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AN EVOLUTIONARY APPROACH TO INTERNATIONAL EXPANSION: A STUDY FOR AN ITALIAN REGION

by

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CONTENTS

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1. Introduction

It is well known that the Italian economy grew very fast over the last decades, especially in international markets. A vast literature is available on the reasons why this happened. In general a mercantilistic approach characterises this debate as foreign markets are seen merely as a way to increase sales or reduce costs. This approach looks precarious for at least two reasons. First because sustaining exports and substituting for imports (through conventional macro-economic actions or industry policies) often generate conflicts in the international scene and expose a country to possible actions of retaliation[1]. Second, and most important, by focusing on export performance alone, one forgets that international expansion, in recent times, offers a learning opportunity that concerns every aspect of the national economy and its competitive position.

If one looks at the international market only as the locus where to exploit some national advantage, it is forgotten that the *international market* is where the competitive advantage is now created through more information on technology opportunities, on the variety of suppliers and on the existence of new or better services. It is where current managerial culture spreads and where one can learn which relations (among firms and agencies) are best to compete.

On the other hand looking solely at the performance of the Italian multinational firms seems far too restrictive. While *sales abroad* replace export sales, the *competitive advantage* of the country very much depends on the performance of a few *national champions*. Minor importance is thus given to small and medium scale firms and to the significance of product niches in fostering new kinds of competitive advantages. Also little attention is paid to

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1 This is not a position steming from a neo-liberalist approach. It simply does not rely upon simple "good will" in solving the problem of countervailing protectionism

the extent to which inter-firm collaboration, facilitated by better communication linkages and easier access to business and marketing services can enhance the advantages of both individual firms and industries.

In fact both large multinational firms and smaller national firms contributed to the Italian performance abroad. This result was made possible by two conditions: the presence of some firms' advantages and an active role of the State. At the national level, economic policy was mainly targeted toward large firms and investments in strategic sectors, in depressed areas and in selected activities. Other policies were experienced at a regional level, stemming from local institution and promoted by firm associations and local public agencies. These policies, together with some independent forces, drove small and medium firms towards international production and export sales at a very fast pace.

Evidence suggests that, in Italy, during the 80's, the most dynamic factors were very different from those described in current literature on multinational enterprises. With a strong presence in the most traditional productions[2], the fast growing firms were:

- highly specialised in a tiny segments of their markets (often with a high skill content for labour and management);
- often present in light industries, very sensitive to fashion cycles, high-quality standards, evolution of design;
- open to a process of integration with other firms (both national and international) in various stages of production (particularly as sub-suppliers);
- subject to economies of district-localization (local division of labour among small firms)[3].

Direct investments (although increasing) could not reach the rate of increase of other forms of collaboration agreements that firms experienced both locally and internationally[4]. Well documented examples show how inter-firm collaboration can improve quality, develop new products and expand market

2 This is often a source of concern. See Onida (ed), 1986 and Onida (ed), 1989

3 Empirical studies at the firm's level are often available on a regional basis, especially in those areas which show a striking export performance. Regional models of production emerge from these studies. For an early discussion of the Emilian model see Brusco, 1982; the Veneto model is discussed in Brunetti et al, 1989; an interesting attempt to assess the dynamic role of space in local development can be found in Camagni, 1989

4 See R&P (eds), 1987

share[5]. A large literature now exists about the so called *local districts*[6], *flexible specialization* and *flexible manufacturing production networks*[7].

As different patterns emerged, a better distinction between various cases was considered necessary to stress the differences among local models of development and organization.

The purpose of this paper is to investigate and help explain why firms based in the North-East of Italy, namely in the region called Friuli Venezia Giulia, can compete successfully in their segment(s) of industry. In particular, given that a process of globalization is said to take place, allowing for an expansion toward new and larger markets, it was wished to highlight the degree of global perspective that firms show in this area, despite their relative small scale.

Contrary to traditional literature on international trade, an evolutionary approach[8] was adopted, using the concept of *competitive advantages* of firms instead of the concept of *factor endowment* of nations. In simple terms it was agreed that advantages could <u>not</u> be considered as:

- *given*; instead they are produced by a country history, by the evolution of its firms' competitive structure, by the government behaviour, by the quality of local demand and by the scope of related and supporting industries;
- *stable;* in fact they change over time, both smoothly and in discrete terms, as a result of changes in the industry structure and in every firms positioning within this structure;
- *equal*; on the contrary there is a hierarchy of advantages in terms of tenability during time; lower-order advantages, such as cheap materials or cheap labour supply, are often easy to substitute or imitate; higher-order advantages, such as proprietary knowledge or brand reputation are more durable;
- *easy* to predict in their future configuration; chance, not only uncertainty, can play an important role, leading to unexpected results.

5 Balcet, 1990

6 The local district is centred on territorial contiguity and on the historical sedimentation of skills, culture, political and social cohesion. Firms internalize external economies acting as a group. Diseconomies of scale are overcome through local external organization. See Brusco, 1986

7 These contributions, rooted in the works of Alfred Marshall- see Bellandi, 1982 - received recent insights from Piore and Sabel, 1984 and Beccattini, 1979, 1989; see also Vaccà and Zanfei, 1990

8 For a broad discussion see Lunghini and Vaccà (eds), 1987

Adopting a disaggregated view, (the Porter's[9] *value chain* of a firm), we focused on two main topics:

- *the relation* between the external connections and the evolution of a firm, both in terms of strategy and business ideas; particular attention was paid to the specific interaction between foreign expansion and the shift of competitive advantages;
- the relation between the firm pattern of international expansion and the evolution of cooperation with other (both local or foreign) firms.

