

Braga, Vitor

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Business networking for SMEs as a means to promote regional competitiveness: A Theoretical Framework

Vítor Braga¹

Vitor1@mdx.ac.uk

Middlesex University

School of Health and Social Sciences

Queensway, Enfield, Middlesex

EN3 4SF, London, UK

Abstract. *The competitiveness of regions, as a means of promoting the competitiveness of a country as a whole, has been one of the main topics on the agenda of policy makers over the last decades. Several attempts at promoting competitiveness have been made with different degrees of success. In most cases, public investment in the regions was perceived as the solution to promote regional competitiveness and top-down policies were implemented. However, competitiveness also has an important dimension that is not related to public investment and depends instead on the cultural and institutional norms of a region. These regional characteristics are not easily addressed by traditional regional policies and require the study of cognitive processes and sociological and anthropological issues.*

Over recent years regional development has emphasised the importance of endogenous development. From this point of view, national or local governments' policies must recognise that competitiveness not only comes from public investment in physical infrastructures but also depends on the behaviour, attitudes and capabilities of local entrepreneurs within the business environment. The scientific literature has been unanimous in showing that business networks carry advantages for regional competitiveness. Several key issues are raised regarding this issue including trust, local culture, and transaction costs. The networking of activities gains special emphasis with respect to SMEs. In most cases the regional economy depends on these firms and they are frequently seen as a key element within regional development. Also these firms depend much more on potential networks to gain advantages in information and expertise and often require joint ventures with respect to R&D activities.

This paper will address the advantages of networking and its contribution to regional development as a way of promoting competitiveness. In so doing it will analyse the factors that lead entrepreneurs to co-operate and apply these findings in the context of regional and national economic development.

Keywords: Network form of organisation, Local development, Trust, Co-operation.

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I. Introduction

The global economy is a vast set of networks where every firm is linked to others in some way. If there is such a high number of inter-firm connections in the real world, it is worthwhile studying them and asking how do these linkages operate and under what conditions they are more able to produce positive (or negative) effects for the firms involved.

The concept of network lies in between the concept of firm and market, not fitting within any extremes of the analysis of markets and hierarchies, (Podolny and Page, 1998; Thorelli, 1986 and Grandory, 1997) with its own qualitatively different and distinctive properties. A network of firms doesn't involve the formal hierarchy as a firm and normally there is no financial. It also implies some level of connectiveness and trust among its members. In ordinary market transactions these levels are lower. Also, a firm willing to produce in a network saves the search costs in order to find a partner that can provide the firm the goods or services it needs.

Thorelli (1986: 38) defines a network as: “*‘nodes’ or positions (occupied by firms, households, strategic business units inside a diversified concern, trade associations and other types of organisations) and links manifested by interaction between the positions*”. Emphasising the links that are established between the firms within a network, Podolny and Page (1998) define a network as any collection of actors ($n \geq 2$) that pursue repeated, enduring exchange relations with one other and, at same time, lack a legitimate organisational authority to arbitrate and resolve disputes that may arise from the exchange. In a similar way, Varamaki and Vesalainen (2003) define a business network as “*certain co-operative groups which may consist of firms with a vertical or horizontal relationships and whose member firms have a common interest and together seek some means to achieve a higher level of performance by using multilateral group design*”.

A significant part of the existing literature on this issue is based on a sociological approach as with Janssen and Koenig (2002) who define networks as “*patterns of lasting social relationships between people*”. The authors also agree that they are an important part of an entrepreneur's social capital, whereby a quality is created between people that increases the return of a person's human capital such as intelligence and education. This emphasis is important since, according to Lam (1997) social institutions influence firms' strategies and work practices in a systematic way, thus influencing also firms' structures and processes.

The most important concepts related with networks are those of power and trust. Power has to be seen as the ability to influence others' decisions, and doesn't have to be a unilateral phenomenon. In

fact, power may exist in two or more ways. Those two concepts are of high importance to distinguish a network from a system. In the absence of power and trust, the network phenomenon would resume itself to a certain number of companies operating and the network concept would have no meaning.

An organisation can be defined by its domains; product; clientele served; functions performed; territory and time (Thorelli, 1986), a partial overlap in those domains is necessary for a network to exist. As the overlap becomes less complete the division of labour and synergistic network opportunities are likely to be more prevalent and more effectively implemented. A minimum of domain consensus is, however, necessary for the existence of a network.

A big issue within the study of networking is the need for the existence of a critical mass, in terms of quality and quantity of the relationships; otherwise one can not really talk about a network. Nevertheless, problems arise in terms of defining and measuring this critical mass.

