capital is built up by social groups ranging from the family to the nation. Families are primary building blocks for social capital. Schools and institutions of learning can also sustain social capital... as can local communities and firms”.

Maskell (2001) considers that “the contemporary process of globalization has dramatically enhanced the economic importance of what a diverse group of current scholars has called social capital. Social capital refers to the values and beliefs that citizens share in their everyday dealings and which give meaning and provide design for all sorts of rules. Social capital is accumulated within the community through processes of interaction and learning.

Norms, codes, trust, solidarity and other vital elements of social capital can be built and reinforced when sharing a common goal or a mutual fate even in the most hierarchical economic structures imaginable, like the globally operating multidivisional corporation, and not just when people mingle, organize and achieve with peers in their spare time”.

Partha Dasgupta (2002) highlights that even though it has a powerful, intuitive appeal; it has proven hard to track as an economic good. Among other things, it is fiendishly difficult to measure. This isn't because of a recognised paucity of data, but because we don't quite know what we should be measuring. Comprising different types of relationships and engagements, the components of social capital are many and varied and, in many instances, intangible.

“In all these accounts, the engagements that rely on what is called social capital occur somewhere between the individual and the State: they are conducted within informal institutions. When applied to horizontal networks, social capital is identified with the workings of civil society”. “Social capital is most usefully viewed as a system of interpersonal networks”.

From the regional development point of view (Landabaso et al. 2003), social capital has been seen as “collective capacity of key socio-economic players in the region (e.g. individuals, companies, authorities, research centres, business support agencies, etc.) to form and effectively use networks or other forms of cooperation on the basis of shared value system, norms and institutions (e.g. trust and reciprocity) in order to enable and accelerate the process of regional learning”.

According to Kevin Morgan (2004), “social capital is a relational infrastructure for collective action which requires trust, voice, reciprocity and a disposition to collaborate for mutually beneficial ends”. “Building social capital (a relational infrastructure for collective learning) takes time, patience, resources and mutual

understanding. The assumptive worlds of business, universities and regional government for example, are all very different and genuine partnerships are not built overnight”.

The sum of the different points of view, and the overall knowledge developed about the subject, make now possible to summarise some specific features. In most of the definitions of social capital we find common features:

- they talk about the elements of social capital, like norms, values, voice, codes, understandings, feelings of trust, solidarity and reciprocity;
- and about its functions: social relationships, interactions, organisational capacity, coordination, cooperation, networking;
- they browse in the social, psychological, cultural and political spheres, for a concept that produces economic outcomes (together with non-economic outcomes) and affect economic performances;
- finally, all these definitions imply that this social capital has positive externalities in the economic sphere. These studies assert that a relevant “stock” or “amount” of social capital facilitates productive activities and have positive economic effects, and that discovering, fostering and creating social capital will be an important task for public policies.

As presented above, the focus of this chapter will be the effects social capital has in the economic sphere, with special regard to the capacity it has (or not) to foster innovation. More in detail, the common features highlighted above, extracted by a general outlook of some definitions, seem to be important starting points for the analysis, except the last one. Many “stocks” or “amounts” of social capital exist and they can reinforce positive or negative trends already present in the context. The main idea of this work is to consider social capital as a *vox media*, not necessarily having positive effects, but having relevant effects in any case.

The innovation process

Innovation theories and policies were born to face with the difficulties of understanding the technological change as a driver of growth. They are now being developed to face with the problem of better understanding all the interrelated and unpredictable changes that drive economic development of nations, in all policy areas.

One of the pioneers, who tried to define the concept of innovation, was J.Schumpeter (1934). According to him, innovation can be considered: “the introduction of a new product or a qualitative change in an existing product, a process innovation new to an industry, the opening of a new market, the development of new sources of supply for raw materials or other inputs, changes in industrial organisation”.

The definition provided by the European Commission seems to be more comprehensive: “the renewal and enlargement of the range of products and services and the associated markets; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organization, and the working conditions and skills of the workforce” (COM (1995) 688)

This definition of innovation expresses the spaciousness of this concept, by clearly defining the different fields of action of an innovative activity:

- new or better products;
- new or better services;
- new markets;
- new methods of production;
- new methods of supply;
- new methods of distribution;
- new methods of management;
- new methods of organisation;
- changes in working conditions;
- changes in the skills of the workforce.

In a still wider conception, innovation can be seen as any change, which allows an organisation to do more and/or better, and its successful exploitation.

In a broader view, the innovative capacity of a nation appears to be strictly related and interdependent with its culture. Culture being the environment of the ideas allowing a continuous generation of a widespread innovative capacity and innovative capacity being one engine that changes and drives ways of thinking and ways of doing of people.

This broad and social conception of an innovation process contrasts with a narrow, technical and economy-centric vision, in the sense that the economic measurable output of an innovation is to be considered just one of the several benefits that it can give to the society. Innovation is still widely perceived in its technological dimension, but non-technological innovation is often more important, since it allows a more rapid generation of socio-economic benefits. In fact, it takes many forms, apart from technological innovation. There is innovation through new business models and new ways of organising work, innovation in design and in marketing. Innovation can also consist of finding new uses and new markets for existing products and services. It emerges where the market offers incentives to introduce new products and production methods, and where people are willing to take risks and experiment with new ideas. In addition, human, social, organisational, political and cultural aspects of innovation can really generate structural changes in the societies, contributing to the development of a widespread innovative capacity. Technology is to be seen as just a means, often an excellent means, in the service of people and societies.

Innovation is an interactive process. It must come up from the dynamic of interactions between all the elements of the system: individuals, organisations and the operating environment. The functions and the activities at the core of the innovation process can be different, but there must be always an intense set of interactions allowing the flow of knowledge between individuals, in order to create opportunities to develop innovative ideas.

The innovation process is an incremental and cumulative one. If the main element is knowledge, then the proprieties of the processes of knowledge creation, diffusion and use must be extended to the innovation process (R.Nelson, S.Winter, 1982). The ways knowledge is created, transferred and used determine the functioning of the system, thus its capacity to promote and exploit innovation.

It is also and mainly a social process, in which social interactions among the individuals, the shared norms, values and beliefs composing the local culture, can strongly influence the intensity of change and the generation of innovative opportunities, as well as the capacity to obtain socio-economic benefit from them. Social capital is a relevant factor to deal with, since it can affect innovation policies, due to its strong potential for making such a policy work better, or also, in some cases, for hindering it.