The purpose of this distinction was to single out the competitive and non-competitive forces at work and observe the different forms of organization that might take place, at the same time, within and between single firms.

Understanding was sought in a number of issues. First, the main focus of attention was on two topics. How the choice of developing external relations, and the experience which follows, influence a firm's productive structure, its marketing strategies and further international relations; and, how this experience affects a firm's general configuration, its positioning in the industry(s), its medium and long term strategies and the specific elements of its competitive position.

Attention then turned to how various forms of external operations (imports and exports, inter-firm collaboration, foreign investments) become part of a wider set of relations, including logistic activities, research and development, management of human resources, managerial services etc.

The characteristics and the evolution of the main foreign markets were analysed considering the reasons of entry, the marketing strategies, the relations with national and foreign operators and the transfer of experience and resources to other foreign markets. The analysis of the main cooperation agreements with foreign firms concerned the initial motivations, possible sponsors, kinds of difficulties, expected and realized results, variations in the original project and feed-back effects.

As a result, it was possible to single out the main phases of the firm's process of international expansion (changes in the firms strategy, ownership, etc) which caused a shift in the competitive advantage of the firm in different periods.

9 Porter, 1986, 1990

This method of investigation differs from the approach used in most current empirical research, with its reliance upon many cases to obtain statistical results. Because of the mass of information required for each firm and the need to cover quite a long period, a case study methodology was adopted. In fact only 25 firms were investigated[10], using a questionnaire and having long interviews with the firm's manager and other executives. As a result the dimension and the specific selection of the sample has no statistical significance and is not a fair picture of all the manufacturing firms of the region.

It is interesting that most firms of this particular *sample* happen to belong to very traditional sectors which would be considered *mature* under the Vernon's theory of product life cycle. Using the more recent Pavitt's taxonomy[11], no firm belongs to science based sectors.

The study comes to four main conclusions. First, competitive advantages represent a *firm specific* asset, as they come from a unique bundle of internal and external conditions coupled with strategies appropriate to that particular time. Secondly, no kind of advantage is a durable asset. Successful firms tend to change very often (in a range of five to ten years) the source of their competitive advantage. Thirdly, firms operate as elements of a system in which an important role is played by both the local environment and the extent of external linkages. Finally, the process of globalization seems to be only at its initial stage. Various bottle-necks emerge in the feed-back mechanism. The existence of a positive learning opportunity from international experience implies that a firm should change its business formula accordingly, thus improving its capacity to transform itself. These changes are present but not completely developed in the firms of the samples.

In synthesis, a process of globalization, based on firm specific advantages and strategies, is taking place but still lacks a powerful feed-back mechanism of fine-tuning with the rest of the world. A slowing down of the export-led growth is likely to take place, if strong discontinuity will not be introduced, in the internal and external organization of most firms and if a new industry policy will not be pursued.

10 We collected information on the most interesting and dynamic firms of the region at the local Industry Association and selected the firms to investigate *randomly*, given a *general* acceptance, on their side, to be analized in detail

11 Pavitt, 1984

2. Globalization and networking

A brief summary of the main features of globalization and networking could be useful, at a price of a certain simplification, to understand the implications of our results for the debate on the sources of international success.

Current literature on globalization refers to two main ways to serve world markets:

- a multi-domestic way, in which competition takes place on a country-by-country basis; firms tend to be owned locally and if not, local subsidiaries have a great autonomy from central headquarters;
- a global way, in which a firm's competitive position in one nation significantly effects (and is affected by) its position in other nations; rivals compete on a world-wide basis, drawing on advantages that grow out of their entire network of world-wide activities.

Under this perspective, some argue that communication technology have driven the world to a converging commonality of tastes[12] which is bringing about a higher standardization of products and a supremacy of the global firm over firms who adjust to local tastes. This view was widely criticised, both theoretically and empirically[13]. It is now quite accepted that global competitive advantages do not require universal product homogeneity and a standardisation of the marketing mix. This is due, among other things, to the development of Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) technologies, which allow for the production of customised products and for a higher flexibility and variability of the production processes.

Nevertheless, a global perspective had become the norm rather then the exception for reasons connected one way or another to the rise of a technological paradigm[14] in which information technologies play a central role[15]. As a result, knowledge can be formalized and transferred much more easily thanks to the standardization of a common language[16] and the creation

12 Levitt, 1985

13 An interesting discussion of some international contributions can be found in Gallagher (1988); in Italy the debate took place, mostly, after the review "Economia e Politica Industriale" called for a "research program" on industrial economics (n. 48, 1985)

14 Dosi, 1982

15 Antonelli (ed), 1988

16 A language is defined as a set of rules (vocabulary, syntax) able to reduce the complexity of communication among people and/or machineries to an acceptable degree. It is an open system, subject to variations. To eliminate these variations a language often produces *codes*, i.e. closed systems in which only one significance (output) in associated with one significant (input). A softwear program, for example, is a code used to simplify the language spoken among intelligent machines. For deeper insights into this matter see, among others, Rullani, 1986 and Rullani, 1989

of codes in every economic activity.

The new technological paradigm involves both large and small firms and allows for different forms of organization of transactions. We can see very clearly at least three of these forms. One is the market, in which prices are still the most efficient *media* to govern the complexity of the relations among various agents. Another is the managerial plan, in which various strategies are performed under a hierarchical structure[17]. A third form is the networking system in which agents cooperate to achieve collective ends and avoid constraints emerging from the above forms of organization[18].