The question of how do clusters affect regional development is, to some extent well studied in the academic literature. However, it should be remarked that this paper is not properly considering clusters as the unit of analysis. It must be noted that there are differences between the concepts of networking and clustering. Even the definition of cluster, there seems to be some confusion around the concept, probably because it is used in many different aspects of life and by people with very different backgrounds and purposes. My understanding of a cluster relates to the concentration of firms operating in the same or related industries that interact and co-operate and are usually geographically concentrated. However, to some authors the cluster existence doesn't imply co-operation and for others, the firms don't have to be geographically concentrated. Furthermore, networks are to some extent more flexible in definition than clusters. By not being geographically concentrated they probably will not make use of a specialised pool of labour to a specific industry or sector. Furthermore, they will not be noticed so easily by public authorities and/or local governments being more difficult to attract public investment on specific infrastructures.

Defining networks as non-geographically-concentrated implies that some of them cross regional or national administrative borders. However, in this paper networks are considered as entirely or partially (the majority share) within one region. This assumption is necessary to address more easily the advantages arising from networks to economic development.

Finally, my definition of network would be as a group of different organisations, with convergent (similar or interconnected) goals, which share an identity and develop a singular definition of trust and power and pursue repeated exchange relations, subjected to the existence of a critical mass. It

also implies the existence of important social relations between the people involved (within those organisations) and the seeking of higher levels of performance (regarding to costs, time and efficiency).

II. Economic Aspects

1. NETWORKS AND RETURNS TO SCALE

Within the production theory, on the orthodox economic analysis, production can assume three different forms: increasing, constant and decreasing returns to scale. In the case of increasing returns to scale, production is more profitable for higher levels of output. When decreasing returns to scale are verifiable, production becomes more costly (per unit) as output grows. In the case of constant returns to scale, the average cost is constant, i.e., the same for any quantity of output. Different returns to scale provide different advantages in what relates to the networking phenomenon. When a firm, or a set of firms (that can be an industry) face increasing returns to scale they are seeking high levels of production so that they can take advantage of economies of scale. In this case, a network can provide a more flexible and specialised division of labour, allowing economies of scale. Thus, different firms will specialise in the production of a part of the production process. Probably in this case, the demand market will be bigger when compared to a situation whereby each firm is producing the entire value chain and the market has to be shared. One is assuming here that any market can, at some point be transformed into a vertical network. In the presence of increasing returns to scale, normally a share of heavy and costly infrastructures are needed. Or, in a different perspective, sunk costs are an important part of the production itself. Sharing these infrastructures is an advantage that a network can provide.

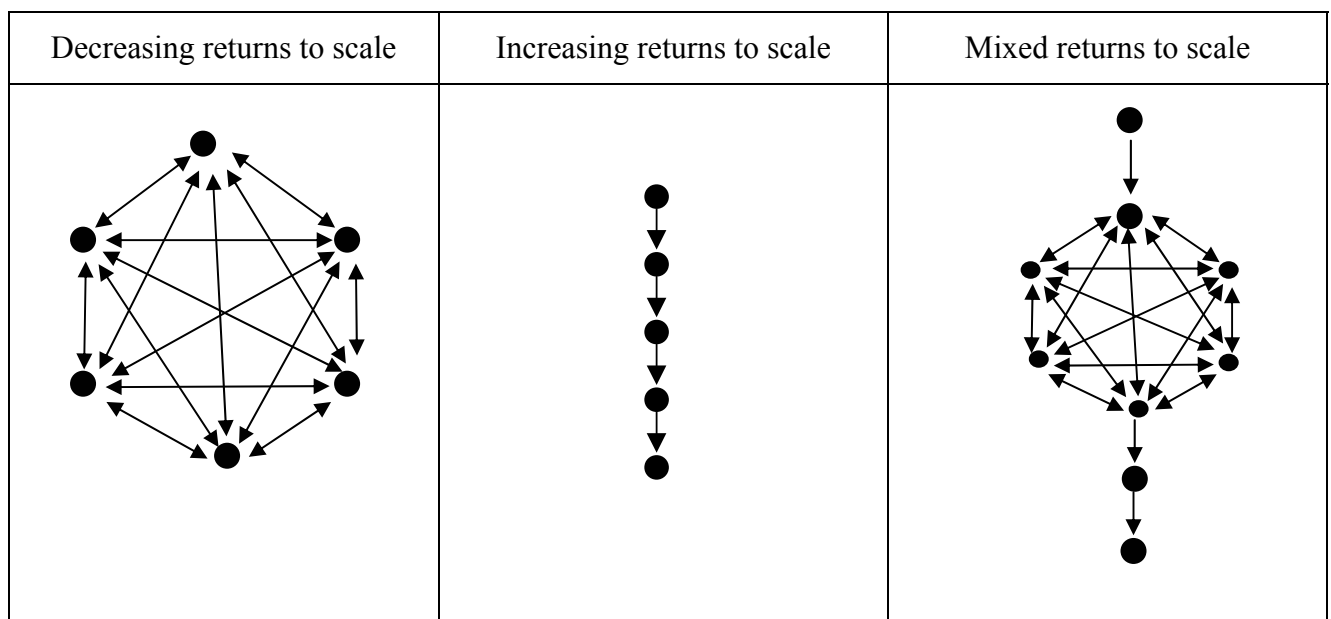
When decreasing returns are the case, each firm will be producing at a low level. In this case there is no space for the division of labour, and the market will be populated by a lot of small firms. Within this context, the environment is more likely to be competitive rather than co-operative. Each firm will have a small market share and thus little market power. However, there is still place for co-operation. As it has been said, firms are so small that they don't have relevant market share. This can lead to a problem of monopoly by the suppliers. If firms co-operate via buyer's associations, for example, the market power will be increased and low costs can be attained. Also if firms are to be