It is a sector-specific process. Patterns of innovation differ a lot depending on sectors. Some sectors are more innovative than others. The Innovative Performances of sectors depend on different factors, for some of them knowledge creation is the main engine, for others diffusion of knowledge is it ³. (EC Innovation Scoreboard, 2004; Malerba, 2002)

The innovation process certainly is a context-specific process. Every country must find its own way, its own route towards innovation. Local peculiarities and characteristics always determine the setting up of an innovation culture and system, and impede to simply apply models developed elsewhere. Policy makers cannot just copy best practice and expect them to work, it's necessary to suit specific national or regional conditions and objectives, needs and interest. "The best model of innovation does not exist" (Lundvall, 1992).

But, in the end, the process of development of an innovative capacity within a country is first of all a cultural one. Many authors stress the importance of a general,

³ Patterns of innovation differ a lot depending on Sectors, besides Regions and Countries. Some sectors are more innovative than others. The Innovative Performances of sectors depend on different factors. By using 2 groups of Innovative Performance Indicators (K Creation & K Diffusion), the 2004 EC Innovation Scoreboard shows that:

High and medium-high technology manufacturing sectors innovate through Knowledge Creation (Public R&D expenditure %GDP; Business expenditures on R&D %GDP; EPO high-tech patents applications; USPTO high-tech patents granted; EPO patents applications; USPTO patents granted)

Service and low-tech manufacturing sectors innovate through Diffusion of Knowledge (SMEs innovating in-house %all SMEs; SMEs involved in innovation cooperation; Innovation expenditures %turnover; share of SMEs that use non-technical change).

wide, positive environment conducive to innovation, and then it is necessary to focus on the building elements of such a necessary environment. Culture seems to be one of these elements. It has to do basically with the general set of values, beliefs, knowledge, attitudes and ideas which form a widespread common understanding and ways of thinking. These generally accepted ways of thinking serve as a yardstick for the acceptance or the refusal of the social models proposed to the people. At the very beginning of the innovation process there are the individuals. Individuals also are the main recipients of the innovation process. An individual's attitudes, values, ideals, and beliefs are greatly influenced by the culture in which he or she lives. That's the reason why any innovation policy assumes the form, and thus the complexity, of a tentative social change, with all the consequences that this implies (slow, difficult, complex, path dependent, influenced by history, by geographical conditions, etc...). Culture is the main asset to promote innovation. The cultural features of a society have the power to direct people's minds towards objectives, they can, in some way, shift social preferences from a model to another, they make some values and ideals more or less appealing than others, to people that then will try to pursue them by means of their actions. This is the process by which culture determines social actions and then economic trends.

The effects of social capital on the economy

Many authors have tried to explain the positive effects that social capital has as an economic resource. Its "positive externalities" are widely recognised as facilitators for economic activities and for innovation in particular.

Those who identify it with social features and attitudes like trust, highlight its utility in economic negotiations, like the so-called "reputation effects" in the game theory. Social capital can reduce transaction costs, such as search and information costs, bargaining and decision-making costs, contracting and control costs (Maskell 2001). Those who consider social networks as the materialisation of social capital, highlight that these social features have the capacity to overcome and to some extent prevent from asymmetric information, reducing in any case the information costs. It facilitates coordinated actions (Putnam 1993), and also facilitates cooperation within or among groups, by reducing bureaucratic procedures (OECD 2001).

As a matter of example, in the case of the well-known prisoner's dilemma, the existence of strong links, trust and solidarity between the actors can completely change the logic of the model. The dilemma of the prisoners is that, whatever the other does, for each is better to confess than to remain silent and help the other. The outcome obtained when both confess is worse for each than the outcome they would have obtained by both refusing to confess. A conclusion is that the game shows a conflict between individual and group rationality. A group whose members pursue rational self-interests may in the end obtain worse results than a group whose members act contrary to rational self-interest.

How would social capital affect this game?

In the case of two actors with strong links, and paths of cooperation, sharing trust and reciprocal solidarity, the most likely solution would be the cooperation between them. And this solution is the one giving better outcomes for both, than confessing. This is a manifestation of the effect social capital can have in facilitating a cooperative attitude between economic actors.

In the innovation policies theory, the capacity to foster cooperation among economic actors has been the most considered aspect, giving room to strong support and consideration to the relevance of social capital for innovation.

“Social capital enables firms to improve their innovative capability and conduct business transactions without much fuss and has, therefore, substantial implications for economic performance” (Maskell 2001). “It enhances and accelerates a process of exchange and creation of knowledge and innovation” (Landry et al 2000). Due to its role of facilitator of cooperative activities, it has been assigned a great importance in the process of knowledge diffusion and exploitation as well as in the learning process. Hence it is increasingly the focus of innovation theories.

A different perspective

The theories about social capital have been mainly developed between the USA and the European Nordic countries. In particular, the role of social capital in innovation policies has been deeply analysed and discussed by Scandinavian, Dutch and British scholars, producing strong support to the thesis that considers it as a necessary condition for the well functioning of an economic system.

It should be noted that many forms of social capital exist and that the effects it has can be very different. Some scholars have already noted (Coleman 1988) that some well organised, structured and efficient groups can act, and actually act, to pursue criminal ends. They all are formed and based on systems of shared norms, beliefs, understandings, values, kept together by the strong interaction, networking, in some way solidarity among members, and acting in a cooperative and coordinated way. Of course, this kind of organisations does not have positive externalities, and cannot be seen as positive in fostering innovation. Mafia groups, for instance, act this way, and we would not say that they generate positive effects⁴.

But it is not only the social capital existing in criminal groups or organisation, which suggests the thesis of a social capital having several different potential effects. If we analyse some customs and practices of societies in southern Europe, we can observe how social networks, interactions, cooperation and solidarity, prevalently in small villages, more in isolated ones, act as a social protection and support for less wealthy

⁴ “The concept of harm and the function relating its amount to the activity level are familiar to economists from their many discussions of activities causing external diseconomies. From this perspective criminal activities are an important subset of the class of activities that cause diseconomies” (Becker 1968).

people, allowing them to reach better living standards, and avoiding many potential conflicts.