This picture implies a rise in the complexity in the environment in which agents operate. It also allows for a higher dynamism in competition, as various agents, with different characteristics, appear from various areas of the world.

The reasons why information technologies[19] do not imply a convergence toward the *one and only* best way to produce and distribute at a world scale could be understood when looking at the dialectics between formalized and non formalized knowledge[20].

More room for new-comers *along with* a growth of multinational firms is possible because different economies can be reached through a different use of information. Not accidentally these features could also explain the non-existence of an optimum firm scale for every industrial activity[21].

17 Williamson, 1975, 1985 and Teece, 1986. Our approach is partly different because the form of organization is not choosen as a result of a parametric comparison of different conditions. See Di Bernardo, 1989. For a discussion on various forms of international cooperation see also Tiberi Vipraio, 1987

18 The concept of networking was born, with different connotations, in the theory of management and organization. For a broad discussion by different points of view see the review "Economia e Politica Industriale", n.64, 1989 and 65, 1990

19 According to recent (orthodox) revisions of traditional theory, the price system fails in assessing the optimality of economic activity, in a market system, when access to information is differentiated among the economic agents. An administrative form of organization of transaction will substitute the market form of organization when information exchange is cheaper, this way, in spite of the disadvantages of centralization. See Arrow, 1985

20 A new industrial organization approach, based on new information technologies, is now developing by the merging of industrial economics and transaction costs analysis. See Antonelli (ed), 1988

21 According to the new industrial organization approach, the size and the strategy of a firm are determined jointly, when both production costs and governance costs are taken into account. In determining industrial structures, the features of production costs shape the minimum efficient size of the production activities while the features of governance costs, due to uncertainty and information imperfections, shape the minimum efficient size of the firms. See Chandler, 1986 in Porter (ed), 1986. In this process, competition is created endogenously, by the degree in which firms accumulate knowledge, use it and then loose it. See Antonelli, 1982

On the one hand, formalised knowledge tends to make national models of consumption, production and management more homogeneous through an increased use of science in the production of goods and services. If the flow of information within the scientific and technological system is connected world-wide and if it is formalized through a common language, a sort of contamination of the productive system as a whole is almost inevitable when some access to such a language in ensured. This process in empathised if information is codified and a possible two-way interaction is allowed. The transformation (within and across industries) of informal knowledge into formal knowledge (using codes and producing languages) is also increased by the use of more intelligent machines and the creation of *routines* in problem solving[22].

On the other hand, a common base of formal knowledge, also allows for a division of learning opportunities by different centres and for achieving a specific feature (originality) that distinguished every firm from one another. Economies of scale, created by the enlargement of world markets, not only coexists with economies of scope, created by a multiple use of fixed resources. A third kind of economies stems from the possibility of introducing variety and variability (flexibility) in the production processes. In principle there is no limit to the customisation of products and services that information technologies could produce, once perfect interaction between supply and demand characteristics is taken into account.

As a consequence, trade-offs emerge among various strategies of market positioning to exploit one or a combination of the above mentioned different *economies*. Synergism among various sources of advantages might therefore appear and the systemic features of every form of organization (once obscured by the prevalence of the market form over hierarchy and networking) can play an important role in enhancing competitive advantages.

An easier access to formalized knowledge creates neither firms homogeneity nor the prevalence of the *right* dimension because there are various competitive advantages to be exploited, both from the persistence of informal (not transferable) knowledge[23] and the possibility to gain access to different kinds of economies at different degrees.

22 Nelson and Winter, 1982; Freeman and Perez, 1986

23 This argument differs from the appropriability theory of information in lacking to see any clear relation between proprietary knowledge and industry technology cycles - Magee 1977, Dunning, 1981

If this is true, the globalization of knowledge (in formalized terms) does not imply an elimination of national varieties and does not favour those standards which leaders command (whether firms or countries). Sharing a common base of knowledge brings about globalization in a much more complex way. If local varieties inherited by history and geography remain, some hybrids could prevail and several varieties of goods and services could be suppressed, but the persistence of informal knowledge produces a higher value for local differences (economies of variety) and a world *use* of local characteristics.

Furthermore, the globalization of knowledge determines a great potential for the production of new knowledge, both formal and informal. As a result, not only national varieties will survive but new varieties could emerge from new specializations. We shall then see a progressive weakening of spatial barriers and a faster diffusion of innovations between different areas. The traditional view that being present in many markets (through exports and/or direct production) is a condition to be global does not necessary hold. What a firm needs instead is a global perspective and the connections with a global network which allows for it[24]. As we shall see in the last section, this approach bears important consequences for trade and industry policies for industrial growth.

3. The Case Study

The process of foreign expansion that took place in Friuli Venezia Giulia in the last forty years, although very limited in importance, fits very well into this framework and may be instructive in many respects. Some characteristics of this process can be illuminated by considering in detail the behaviour of our *sample* of firms.

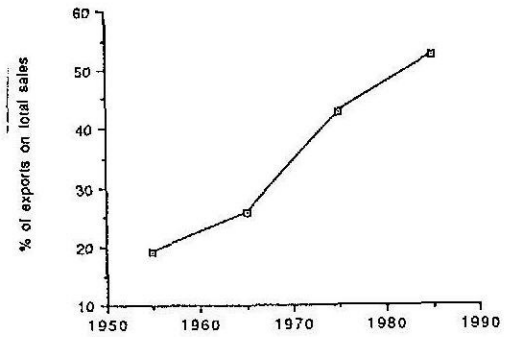
3. 1 Increases in the export propensity

A brief description of the propensity to export among the firms in our sample maybe helpful. A distinguishing feature of the firms is that such propensity is quite high and constantly increasing in the last four decades (see Fig.1). For more than half of the firms, exports represent more than half of their

24 A global firm may well be a net importer, or it may be a national sub-supplier of a large exporting firms. A global firm, though, is neither a passive object of external strategies nor a mere sub-contractor of a large firm. If it takes a global perspective, it must play an active role in the global creation of value and be conscious of it.

total sales; for another 30% they represent more than 20% of total sales.