geographically concentrated the advantages arising from the clusters literature can also be verified. Public policies are driven by the sector because of its potential importance to the region; a labour pool of labour is likely to flourish, infrastructures may be created to serve the industry, and probably related industries will locate in the same region leading to a decrease in transport costs. It is assumed that these firms correspond to an important part of the regional economy.

Finally, when the industry is characterised by constant returns to scale, the level of efficiency and costs does not depend on the amount of production by each firm. In this case, the advantages arising from networks are those that also exist for the above mentioned situations. In fact, some advantages are common to all three situations and don't depend on returns to scale. It is these advantages that are considered in the rest of this paper.

The assumption used until now is that the entire value chain enjoys the same type of returns to scale. However, different returns to scale may occur in different parts of the production process. In this case, a mix of different forms of networks will occur, as seen in the picture below.

Fig. 1: Mapping networks in the presence of different returns to scale



Actually, returns to scale also determine the market structure, defining the number of firms operating in the industry. In fact, one can understand that returns to scale constitute a determinant to the form that networks assume.

2. USING THE THEORIES OF FIRMS TO ADDRESS THE ADVANTAGES OF NETWORKS

A lot of literature has been devoted to the explanation of the nature and the existence of firms, starting with Coase in 1937. However, nowadays scholars are divided in the explanation of this issue. On one hand people perceive the firm exists because there are transaction costs associated with production in the market – Transaction Costs Economics (TCE). On the other hand the existence of firms is explained with regard to resources, competencies and capabilities – The Resource Based Theory (RBT). The theories that follow are mainly driven by the explanation of the existence of firms, but in a broader way, they also explain the economic organisation (Foss, 1996a) of markets which can be of major importance to understand the relationships within a network. The use of these approaches might be useful for the explanation of networks, however in line with Thorelli (1986, p. 44) *“the network paradigm is not to be viewed as a substitute for any theory of the firm, of markets, or industrial organization but rather as a supplement, a view point with both normative and positive implications.”* Those explanations are vital to understand the workings of firms as single units, and also to understand the strategies they adopt. In this way, these contributions are of major importance in understanding why firms adopt a network strategy and as well as the formation of networks themselves. However, to be more specific, the aim of this section is to provide some insights into how these theories contribute to the argument that networks can provide a path for (local) economic development.

2.1 Transaction Costs Theory

The Transaction Costs Theory has been used over the last 30 years (with a high level of popularity) to explain firms’ decisions with respect to how economic activity is organised. This approach has provided a huge research agenda, which is visible in the number of writings produced since then.

Some of the tendency among the economists is to interpret the TCE writings as the explanation for why firms internalise a transaction. Coase (1937) studied the economic organisation of activities from a Transaction cost minimisation perspective and concluded that the costs arising from negotiation and concluding different intermediate product markets could be lower when integrating vertically, substituting them for a flexible² employment agreement. In line with Coase, co-ordination

² The use of a flexible employment contract is important here otherwise factors as labour legislation would have to be included within the analysis.

could be done either by a decentralised market mechanism (market) or by central decision-maker – the entrepreneur (firm). His explanation for the existence of firms is as follows:

“It can, I think, be assumed that the distinguished mark of the firm is the suppression of the price mechanism”

Pitelis (1993, pp. 8) refers to Coases’ theory as

“...that resource allocation in market economies was taking place not just through changes in relative prices (the market) but also not through such changes, but rather through ‘entrepreneurial’ decisions, unrelated to relative price changes”

However, According to Hennart (1993) the presence of market transaction costs is not a sufficient condition for internalisation. Firms also incur organising costs (higher than the market) according to Coase (1937). The markets use the price method of organisation and face price constraints (which usually minimise shirking but encourage cheating). On the other hand, firms rely on hierarchies but face behaviour constraints (which minimise cheating but encourage shirking). However, Hennart concludes that both markets and firms use a mix of price and behaviour constraints, but with different degrees of importance. According to him, the decision of using a price or hierarchy mechanisms depend on the relative costs of measuring output plus that of tolerating the residual amount of cheating as compared to those of constraining behaviour and of bearing the residual amount of shirking.