Some have started to recognise that forms of social capital are evident also in less developed regions and countries. In these contexts more or less informal networks often exist, playing a relevant role in the economic and social life, tacitly gluing people around shared value systems, norms and beliefs. And it is true that strong social relationships in these contexts often make up the inefficiencies of the public sector, generating and consolidating important "invisible" networks that help local people to reach better conditions than what could be expected. This is the case of many communities in many regions of the world.

In south Mediterranean countries, there are more evident features that prove the existence of social capital. In some cases we can even observe forms of social capital with direct and explicit economic effects. In the Islamic religion there are two practices called *Sadaqa* and *Zakat*. *Sadaqa* is the charity to an Islamic cause, or also the charity to the poor. *Zakat* is an obligatory duty and one of the five pillars of Islam. The word means both 'purification' and 'growth'. Technically, it means to purify one's possession of wealth by distributing a prescribed amount to the poor, the indigent, the slaves or captives, and the wayfarer. Since one of the most important principles of Islam is that all things belong to God, and that wealth is therefore held by human beings in trust, one's possessions are purified by setting aside a proportion for those in need, and, like the pruning of plants, this cutting back balances and encourages new growth. *Zakat* is the amount of money that every adult, mentally stable, free, and financially able Muslim, male and female, has to pay to support specific categories people. According to the Islamic religion, *Zakat* functions as a social security for all. Those who have enough money today pay for what they have. If they need money tomorrow they will get what is necessary to help them live decently. Economically, *Zakat* can be seen as a sort of general redistributive policy, by means of which every person should give the 2,5% of his net annual benefit to support poorer people. The direct economic effect of such a cultural and religious belief is manifest. The payer pays his dues as an act of worship, a token of submission and an acknowledgment of gratitude to God. The receiver receives it as a grant, as a favour for which he is thankful to God. From this, another important concept of the Islam derives, that of *Kanaa*: the idea of being satisfied whatever one person has, or better said, the awareness that "I will be satisfied for what God will decide to give me" and at the same time that "God will give me what I will need to be satisfied".

Sadaqa and most of all *Zakat* appear to be clear indicators of the existence of social capital, in this context. *Kanaa* can be seen as reinforced and fostered by the general presence of social capital, and directly by the practices of *Sadaqa* and *Zakat*. It may be just one of their possible outcomes, like many others features of societies.

The economic effect of such a social structure can be proved and, to some extent, measured by analysing and comparing some indicators. The process of developing

such a social protection mechanism, due to interaction, networking, sharing values and attitudes, like an informal, social protection, parallel to the one provided by the state, allows lower income people to reach better living standards, than expected. If we consider the GINI index as a measure of the inequality in the income distribution of a country, we can observe that south Mediterranean countries represent a group of countries who:

- first of all, have a sort of homogeneity in their GINI values;
- then, compared to other countries of the world with similar levels of per capita income, have considerably lower values, i.e. have a more equal economic structure than the average.

In this analysis, within the group of south Mediterranean countries we have considered the so-called Mediterranean Partner Countries, by the European Union International Co-operation policy, namely: Morocco, Algeria, Tunisia, Egypt, Jordan, Lebanon, Syria, and Palestine, and also Turkey, which in fact has a status of Associated Countries, but for the purpose of the analysis, shares a lot of significant features with the MPC *strictu sensu*.

In order to realize a coherent comparison, the MPC were analysed jointly with other countries of the world having the same levels of per capita income. Actually, based on the last UNDP data available, we analysed the world ranking of GDP per capita at purchasing power parity. Within the group of MPC, we find the highest value for Tunisia, with 7.161 US\$ per capita at ppp, while the lowest is 3.576 for Syria. The countries with a GDP per capita at ppp comprised in this range have been considered in the analysis. They are: Brazil, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Panama, Paraguay, Peru, Uruguay and Venezuela, in Latin America, China, Iran, Philippines and Thailand, in Asia, and Kazakhstan, Romania, Bulgaria and Ukraine, as former communist countries.

The indicators used in the analysis of the inequalities in the economic structure of these countries are:

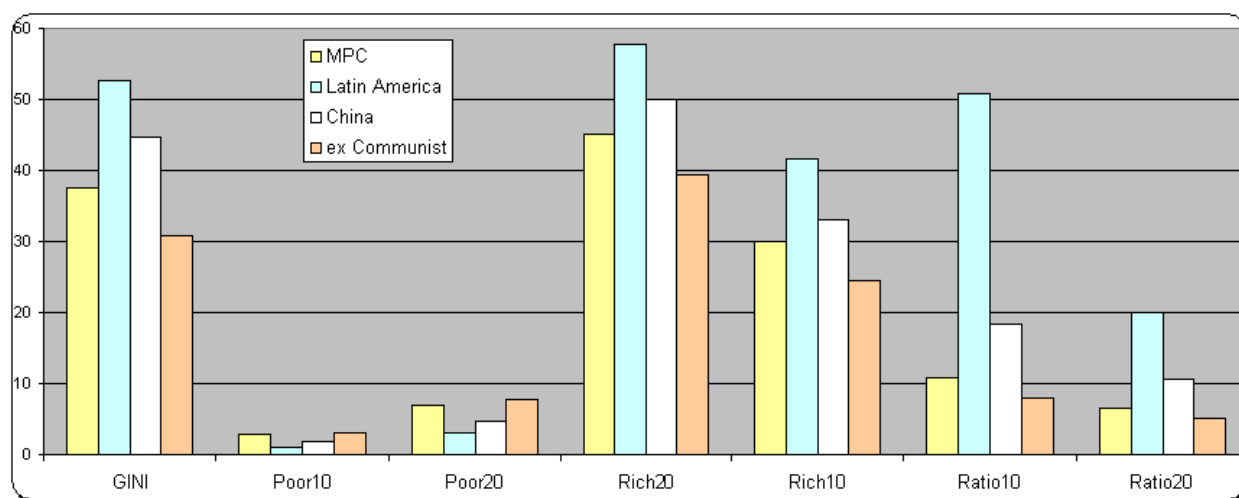
- the GINI index, which measures the degree of inequality in the distribution of income in a country. The index is calculated from the Lorenz curve. It is the ratio of the area between a country's Lorenz curve and the 45 degree helping line to the entire triangular area under the 45 degree line. The GINI index measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. The more nearly equal a country's income distribution, the closer its Lorenz curve to the 45 degree line and the lower its Gini index. The more unequal a country's income distribution, the farther its Lorenz curve from the 45 degree line and the higher its Gini index. A Gini index of "0" represents perfect equality, while an index of "100" implies perfect inequality.
- the contribution to the total consumption of a country, made by the poorest 10% of the population, the poorest 20%, the richest 20% and the richest 10%,
- the ratio of the 10% richest to the 10% poorest, and the one of the 20% richest to the poorest.