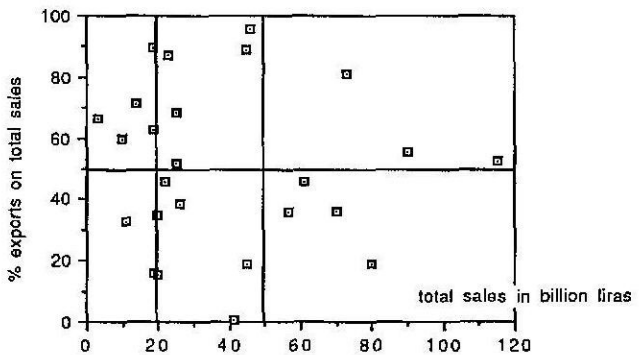
Fig 1 Evolution of foreign sales



Source: Grandinetti, 1991.

As with other studies on the Italian economy, this sample shows a propensity to export that is not related to the scale of the firms; in fact this propensity is between 47% and 54% in each sales group. There is however a greater variation in the propensity to export among the smaller firms (see Fig. 2).

Fig 2 Propensity to export by total sales



Source: Grandinetti, 1991.

The increase in exports occurred in both volumes and quotas. Since 1950, the number of exporting firms has always increased relative to the number of non-exporting firms (reaching 100% in the 80's) and so did the quota of exports on sales (going from 19.3% in the 50's to 52.4% in the 80's). These data confirm that, quite surprisingly, our sample is rather *in line* with what had happened in the rest of Northern Italy in the last forty years, at least in export sales.

3. 2 The increasing complexity of the foreign markets approach

A first important question, from our point of view, is whether the rise in exports was accompanied by a qualitative evolution of the ways in which firms face and manage foreign markets. Concentrating on export strategies only, a degree of higher complexity was found in every firms time path. In particular four dynamic aspects appeared:

- an increasing diversification of markets;
- a higher rate of risk and direct involvement abroad;
- a higher interaction with final users and/or intermediate agents;
- a better fine-tuning of the marketing mix to every foreign market.

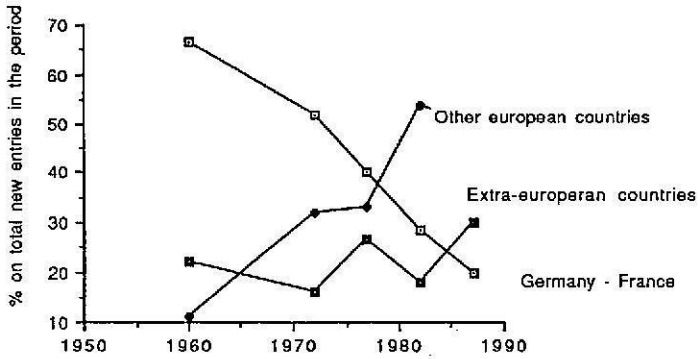
Let us consider every aspect separately.

3. 2.1 Specialization and geographic diversification of foreign markets

Traditionally France and Germany have always been the principal foreign markets of Italy. This was even more pronounced among the sampled firms. Germany accounted for 31.7% and France for 28.5% of total exports, followed by Great Britain with 12.8%. A slight diversification emerges with 6.4% of total exports to USA and Canada, the Middle East (4.7%) and other smaller European countries. More countries recently belong to the first four markets of each firm, with Africa and East European countries at the bottom line.

More significant feature is the temporal dynamic of market diversification (see Fig.3). Traditional markets drop dramatically throughout the four decades. Before 1969 new entries meant, most of the times, the very start of the export activities and were directed to Germany and France in 2 out of 3 cases. A process of diversification involved, after the 70's, first other European countries and then other extra-European countries (with strong variations).

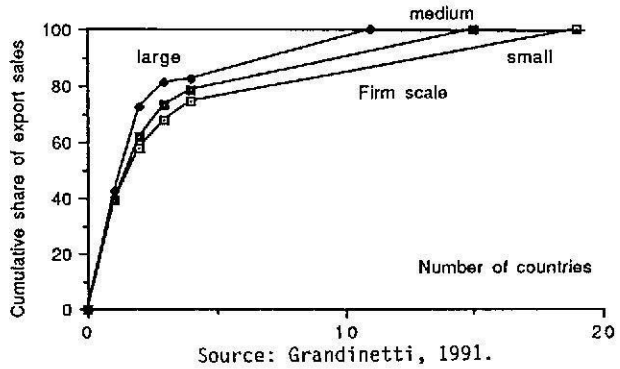
Fig. 3 New entries on foreign markets



Source: Grandinetti, 1991.

A related aspect concerns the concentration of the country-portfolio, which is quite balanced, with an average of 15.2 countries per firm (see Fig.4). This figure is biased by the incidence of firms which produce special machinery and sophisticated plants (adapted to customers' needs) with a very high unit value. A high geographical dispersion in expected here as every new sale almost coincides with a new country.