Coase pointed out some limits for the growth of firms, otherwise, there will only be place for one firm in the real world. These limits are as follows: (1)The growth of a firm implies a decrease in the returns to the entrepreneur function, i.e. the costs of organising additional transactions within the firm may rise; (2) as the transactions increase, the entrepreneur fails in the better allocation of resources and (3) the supply price of one or more of the factors of production may rise, because of what he defines as *“the other advantages”* of a small firm are greater than those of a large firm. The result then is that a firm will tend to expand until the costs of organising an extra transaction within the firm become equal to the costs of carrying out the same transaction in the market, or to the costs of organising in a different firm.

Along with this explanation Coase also explains why firms grow. The size of the firm depends on how much of the operation the entrepreneur wishes to have under his own control. Thus, firms grow as the entrepreneur decides to co-ordinate more and more operations, i.e. he will internalise all the operations that he thinks it is more profitable than incurring on the price mechanism.

Using this price mechanism appears to be costly (e.g. discovering what relevant prices are). The existence of a firm does not eliminate this contract costs but they are certainly reduced.

TCE is based on two main assumptions (Williamson, 1983, 1981), not always accepted by other authors. These assumptions are (1) the recognition that human agents are subject to bounded rationality and (2) at least some agents are given to opportunism. The first of these refers to the analytical and data processing ability of humans, which is not unlimited but also doesn't imply a status of irrationality. Williamson (1981) recognises that some economic models are based on the unrealistic assumption of hyperrationality of the "economic man".

The second assumption of opportunism suggests that the calculating behaviour is more sophisticated than the usual assumption of self-interest. According to Williamson (1983, pp.16), opportunism refers to

" 'Making false or empty, that is, self-disbelieved threats or promises', cutting corners for undisclosed personal advantage, covering up tracks, and the like"

The assumption of opportunism is important to the argumentation in favour of TC. If individuals were not opportunistic, organising costs would be zero since the protection against opportunism is costly. The assumption doesn't have to imply that all agents behave in an opportunistic way, the sufficient condition is that at least some do.

This also might be important to explaining the firms' existence, as done by Foss (1996 a, p. 474):

"Co-specialized resources/assets are organised more often in the firm than in the market, precisely, because co-specialization produces rents that can be appropriated by opportunistic input-owners."

This explanation refers to the existence of the firm (in opposition to the market) but also explains why a particular firm owns a specific combination of assets/resources. To some extent the author refers to the rent seeking behaviour arising from monopoly. The classical economic theory shows that under monopolistic conditions, producers are able to get higher profits and there is a loss of social welfare. Internalising those monopolistic activities the firm either can internalise those profits or avoid the loss of social welfare.

According to Pitelis (1993), Williamson used the concept of Transactions Costs, markets and Hierarchies to explain both hierarchies (the firm) and markets (the non-full suppression of the market by the firm) in terms of transaction costs economising. He also used it to explain a number of important issues relating to resource co-ordination, including the employment relation; vertical integration; the M-form organisation; conglomerate diversification and the multinational corporation.

Foss (1996a), referring to the TCE as the contractual approach, explains the fundamental reason why various resources are brought under common ownership. This reason is due to the problems arising from: i) high asset-specificity or non-verifiable marginal products under team-production and ii) proclivities to opportunism/moral hazard.

Hennart (quoted in Madhok, 1996) criticises the TCE arguing that it is more a market failure than a theory of the firm and also fails to capture the real complexity of economic organisation. This point of view relies less on the explanation of why do firms exist but more upon the explanation of why doesn't the production occur in the market. In line with this critique, markets show weaknesses in responding to production demands, making the firm an alternative to that form of production.

Pitelis (1993) summarises an extensive number of critiques (contributions from different authors). The first relates to the definition of transaction, transaction costs, markets and hierarchies. The problem with the definition is that transaction costs are defined very broadly. In fact, according to Hodgson and Knudsen (2003), Coase, in his original paper does not use the term 'transaction costs', but phrases such as 'contract costs' and 'costs of using price mechanism'. Nowadays it is used as the cost of defining, negotiating and enforcing all contract, thus is not restricted to the Coasean 'cost of using the price mechanism'. This fact raises two problems; TC are difficult to measure and can cover a range of possible phenomena (inside and outside the firm). In order to solve this problem the same authors use the term 'monitoring costs' when they are referring to the costs of monitoring inside the firm and the TC are only related to those costs occurring outside the firm. The second set of critiques is based on the assumptions that the theory makes. These assumptions postulate that markets and firms are separable and substitutable. It is also assumed that efficient firms replace inefficient markets and that transaction costs are operationalisable. The third set of critiques is related to the role of power. The Transaction Costs, Markets and Hierarchies (TCMH) theory does not consider asymmetries in power relations neither between firms, nor inside the organisation. It also doesn't link Transaction costs to power and how these can be different under different power situations. In the same way, TCE does not consider factors such as trust and attributes other than just self interest and other institutions and conventions (e.g. associations; 'clans' and networks). And finally, the theory does not include the possible role of the state, or the central planner, in the models.