As expected, by taking into account what previously argued about the presence of strong social capital in MPC, this group of countries has a significantly lower GINI index than other countries in the world with similar levels of GDP per capita, the poorest fraction of the population contribute in a higher quantity to the total consumption, and consequently the ratios of 10% and 20% are lower. Only the former communist countries, due to the heritage of the particular economic structure they had during decades, show similar levels of inequalities and in some cases also lower than those of MPC.

In particular, we can observe that the MPC with the highest GINI index is Turkey, with 40,0%, which is significantly lower than the lowest value for Latin American countries, Ecuador, with 43,7%. MPCs have values comprised between 34,4% (Egypt) and 40,0%. Latin America countries have values comprised between 43,7% and 59,3% of Brasil. China has 44,7%, Iran 43,0%, Thailand 43,2% and Philippines 46,1%. Former communist countries have 29,0% for Ukraine, 30,3% for Romania, 31,9% for Bulgaria and 32,3% for Kazakhstan.

Grouping countries into 4 main categories (Mediterranean Partner Countries, Latin America, China, and ex Communist Countries), we find these figures:

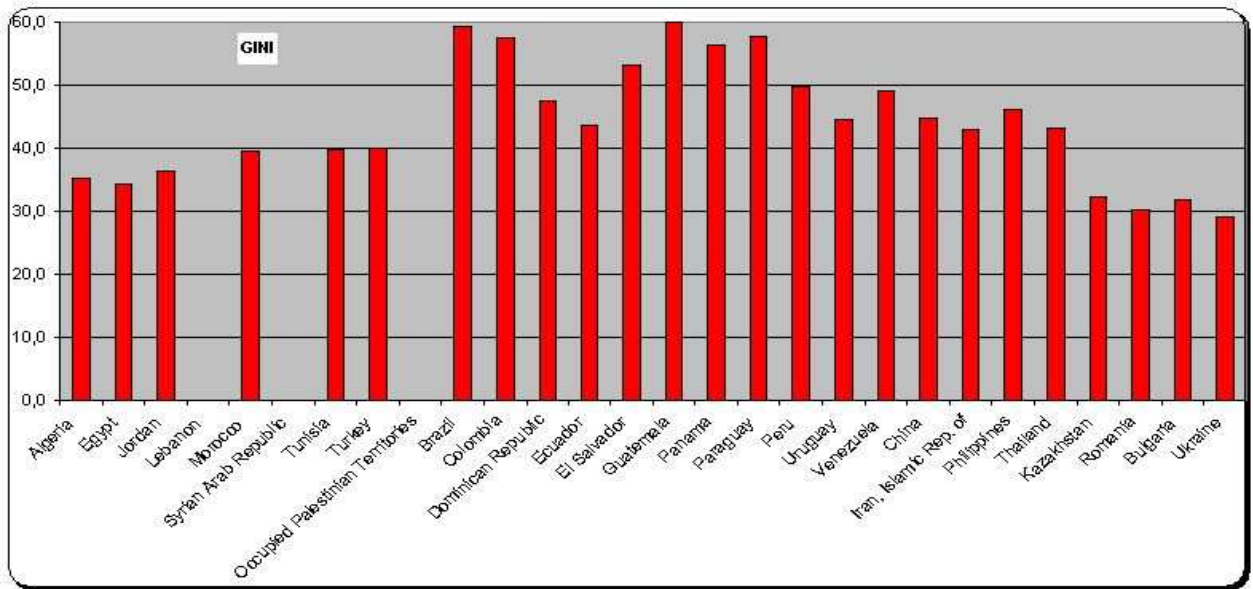
Figure 1: Inequality measures for main groups of countries



Source: UNDP (2005).

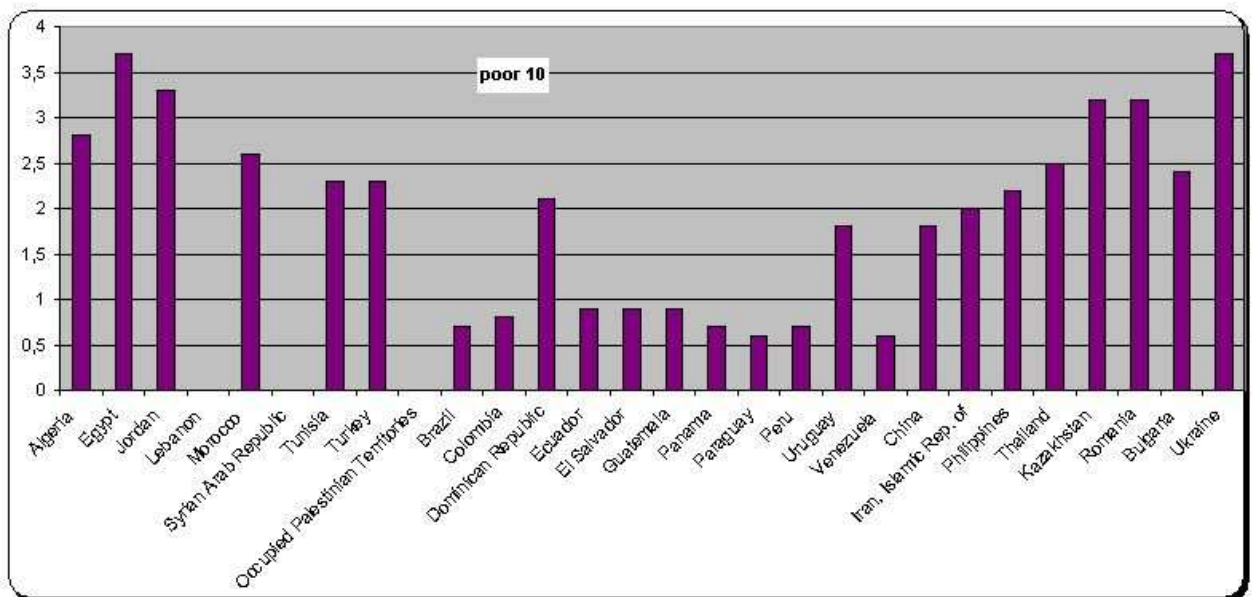
And, more in detail, values for each country are the following:

Figure 2: GINI index for country



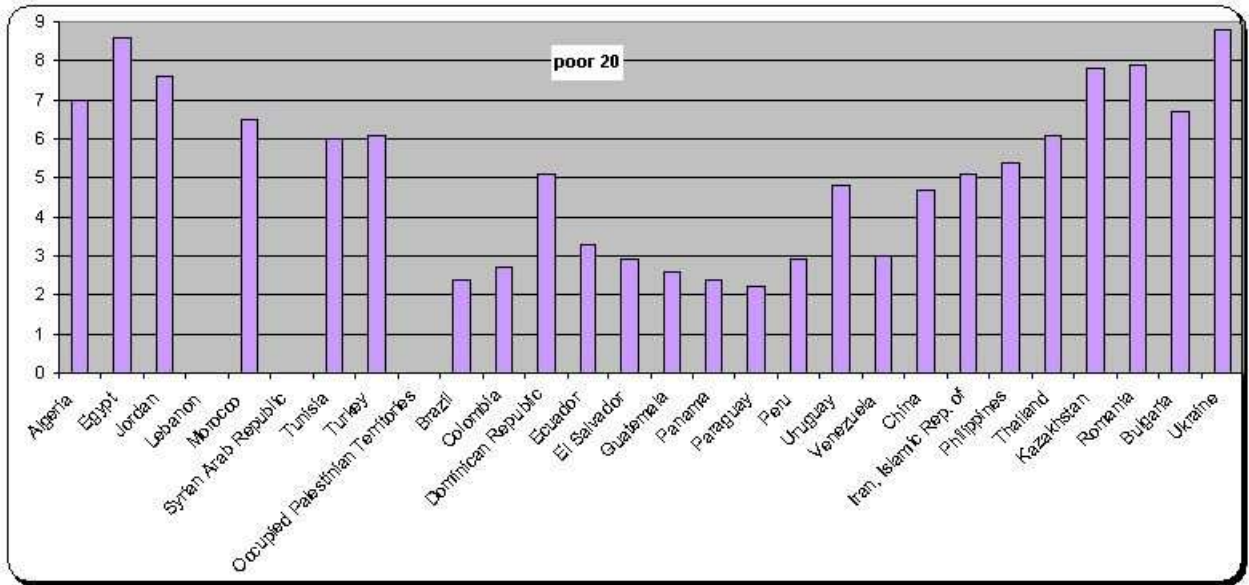
Source: UNDP (2005).

Figure 3: Share of the total consumption by the poorest 10% of the population in each country



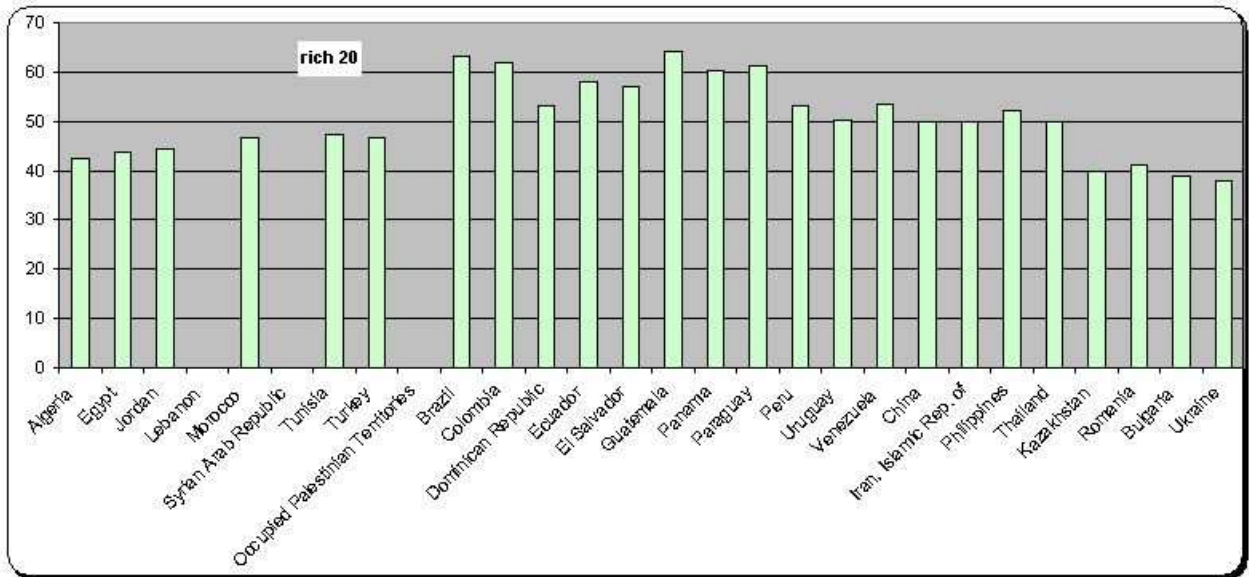
Source: UNDP (2005).