Fig. 4 Concentration of exports in foreign markets



Source: Grandinetti, 1991.

We considered that a higher figure would reveal too many spot operation (too occasional sales) while a lower figure (given the composition of the sample) would probably mean higher country-risks. The first danger is perhaps present in the exports of smaller firms, while the second may arise for medium scale firms.

On average, while the first market accounted for almost total exports until 1969, now it accounts for only 40%, another 40% concerns three other countries and the remaining 20% is split among many countries. The last figure has a strong experimental nature. Entrepreneurs say to proceed, in this case, by trial and error to select the best alternatives for the future.

In short, geographical data show an increasing complexity in approaching foreign markets toward a higher diversification, a more balanced country-portfolio and a higher propensity to enter new markets.

3. 2.2 The evolution of entry channels in foreign markets

It is recognized that firms of small and medium size leave international marketing mostly in the hands of their intermediaries. Therefore these agents play a central role in assessing and implementing export strategies for the producers. This situation poses several problems.

As various commercial operators differ in functions performed and therefore in focusing on the firm's targets, it was important to examine such operators in detail. Besides, as different countries differ in the structure of their distributive system, we wanted to verify whether firms face this problem through appropriate selective choices or passively submit themselves to the main stream of business practices. Then we looked for a possible cooperation between producers and distributors, given the strategic role that the latters play on foreign markets. Finally, we tested the common idea that it is unwise for a firm to open subsidiaries or affiliates in a foreign country before reaching large dimensions. All these aspects are analyzed in their temporal evolution.

Information was gathered on the principal four markets of each firm, stressing possible differences between the first and the last channel of entry. A taxonomy of entry modes was used, ranking the rate of foreign exposure in market distribution from lowest to highest involvement[25].

Keeping in mind that such progression is not rigid and that every form can describe a slightly different degree of international co-operation with distributors, the evolutionary paths of marketing forms is nevertheless quite clear.

25 See the top of Fig.5.The same denomination was used, sometimes, in different groupings to take into account the increasing rate of direct involvement in distribution. The term "consortium", for example, may impliy a simple activity of promotion but also a much more complex program of market penetration, after sale services, joint local production etc.

A higher degree of control *and* risk is associated with the increase of the international experience. Such path does not follow e pre-determinate sequence. Classifying every firm on the base of the first and the last channel used to export, less co-operative forms decrease and more co-operative forms increase.

Particularly striking is the presence of firms in the last group, given the small scale of the firms and their non-multinational character Almost every channel is more represented now than it was at the beginning of the export activity. A diversification of channels parallels the evolution toward a higher foreign involvement, but the former is quite independent from the latter[26]. There is both an increase in the number of channels and in their association with other channels. A more complicated pattern would probably emerge if one considered every market. Ranking firms in terms of decreasing exports on sales, no correlation is found between this process and the export dimension of firms.

Figure 5 highlights the dynamic aspects of this process in relation with the most involving channel used in each period. Here the initial profile is sketched against the current profile. Channels clearly show a deeper involvement in approaching foreign markets, except for two cases of joint ventures.[27]

4 The Evolution of the competitive advantage

4.1 Some more tools of analysis

To go from *channels* of export sales to *competitive advantages* we need of course a more general interpretation. We also need a general picture of the local system of production and its evolution. In some other works[28] two dimensions of analysis were adopted.

A first dimension considers the position of the firm in performing various activities along its value chain[29](see Fig.6). This position could be distinguished in two ways:

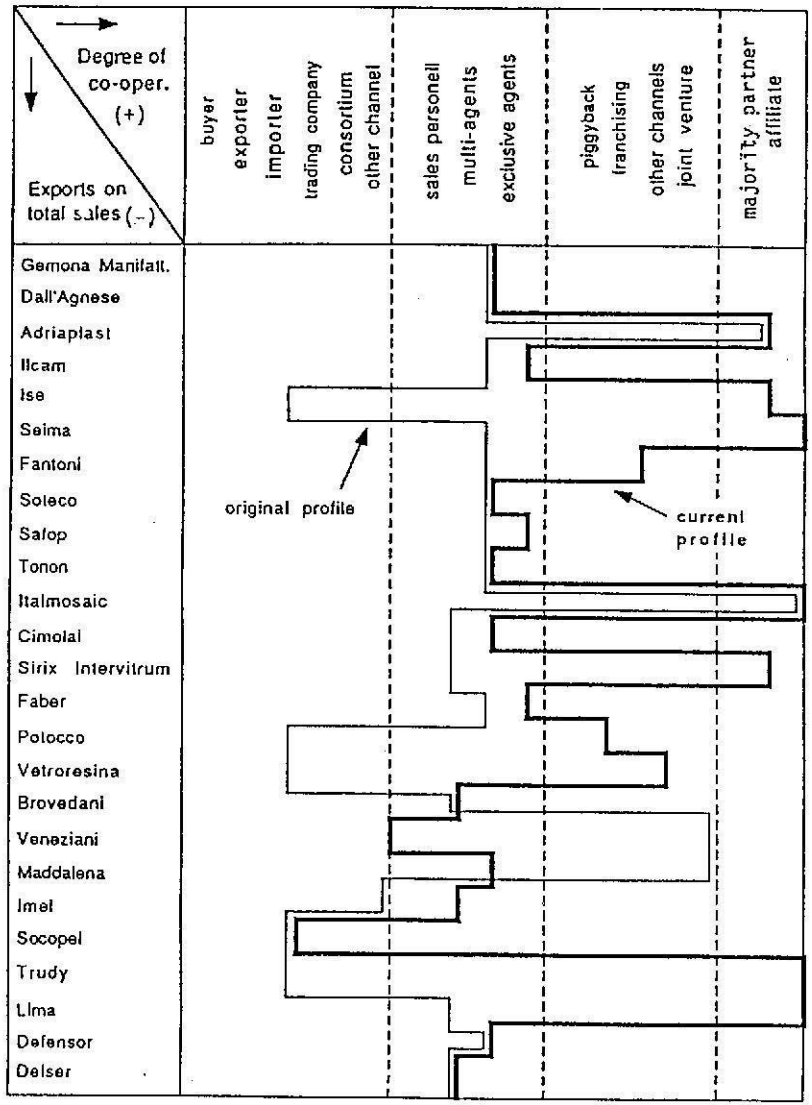
26 If one compares less involving with more involving channels, one can see that while the latter increases both as a percentage of firms using them and as a percentage of channels effectively used, less involving channels increase in the proportion of firms using them but decrease relatively to other channels.