2.2 Resource Dependence Theory

Since the early 1990s the explanation of the nature of firms has also been undertaken in terms of resources or knowledge. According to Kogut and Zander (1996, pp. 502), "*firms are organisations that represent social knowledge of co-ordination and learning*". This view of the existence of firms is based on the argument that organisations are dependent upon the exchange of resources (Jenssen and Koenig, 2002). These resources can be: information; motivational resources and material resources. The reason for the existence of firms, in line with this theory, is that firms provide a social

community of voluntaristic action structured by organising principles that are not reducible to individuals (Kogut and Zander, 1992). According to the authors the firm is more than just a sum of individuals. It is implicit here that the firm is a set of resources that have no meaning when operating in isolation and that there are synergies to come out of this interaction verifying complementarities. In other words, there is implicit co-operation between productive factors inside the firm.

The firm can be seen as a group of all the productive factors existing in the economy. If there is to be gains from the productive factors' co-operation inside the firm, then it is likely that some kind of local economy gains arise from firms' co-operation. The question here is a question of formal co-ordination. While inside firms there is the entrepreneur who co-ordinates the activities with formal and recognised power, inside networks there is no such thing. However, the question of power is much more complex than just this. Inside the firm, it is assumed that the power relies only on the entrepreneur, who then defines a hierarchy inside the organisation. Nevertheless the knowledge economy brought new insights to those power relations. In line with Foss (2002) knowledge is becoming more dispersed and increasingly must be outsourced. If this powerful resource (knowledge) is to be owned by employees then authority relations are fading into insignificance and the exercise of authority becomes inefficient. Another important aspect is that when these actors (that possess the knowledge which is an input to the firm) then the boundaries of firms get blurred. This fact relies on the nature of the input that is important to the firm. If one is talking about a physical input, the ownership of that input only depends upon the firm itself. But when the advantage relies on human inputs, then ownership might depend on factors exogenous to the firms' own decision. If the advantage relies on human factors then the boundaries of the firm become blurred and the hierarchy assumes different shapes. The boundaries here are not defined in terms of the cognitive limitations of individuals. These limitations lead to knowledge transfer problems, which are due to their specific attributes: the degree of knowledge tacitness and the level of problem solving complexity. Thus, if this is true for the working of firms then the existence of formal power is also not a condition for the advantages arising to networks via firms' co-operation.

This theory of the firm is strongly influenced by organisational theory and rejects the pure contractual interpretation of the firm (Foss, 1996a). Thus, the central competitive dimension of what firms know how to do is to create and transfer knowledge efficiently within an organisational context. Summarising, firms exist because they can more efficiently co-ordinate collective learning processes than market organisation is able to do. (Foss, 1996a)

According to Heiman and Nickerson (2002), the knowledge-based view of scholars maintain that bounded rationality acts *sans* regard for opportunism as it influences managerial choice of

governance for a particular transaction, as opposed to the TCE, which relies on the assumption of opportunism to explain governance mode decisions. In fact, transaction costs exist because economic actors predict that other actors will exhibit opportunistic behaviour, so this is a central issue for TCE.

The reason why hierarchies are preferred over markets is that (Kogut and Zander, 1996) productivity grows with the division of labour, but specialisation increases the costs of communication and co-ordination. This dilemma is solved by the fact that when firms are able to create an identity that leads to social knowledge (since the knowledge of firms has an economic value over market transactions), it also supports co-ordination and communication, since communication and co-ordination costs are expected to decrease in the presence of an “identity”. This is to say that co-ordination, communication and learning are located not only physically in a certain place but also mentally in the form of identity.

Another view in a knowledge-based theory is put forward by Foss (1996a), despite considering himself as a transaction costs economist. This view relies on the firms’ decision for internalising an activity. According to him, when a firm takes this decision, it is a matter of information – it already had already the possibility (at least conceptually) to realise what it can do it in a more efficient way, or must have some superior knowledge.