Figure 4: Share of the total consumption by the poorest 20% of the population in each country



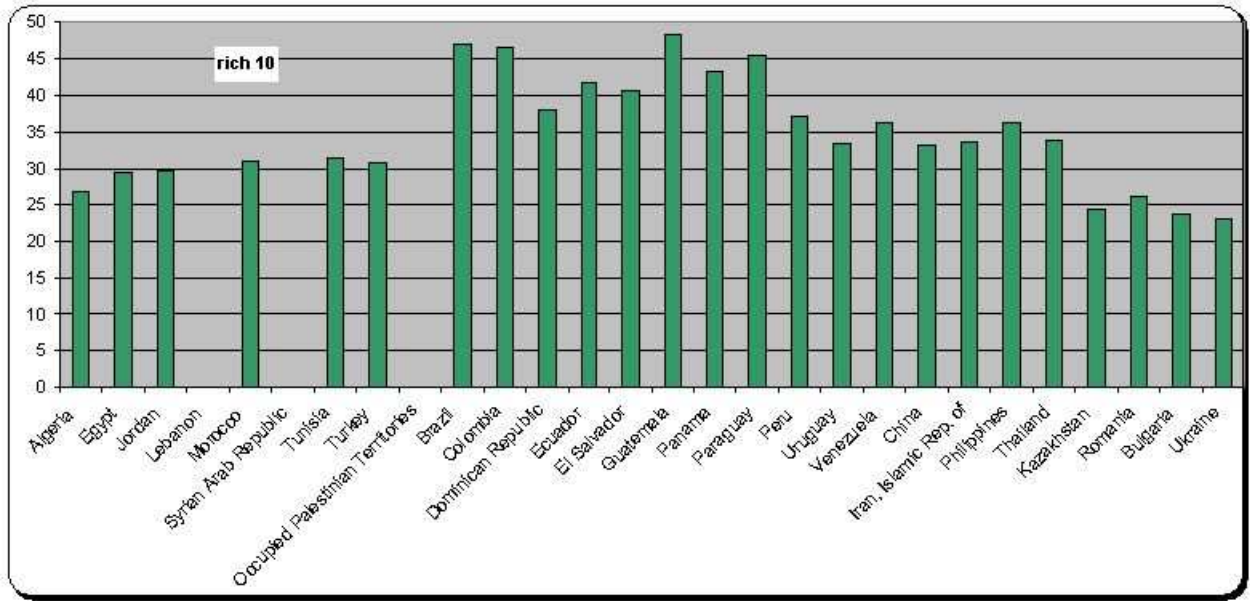
Source: UNDP (2005).

Figure 5: Share of the total consumption made by the richest 20% of the population in each country



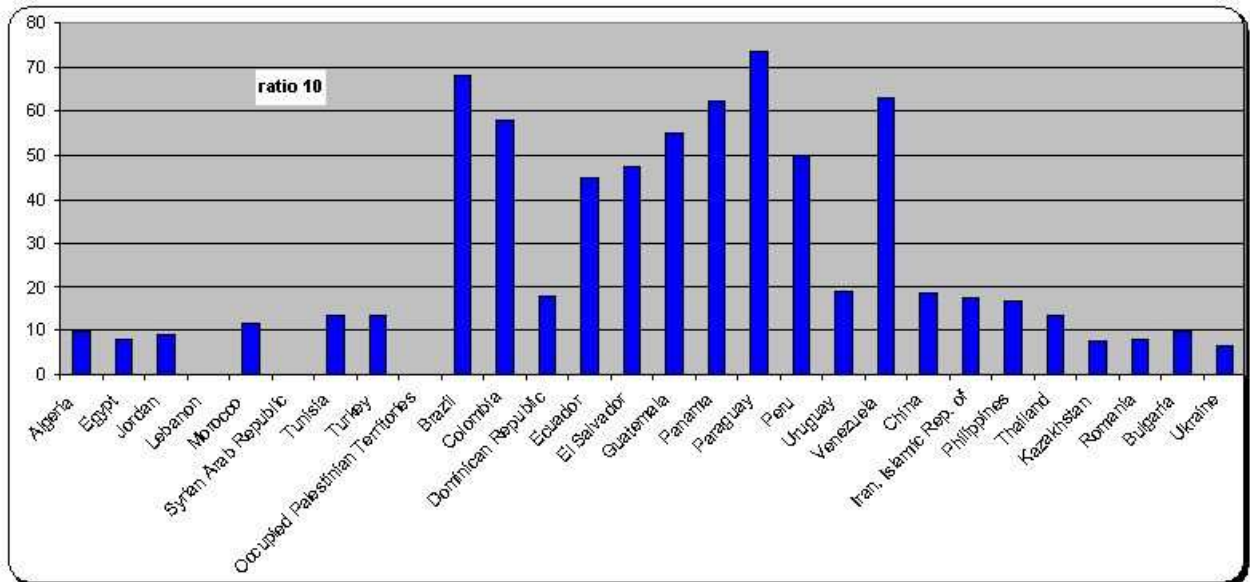
Source: UNDP (2005).

Figure 6: Share of the total consumption made by the richest 10% of the population in each country



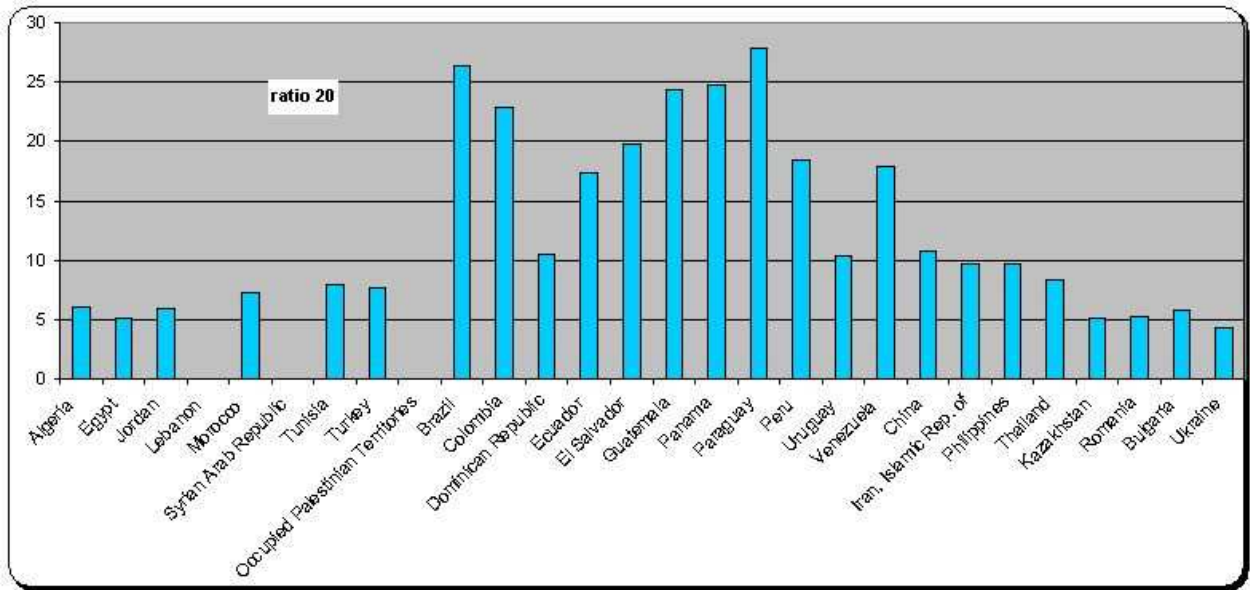
Source: UNDP (2005).