27 For a deeper investigation on various marketing approaches see R. Grandinetti,1991, especially Chapter 3

28 S. Albertini et al, 1991

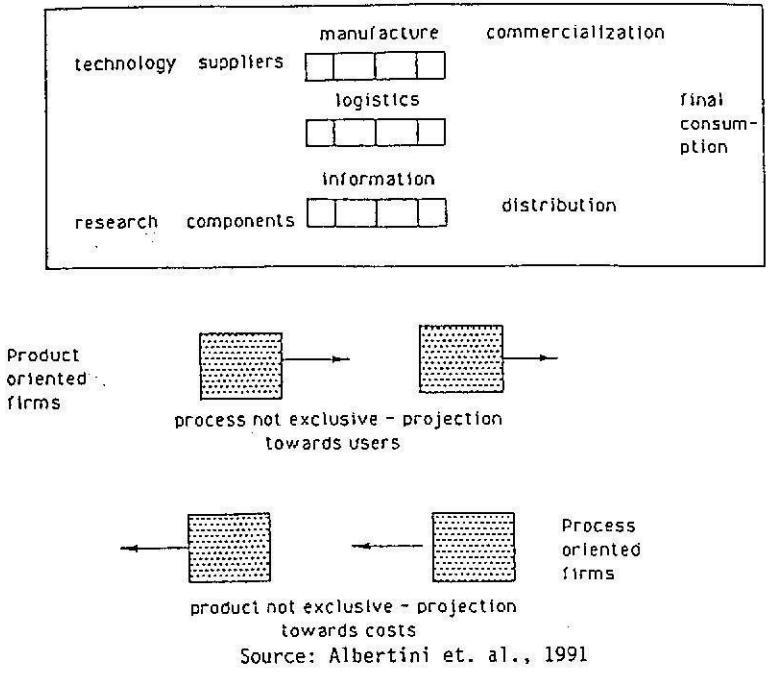
29 See section 5 of this paper

Fig. 5 CHANNELS OF ENTRY - ORIGINAL PROFILE AND CURRENT PROFILE IN THE PRINCIPAL EXPORT MARKET



Source: Grandinetti, 1991.

Fig 6 The value chain



Source: Albertini et. al., 1991

- as *process oriented* (or *up-stream oriented*) if the firm produces value through a better use of various inputs (raw materials, components, new technology, research and development, plant lay-out etc); typically, some kind of cost advantage (cost value) is here involved while the product is not exclusive;
as *product oriented* (or *down-stream oriented*) if the firm concentrates on final (or intermediate) consumer needs and it is very active in market creation and product differentiation. No cost advantage is required here; generally the process is not exclusive. The product is demanded for its special bundle of characteristics, for the services it supplies or for the special relation engaged with users (use value).

A second dimension considers the general tendency towards a higher complexity that a global framework presents. Here a firm must perform a strategy in choosing its position within the industry(s). Positioning embodies the firm's overall approach to competing. It requires a complex scrutiny of the entire industry structure in which a firm operate and how it is changing. The industry[30] structure is usually influenced by five competitive forces: the threat of new entrants, the threat of substitute products or services, the bargaining power of suppliers, the bargaining power of buyers and the rivalry among existing competitors.

For a firm, the industry structure is given in the short run and has to be clearly understood. A firm must decide which is the best position (market segment) it can take to exploit its own competitive advantage within its industry(s). It must also be able to react to change and forecast possible trends, both within its industry(s) and in related industries (i.e. in raw material, components, technology, services etc).

In general there are various trade-offs and synergisms among three types of economies: economies of scale, economies of scope and economies of variety and variability (flexibility). We considered that the domain of the economies of scope could be better assigned to the internal planning of larger firms (the multinational enterprise) or to the strategies of inter-firm cooperation (that we shall consider later). Therefore we concentrated, to begin with, on economies of scale and economies of flexibility, stressing the trade-off between a strategy of mass production (high volumes and few qualities of products) and

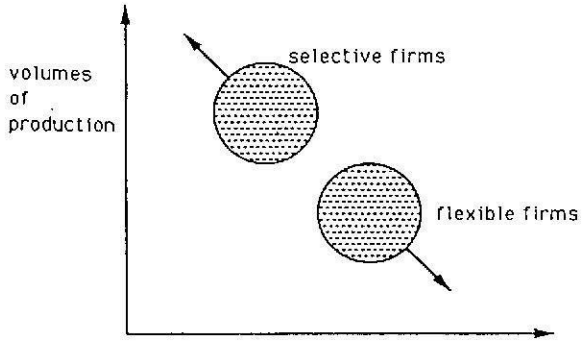
30 An industry is here defined as a group of firms producing goods and/or services that compete directly with each other

a strategy of diversification (high variety and variability of products).