Hodgson and Knusden (2003) agree that there is a firm-specific learning effect, which depends strictly on the number of workers. The basis of this argument is that the firm can be seen as a repository of tacit and codifiable knowledge (embodied in organisational structures and routines), which enhance individual skills and capabilities. i.e., the firm may provide a learning environment in which individual skills may be enhanced. It is not possible to find this environment in a market context.

The definition of an identity among the actors in a firm is important for two main reasons, according to the previous authors. The first one is that it defines conventions and rules by which individuals co-ordinate behaviour and decision making and, on the other hand, sets out the process by which learning is developed socially through the formation of values and convergent expectations.

In this view, the theory of the firm also lacks unanimity as some recent critiques have pointed out. Conner, Kogut and Zander fail in the explanation of the existence of firms once they do not include technological determinism³ (Foss, 1996a). In line with their argument, technology only determines

³ This expression, firstly used by Williamson in 1985, refers to the idea that technology determines economic organization in a directly way.

the size of the firm. Technology determines economies of scale and the most efficient level of production but doesn't constitute a reason for firms to exist.

The gains from shared codes, languages, etc. are necessary to explain firm organisation but are not sufficient. Furthermore, the fact that the resources have to be embedded within the first order organising principles of shared cultures, languages, codes is also criticised by Foss. According to him, separately owned activities may conceptually be much more embedded in the sense of communication channels, shared culture and other forms of social knowledge, than divisions of the same firm. In summary, it is not the ownership that enhances the higher order organising principles. Foss concludes, then, that co-specialisation and the presence of higher order organising principles are not sufficient to explain the existence of the specific constellation of property rights that characterises the firm.

The above referred to theories of the firm are useful to explain the existence of networks. Firstly because they explain the existence of firms which are the unit of analysis in a network context.

In the traditional analysis of markets and hierarchies a trade-off seems to be present: Transaction costs vs. co-ordinating and monitoring costs. The presence of TC's is visible in the case that production takes place in the market, and the co-ordination and monitoring costs rise as the firm decides to incorporate new production activities, since the organisation gets bigger and more complex.

Within the context of an existing network some degree of trust is likely to exist. Associated with trust is the fact that opportunistic behaviour is less likely to exist. Thus, it seems reasonable that transaction costs are lower. In the same way, firms have to internalise less production activities, which, in part diminishes the co-ordination costs. In the final analysis, firms producing within a network of firms are dividing a big production unit into several different plants (under different management). As organisation costs verify diminishing returns to scale, the minimum of the average co-ordination costs occurs for low levels of production.

The foundations that the resource based theory use to the explanation of firms can also be used to explain networks. A network (like firms) represents social knowledge of co-ordination and learning. But in the case of networks the co-operation is not verified among productive factors but among firms.

A network is more than the sum of firms. When one talks about economies of scale (inside a firm), one is, to some extent, referring to the division of labour among the production factors. The division

of labour among firms inside a network seems to produce the same advantages as economies of scale, since productivity is higher. On the other hand, the synergies that are produced through these network relationships produce an increase in productivity in relation to the situation that firms produce in isolation. The tight contact between networks' participants permits the creation of an identity by sharing social knowledge (???). This is an important feature of networks since costs of communication are lower. These costs were expected to be higher as the division of labour and the specialisation increases.

A network is a locus of knowledge transfer. This knowledge can be tacit or codified. There is an extensive list of literature that identifies the tight relationship between networks and innovation. Usually networks foster innovation and some of the network purposes are mainly through joint-ventures in R&D. But in any type of network the contact of different firms facilitates new learning by the recognition of the partners' modus operandi.

III. Social Aspects

The networking phenomenon embodies an important social dimension that arises from personal contacts and social aspects of every-day-life.

One of the major critiques to the concept of social capital is that it includes too many important aspects under the same label. Within this work, this critique becomes a strength since all those aspects are important in this section.

Above all, the concept of social capital refers to the phenomenon of co-operation. David Hume, in the middle of the 18th century began to problematise this issue using the following example. Let us imagine two wheat farmers in the same village, but whose harvests have to be undertaken at different times due to dissimilarities in the quality and location of their respective properties. One may opt to help the other with the expectation of reciprocity of some sort rather than out of altruism. This example, as well as the iconic "prisoner's dilemma" in game theory, stresses the importance of collaboration between economic agents as a means of maximising the benefits that accrue to each.

According to Peres (2000) social capital is a sort of

"invisible glue that maintains social cohesion, and is based on trust between people and operates through a network of relations between the social groups that tend to form in any society".

The concept was firstly developed in sociology in studies about the community, in which it was used to describe relations in personal contacts within a community. However it was adopted by economic sciences in order to explain economic growth. According to Grootaert (1998) the concept can be applied to economic reality at two distinct levels:

- at the microeconomic level, where it constitutes a means of promoting market efficiency; and
- at the macroeconomic level, by stimulating greater inter-institutional cohesion between a variety of governmental, private and other organisations.