Figure 7: Ratio of the 10% richest to the 10% poorest, for each country



Source: UNDP (2005).

Figure 8: Ratio of the 20% richest to the 20% poorest, for each country



Source: UNDP (2005).

These data seem to be consistent with the hypothesis of the existence of social capital in MPCs that allows the less wealthy part of the population to reach higher living standards than expected, like, for instance, in other parts of the world.

Social Capital and Innovation

Once we accept that social capital has evident, positive effects in the equality level of the economy, we can ask how it affects the innovative capacity of a country. Can we say, as many scholars argue, that social capital promotes innovation? Can we say that this happens in all the contexts? Can we differentiate its effects? If, for example, MPCs show high levels of social capital, why don't they show the same high innovative capacity?

If, on the one hand, social capital contributes to increase the equality level of the economy, on the other, and under some particular cultural circumstances, it could be negatively related to what we consider to be important and useful for innovation. In many cases, those social relationships and strong networks acting as an informal social protection could also obstacle the development of an entrepreneurial initiative. Social capital has a positive effect on innovation when, due to the intense relationships and interactions between people, there is an increased possibility and opportunity to generate new ideas, develop them and try to turn them into an entrepreneurial activity to produce socio-economic benefit. By the contrary, in such a context there may be a strong and shared common concern about anything that could change the status quo, more than a stimulus to change.

So, how to deal with such a “negative” social capital?

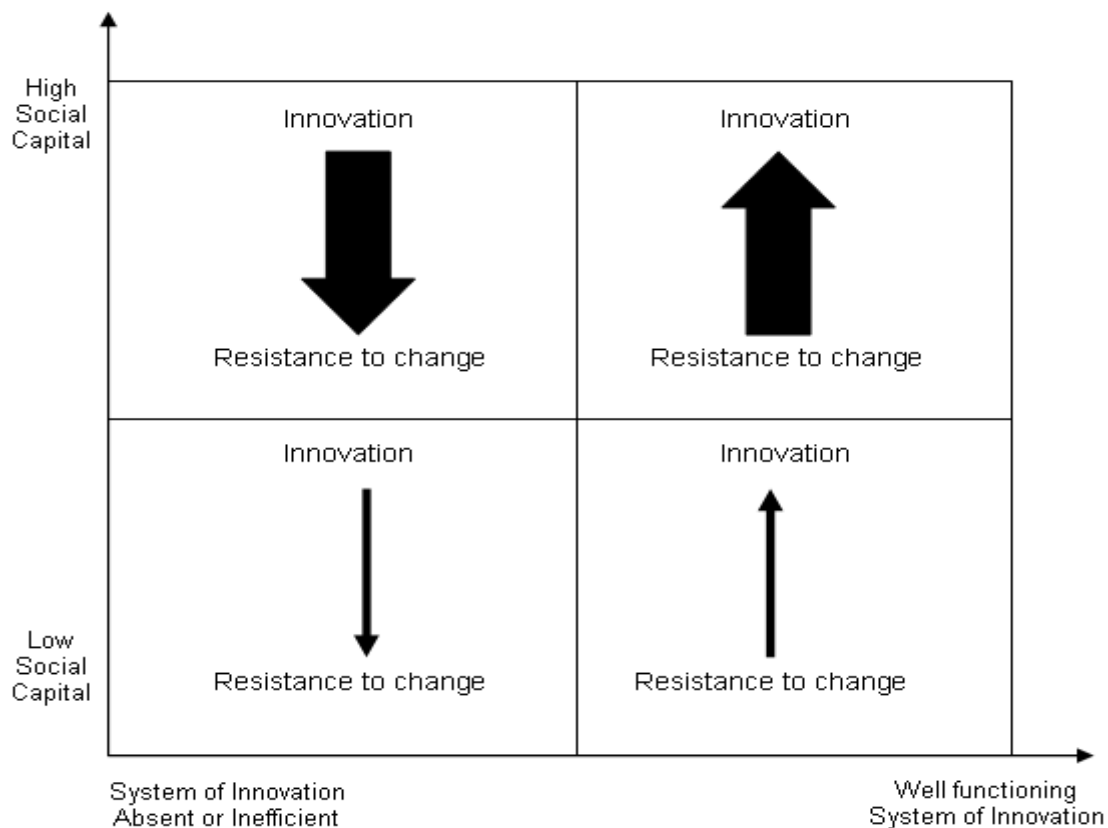
Some might say that it is another form of it, and try to define a “positive” social capital, supporting innovation and being very relevant to the innovation policies implementation, opposing to a “negative” social capital, hindering social and economic initiatives and innovation.

The point is that even if social capital is an important factor affecting innovation and economic and social development, it is always a product and a part itself of the culture of a nation or region. It has much more to do with culture than with economy, but it determines the economic performances of a system. The main idea of this paper is that his relationship with innovation is strict, but not always positive.

It marks the intensity of the trend, not the direction.

In an innovation-oriented system, the presence of social capital reinforces the trend, allows a more efficient and easier coordination of efforts, fosters cooperation, organises and in some way regulates competition, and improves knowledge sharing. When an innovation system does not exist or does not function, the general tendency is to maintain the status quo, and a strong social capital will reinforce this tendency, making more and more difficult to promote change in such a context.

Figure 9: The Relationship between Social Capital and Innovation



The reverse of the coin is that in such a scheme, where interrelations and links among people, families, and groups are longstanding, powerful and indisputable, and it is impossible to fall down and be abandoned, on the other hand it is also difficult to impulse great changes or improvements, i.e. to innovate. Resistance to change is enormously reinforced by the overall set of shared norms, customs, values, beliefs and common understandings.