This choice was said to be:

- *selective*, when few varieties and little variability is allowed for and a search of high volume of production is taking place (economies of scale);
- *flexible*, when the number of variables (variety, variability) that a product or a service embodies is high and lower volumes of production are feasible (economies of flexibility) (see Fig. 7).

Fig 7 Govern of complexity

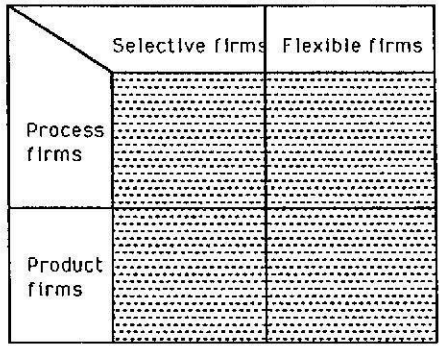


Source: Albertini et.al., 1991

The intersection of these two dimension gives what we called the *Matrix of the Business Formula* (Fig. 8) in which a first distinction is attempted among four types of competitive advantages. Each firm is given a position in one of the quadrants according to which is considered the prevalent type of competitive advantage (couple of features) in each phase of its life period. This Matrix can be used for various purposes.

From a static point of view, it represents a picture of how firm perceive and exploit their *own* competitive advantage at that particular time. In a more

Fig 8 MATRIX OF THE BUSINESS FORMULA



Source: Albertini et.al., 1991

dynamic sense, one can use it to compare the different positions that firms take in various periods and how their competitive advantage change over time. In a normative sense one can check the sustainability of a competitive position in the future, when other types of information are available (evolution of the industry structure, evolution of markets etc). This is particularly important when a contradiction emerges between the evolution of the external environment and a possible stickiness of the firms competitive advantage (often embodied in a process of inertia against change). In the latter case, new lines for industrial policy and environmental innovations[31] should be conceived.

4.2 Some key characters in the evolution of the local environment[32].

Very generally, it is possible to interpret the region's development along these lines. During the 50's, a rapid industrial growth was driven, in the region, by a strong public demand for reconstructing and infrastructure a territory which was almost destroyed by the war. A certain tradition in construction and in metal working was already present. Small firms in consumer products could only develop with a narrow local base. Technology was mainly imported and adapted to local requirements. Most firms were located in the upper left quadrant of the Matrix shown in Fig. 2.

During the 60's a sharp contrast emerged between the local potential and the external conditions. The Italian and the European markets were opening.

31 With this term we refer to the economic environment in which firm operate
32 Albertini et al, 1991

They were highly dynamic but difficult to reach from small scales. Competitors were very aggressive in local niches. A high selection took place and virtually destroyed the local industry of footwear and clothing. Those who remained became successful *process firms* but some elements of flexibility were introduced. The upper right quadrant increases its population. The competitive advantage was still based on low labour costs, on some effort in process innovation and on a passive attitude as sub-contractors for large firms. Some industrial districts were born in this period for specialized traditional items (knifes, chairs, slippers). Some firms appear in the lower quadrants. The lower left quadrant includes firms specialized in plants and appliances.

During the 70's, a sharp rise in wages reinforced the district configuration and the search for costs reductions. Investments were fostered by a strong regional policy based on reduced interest rates for capital formation. Fairly good industrial relations were experienced (compared with the rest of the country) thanks to an average smaller dimension of the firms and a careful regional policy of mediating and managing industrial conflicts. A certain technology up-grading could easily substitute for labour because of an expanding local demand driven by the strong reconstruction effort which took place after the 1976 earthquake. Major changes took place, though, toward a *product* approach. Firms tried to overcome cost constraints either through a *niche* strategy (very specialized products for downstream industries) or a higher flexibility toward demand (flexible manufacture and organization, customization, services). Firms move down and/or to the right of our Matrix.

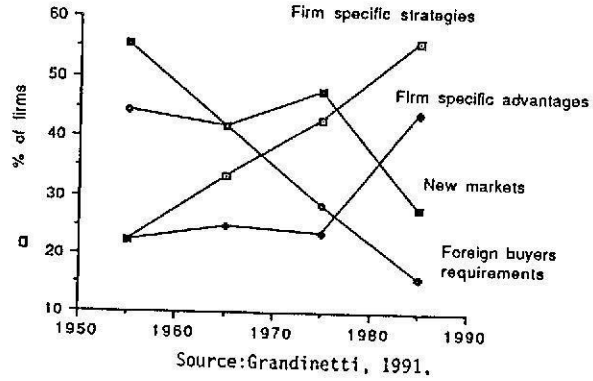
The last tendency increases in the 80's. A fast rise takes place in both sales and productivity. Employment decreases in the industrial sectors but increases more in services. Firms spread evenly in every type of competitive advantage, with a slight process of convergenc toward the centre of the Matrix. This is due to a certain degree of concern about cost reduction in *product oriented* firms and to a certain degree of market attention of *process oriented* firms.