Indeed, social capital, as reflected in the capacity to establish a more or less institutionalised and systematic network of relations of knowledge and mutual trust, might be considered the main resource to which a firm – or indeed a nation, has access.

The most enduring and influential vision of the concept has been provided by Putnam *et al.* (1993), who defined social capital as a social network based on norms and trust which facilitates cooperation and generates higher mutual benefits. It is presented as an attribute that is almost exclusively found in large scale organisations and communities and therefore, by extension, may primarily be associated with the modern nation state. In the study that made him the focus of public attention, Putnam concluded that North-South differences in Italy are causally related to the level of trust existing between actors, the scale and intensity of civic behaviour and the propensity for ‘associativity’ in a given society. Each of these is considered indicative of the strength and vitality of the social fabric. According to Putnam, the existence of high levels of associativity gives rise to new networks and synergies and fosters a greater capacity for intervention in society. As these ingredients were found to be more present in North Italy than in the South, Putnam concluded that they were responsible for the better economic performance and greater political stability in the North.

The more recent literature provides evidence of the progress that has been made in the empirical measurement of social capital’s contribution to economic growth and development. For example, Knack and Keefer (1996) have conducted an econometric study of different countries, and found a high positive correlation between economic growth and norms of cooperation/trust. Narayan and Pritchett (1997) studied the relationship between incomes and associativism in rural Tanzania, and concluded that, in the context of high levels of poverty, families with above-average purchasing power usually participated more in collective organizations. Their accumulated social capital allowed them to enjoy a few externalities such as improved agricultural skills, easier access to the imperfect information market, higher levels/rates of schooling and lower risk aversion, once they felt more protected by a social network. While doubts may remain about the direction of the causality (i.e.

does above-average purchasing power permit social capital to be constructed, or does social capital permit above-average purchasing power to be attained?), these conclusions strongly contrast with the classical sociological thesis that for accumulation to take off, economic actors must turn their backs on the needs and demands of members of their extended families, community and other co-ethnics.

Social capital has a role to play regarding to this competitiveness: according to most of the theoretical contributions on this issue, its implications are to be felt in four distinct yet interconnected spheres, namely at the intra-firm, inter-firm, intra-sectoral and societal levels.

The benefits referred to above are mainly the result of social co-operation which can be found within and between organisations of various types and manifest itself in a number of relevant forms and at various societal levels, such as: teamwork, trust, good will, partnerships, networking, active citizenship and social cohesion. From this point of view, social capital affects the overall performance of an economy both at the level of each firm's competitiveness, and the competitiveness of the economy as a whole. Looking at a given firm in isolation from its external environment, social capital affects competitiveness because it

- is inserted in a vertical association (within a hierarchical relationship) which facilitates the exchange of information and allows a better relations between employer and employees to be established and maintained; and
- encourages a greater capacity for team work, trust and cooperation via horizontal forms of association, and it can be expected that these factors will lead to higher productivity.

Social capital also has an important role to play with regard to the competitiveness of the overall economy because it:

- creates a greater embeddedness of firms in the local productive system;
- enables a greater propensity for innovation
- facilitates information transfers which provide better information to governments about entrepreneurial problems, enabling more appropriate policies to be designed and implemented;
- creates an environment of trust and cooperation among all actors, not only between firms, but also between firms and institutions;
- improves cooperation, provides greater competitiveness and makes for healthier competition;
- can be a factor favouring industrial attraction.

It has been argued that the phenomenon of social capital, in addition to creating a basis for 'local' competitiveness, may also contribute to global economic development, since competitiveness is a factor in economic development which in turn reinforces the conditions for further competitiveness. Woolcock and Narayan (2002) suggest four different dimensions of social capital's contribution to the promotion of economic development:

1. *At the community level:* social capital promotes social welfare via the functioning of local organizations such as clubs, associations and civic groups.

2. *Through networks:* here, vertical and horizontal associations help to satisfy personal or sectoral interests.

3. *The institutional dimension:* at one level, the capacity of social groups to pursue collective interests depends on the quality of the linkages they have with formal institutions; at another level, the performance of regions and firms depends on their own internal coherence, credibility and competence, as well as their degree of transparency and social responsibility; and

4. *Via the promotion of synergies:* this more holistic vision integrates the institutional and approaches and focuses both on embeddedness and the existence of mutual support relations between all actors.

Thus social capital, it can be argued, has a positive effect not only on competitiveness but also on the general development of the economy at large; hence the importance of finding policies that will stimulate rather than undermine it, so as to achieve better performances from firms, regions and countries alike. However, it would probably be going too far to suggest that, given the confidence of the World Bank in the capacity of social capital to help developing countries attain higher and more sustainable living standards more quickly, that 'social capital accumulation' could offer a solution to global stagnation.