The role for public policies

In this case, as well as in the case of most innovative countries, mainly northern European ones, there is a strong relationship between social capital and innovation performance. The common aspect is that social capital determines the intensity of the trend. Where a system of innovation exists, and the society has a clear orientation towards innovation, entrepreneurship, cultural, social, economic change, the existence of social capital reinforces this tendency. This is the case of the need for public policies to foster, create, discover and invest in social capital. But when the general trend in the society is static, conservative, and oriented towards the maintenance of the status quo, the presence of social capital reinforces the resistance to change, by directly hindering any change or by diminishing incentives to change. Thus public policies that aim at promoting economic development through innovation should direct their efforts towards the discovering, and fostering of the enabling conditions and specific elements of a system of innovation, more than towards building social capital. Where social capital does exist, it must be first of all recognised, analysed in its overall effects, and then used, being aware of its nature of *vox media*.

With this in mind, we can perfectly see how peculiar and specific the innovation process is in any social system, local, regional, or national, depending on specific cultural characteristics. The history, the territory, the institutions count in creating cultural specific characteristics of any social system. It is intuitive then, that the process of influencing the cultural settings of a society is a very slow one. Slow to create and diffuse new accepted values, objectives, models, and slow to put aside deep-seated cultural constraints. These cultural differences are also important factors determining unequal paths of innovation among countries and regions.

Public policies that take into account the fundamental cultural dimension and peculiarities, should aim at:

- Creating a general common understanding of innovation as a “good value” to be pursued in the everyday activities.
- Fostering a feeling of trust among the population, on the one hand, and towards public institutions, on the other hand, both being necessary to create a positive environment in which actors will operate.
- Creating a vision: an administration able to “emanate good values” and to demonstrate its commitment in pursuing them will gain an impressive amount of consideration, trust and respect by its citizens. Such a long, complex, slow, and

delicate process of developing an innovative capacity in a country requires a strong political commitment and has a long time scale. In authoritarian political systems, the difficulty lies in the necessity to change the structure of the political organisation itself. This implies an extraordinary effort and willingness to give up maintaining the total control, in favour of democratic reforms. In the democratic systems, the typical difficulty is the gap between the timescale of the politicians (often short-term, in the view of the next elections), and the long term and intangible nature of a process of social change. It is not possible and useless to plan an innovation strategy for a short period and expect it to produce visible and sound results in few years. That's why only if there is a bi-partisan agreement on the strategic comparative advantage that innovation can represent for the future of a nation, then a long-term innovation policy can be implemented with a constant and committed effort.

- Defining common goals, appealing for the whole community, to be achieved through a collective commitment, and propose and promote social behaviours conducive to those goals' achievement. "Most people are not (nor do they seek to become) policy wonks or technocrats. Most yearn for an overarching picture of what we are trying to achieve, one that provides a framework for placing specific ideas, assessing specific past accomplishments, and planning for the future. We seek vision that inspires, compels, and gives meaning to our endeavours and sacrifices, to life" (Etzioni 2001).

- Proposing a mid-term programme with realistic expected results to be pursued by the community, in order to engage people in a common effort, trying to foster social cooperation, which in turn will generate the economic one. The administration should document the strategy, promote the evaluation of the public activities' performances and make them more transparent to citizens.

- Investing and attracting investments in social soft infrastructures.

- Being attractive, for people as well as for capitals. Much of the competition among nations, regions and cities too, nowadays, is about the ability to attract the best human capital. If human capital is more and more recognised as the main source of value for the economic process, and certainly for the establishment of an innovative capacity, it is clear that having the best brains is equivalent to having the best potential. But if the possibilities for the mobility of people increase, then it is no more possible to think to retain them (and in any case it would be counterproductive), it is necessary to attract them, by offering better conditions for life and work. The focus of international competition now is on those conditions.

- Having political stability, clear and respected regulations, democratic conditions for people. Within an authoritarian society, people cannot experience the same freedoms they can have in other part of the world; this will inevitably push them to go away, and certainly would not attract anyone from outside the county. A democratic, open system, without a stable, respected and serious regulatory system, would be likely to attract the wrong actors: speculators and incumbents having open country for corruption.

- Being proactive: the state is the first actor; it must give the impulse to the economic system, trying to avoid a sort of cannibalisation of the economy. The public sector itself has a large weight in the economy, especially in Mediterranean countries. Government spending is able to promote some activities, instead of others, through

a double effect of directly financing strategic areas and attract private investments in those areas. Then, through taxation policy, the state can determine economic incentives for innovative activities. For example, it makes big difference if we shift more “from income taxes, which penalise the efficient to property taxes, which demand you earn on the wealth under your custody”, trying to reduce inefficient ownership (Rajan & Zingales, 2004). Finally, regulations have to correct distortions, to guarantee basic economic rights and most of all by playing an active role in promoting objectives.

- Promoting coordination and coherence in the policy mix. Innovation policies are actually implemented through all the other policy areas too. Innovation policies are strictly related and interdependent with policies about competition, infrastructures, information and mass media, taxation, education, employment, environment, IPRs, research and trade. What is really decisive is the coherence, the coordination and the synergies in public policies. There is a need for a coherent, coordinated and most of all long term oriented approach across all policy areas.

- Developing and improving the ability to intervene. Governance becomes then decisive in the setting up of innovation policies. Good governance is a necessary condition for effective innovation policies. The quality of policy making makes the difference in the adoption and in the implementation of the strategy. The state, at any level, local, regional or national, must have the necessary ability and competence to intervene, if not its intervention can distort the aim of innovation policies. Some authors have clearly demonstrated that a frequent reason of failure of innovation policies was not to be sought in its conception nor in its design, but just in the last step: the “delivery” step. The gap between the “power to decide” and the “power to transform” is often a cause of failure for well-designed innovation policies. Kevin Morgan (2004) claims that: “The world of policy delivery, where policies and programmes are supposed to be implemented, has always been a domain of ‘low politics’, while policy design is the opposite, a domain of ‘high politics’, two domains which are radically different in terms of status, culture and power. This division of labour between design and delivery within the state is the political analogue of the Taylorist division between conception and execution within the firm, and both are equally debilitating”. If policy makers are not adequately prepared and able to deal with such a complex set of policies, they become part of the problem instead of solving it. They could resist to the change or drive it in a wrong direction.

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