There is a relatively high degree of unanimity in the economic literature that social capital has positive effects on development and, therefore, on competitiveness. If this is so, since industrial policy seeks to increase competitiveness, it should not neglect social capital as an important source of success in achieving its policy aims. The social scientific literature on this issue has been growing over the last decade; however, there is still not a significant amount of literature linking industrial policy and social capital.

The concept of social capital embodies factors such as trust, cooperation, embeddedness, social relations, clustering, innovation, etc. It is clear that any study of industrial organization, dynamics and policy will need to take this concept on board.

Despite, the fact that, throughout this essay, the positive aspects of social capital have tended to be stressed; there are few important caveats that should be taken into account. On the one hand, there are those critics who have remarked that as the confidence of “social capitalists” to explain virtually everything in the social sciences has grown, the less persuasive have been their explanations (Fine 2001). On the other, if one does not reject the concept of social capital outright, but simply remains sceptical regarding the extent of its explanatory capacity and the ease with which it and its effects can be measured, and its ‘translatability’ to the policy sphere. Then the following points provide a starting point for improving and adapting the concept.

Clearly, it has to be said that an excessive accumulation of social capital may be dangerous, because in the real world of heterogeneous actors and uneven distribution of economic and political power, cooperation can easily turn into collusion. Price agreements can be established, and other practices inimical to markets and damaging to consumers can become the rule rather than the exception, leading to a decrease in social and economic welfare and a deterioration in the equity of its distribution. There are even more worrying negative examples of social capital such as the emergence and persistence of (a) ghettos, (b) clientelist and corrupt practices that often fill the vacuum left by inefficient markets and/or ineffective or inappropriate policies, and (c) powerful mafia-type organisations.

From the policy perspective, these ‘aberrations’ undoubtedly constitute a serious threat. Corruption is just a way of improving someone’s position at the expense of another’s on non-market based grounds. Social capital relies basically on personal social relations and these may be deployed in many ways that work against the public interest: in order to influence industrial location, distort the distribution of industrial subsidies, gain access to lucrative public sector contracts, or benefit illegitimately from privileged information. According to Woolcock and Narayan (2002) there are some countries where corruption, bureaucracy, lack of civic freedom, inequalities, and low levels of corporate governance, among other deficiencies, constitute a serious and deeply-rooted barrier to economic development. In these cases, to invest in social and civic capital offers returns that can complement the orthodox investment in either government institutional strengthening or private sector capital accumulation.

IV. Conclusions

The entrepreneurs' willingness to co-operate depends on the advantages they foresee arising from co-operation. That means that when co-operation exists all the parts involved receive mutual benefits. Thus, co-operation is a game of positive sums resulting in gains for the overall economy. At least in the supply side. During this paper, the demand side of the economy was not studied. In fact, problems may arise in this respect, when firms decide engage in for collusion. Nevertheless, some gains may also arise when co-operation results in cost cuts and prices get lower.

The returns to scale contribute to the networking shaping the form and determining the different advantages that can arise from co-operation. Using the theories of the firm, one can get some interesting insights into the explanation of networks. In fact, those theories provide us with the information that networks are important for economic development because they permit the lowering of transaction costs and more efficient use of resources.

The social aspects of networking form of organisation are a different perspective of the gains that co-operation brings to economic development. Assuming that social capital enhances competitiveness the concepts of embeddedness; trust; moral rules and cultural values assume a vital role on the study of business' performance.

The framework is presented is far to completely explain why networks exist. Furthermore, co-operation may exist for reasons that are not economically rational (or at least that were not theoretically expected). The fact that a network exist is not strictly explained by the economic or the social aspects. Thus, a mix of these two aspects constitutes the basis for the explanation of networks. In fact, most of the paper addresses causes of costs cuttings to regional development. In the case of transaction costs this perspective is obvious. However, in what concerns to resource dependence theory a shared identity among the network members is necessary. According to Dyer and Nobeoka (2000) Kogut and Zander's argument are also applicable to networks if this identity is created. Reducing uncertainty, lowering costs and sharing common goals are certainly important contributes to regional development. However, in order to better assess those gains co-operation with local authorities is also needed. In fact this might constitute a critique to the paper here presented – the interaction between private and public actors is not stressed.

Finally, one of the most discussed aspects on the networking literature was not discussed in this paper- innovation. However, this issue should not be treated as minor. The existing literature is extensive on this issue. Furthermore it is unanimous that co-operation is important on innovation

because it provides a path for collective learning and might be responsible for the creation of an innovative environment that provides firms with a higher propensity to invest in R&D.

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