4.3 The international expansion: behaviour of the sample

With this general background, we can now turn to the international scene. Fig. 9 shows how export strategies changed in the last four decades. The passive attitude of the 50's (spot requirements by foreign buyers - i.e. no strategy)is gradually replaced by a constant rise in specific strategies[33] and,

33 A strategy is here defined as a set of decisions explicitly targeted toward specific ends

FIG 9 REASONS OF SUCCESS IN FOREIGN MARKETS



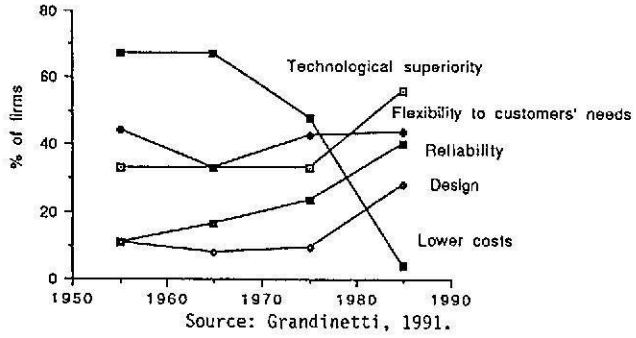
Source:Grandinetti, 1991.

after the mid 70's, by *firm specific* advantages. In particular firms' strategies and firm specific advantages are said to be strongly related by many firms. "We had to take risks and hope to be right" was a frequent statement when managers were asked about the most important phases of their business activity. Some strategies depend on intuition about future trends of tastes and/ or technology; others consist in a deliberate attempt to free themselves from external constraints through customer and/or market differentiation. The result is the creation of a firm specific advantage in each phase of the business activity. New markets lose part of their importance, in the 80s, for a consolidation of the previous ones.

Fig. 10 shows how firms perceive the change in the factors which contribute to their success in export sales. The cost advantage drops dramatically, especially after the mid sixties. Four other sources of advantage emerge: for *process firms* a technological superiority; for *product firms*, reliability, flexibility and design. The lack of a cost advantage is particularly striking considering the sectorial composition of our *sample*, with its absence of science-based sectors and a high presence of traditional and/or semi-finished products. In spite of this, there is no evidence of a desire to lower wages and even to count on a currency devaluation to enhance exports[34].

34 A high degree of imported materials is probably the main cause of this attitude; however one should bear in mind that a simple price-competition ceased to be pursued, in Italy, as a general rule, since the early 70's. Demands of currency devaluations emerge, every now and then, but mainly form large multinational firms or from external sources (i.e. Germany)

FIG 10 TYPES OF ADVANTAGES



Source: Grandinetti, 1991.

The exercise of positioning the firms in the Matrix of Fig 2 shows strong variations, for a large majority of firms, in the type of the competitive advantages that they experienced of each phase of their development.

Now let's turn to the question about how strong and reliable are these characteristics for further enhancement of competitive advantage. To do this we have to look at the firm's value chain in relation to networking and globalisation.

5. Global strategies

A taxonomy of the business activities that a firm can perform is provided by an extension of the *value chain* introduced by Porter[35]. We distinguished between:

- *primary activities,* involved in the physical creation of a product or a service - namely inbound logistics, inventory logistics, operations, production services, outbound logistics, sales, marketing and aftersale services; and,
- *support activities,* which provide inputs or infrastructure that allow the primary activities to take place on an on-going basis - namely managerial services, human resources management, product positioning, technology up-grading, and procurements[36].

35 Though assuming the Porter's framework, we increased the number of activities under scrutiny (from nine to twelve) for a finer investigation

36 Activities are not independent, but are connected through *linkages*. Often such linkage show trade-offs in the cost of each activity. For example, better raw materials are likely to reduce after sales services.

Global strategies are characterized by the adoption of an *outward looking* perspective in deciding which activity to perform and how to relate with other firms along the product(s) value chain(s). Current literature on multinational firms distinguishes between various sources of advantages which stretch along the entire value chain. In general it refers to *global sourcing, global sharing* and *global approach to inter-firm rivalry.*

Global sourcing consists in a strategy aimed at reducing a firm's costs of production through off-shore activities. It may involve a search for lower wages and higher labour productivity but also a reduction in the cost of other inputs (electric power, raw materials, components, technology) and the additional costs of selling without global sourcing (tariffs, import quotas etc). There are several additional costs in off-shore sourcing, arising from transportation, insurance, inventories, training of local labour etc. Global sourcing is expected when the additional costs of off-shore sourcing don't exceed the savings in costs and/or the benefits involved in off-shore activities.[37].

Global sharing is a strategy aimed at reducing total costs through a multiple use of fixed activities. It can arise from sharing a distribution system, a brand name, even management capacity for selling distinct products. These economies consist in the above mentioned economies of scope. Their rationale lies in the existence of *quasi-public* inputs (inputs with excess capacity). This is often the case when it is possible to make modules of intermediate activities and/or to minimise the losses of multi-use activities, e.g. in R&D.

Finally, a *global approach to inter-firm rivalry* can be defined as a strategy conceived along the entire world-wide system of product and market position of a firm and its direct competitors. A global approach is often aimed at imposing upon the opposition the preferred place, time and condition of fighting. The strategic choice of where to fight can be moved world-wide by the response of competitors.

Every firm value chain is connected with a *value system*, which include suppliers and customers. These connections are called *channels*. A firm could be vertically integrated with other firms engaged in some intermediate activity.

37 Various examples can be made on how a firm can benefit from this approach. In protected markets, for example, differential advantages are created when a specialized component manufacturing is coupled with some assembly capacity. The local subsidiary can earn export credits exporting its specialized components and importing other components for assembly lines. As these credit offset the tariff on imported components, a MNF can gain a cost advantage over any non-exporting domestic competitor. Another case is when there are economies of scale in sourcing from a central world scale manufacturing facility and serving several national markets (each one below the efficient scale).

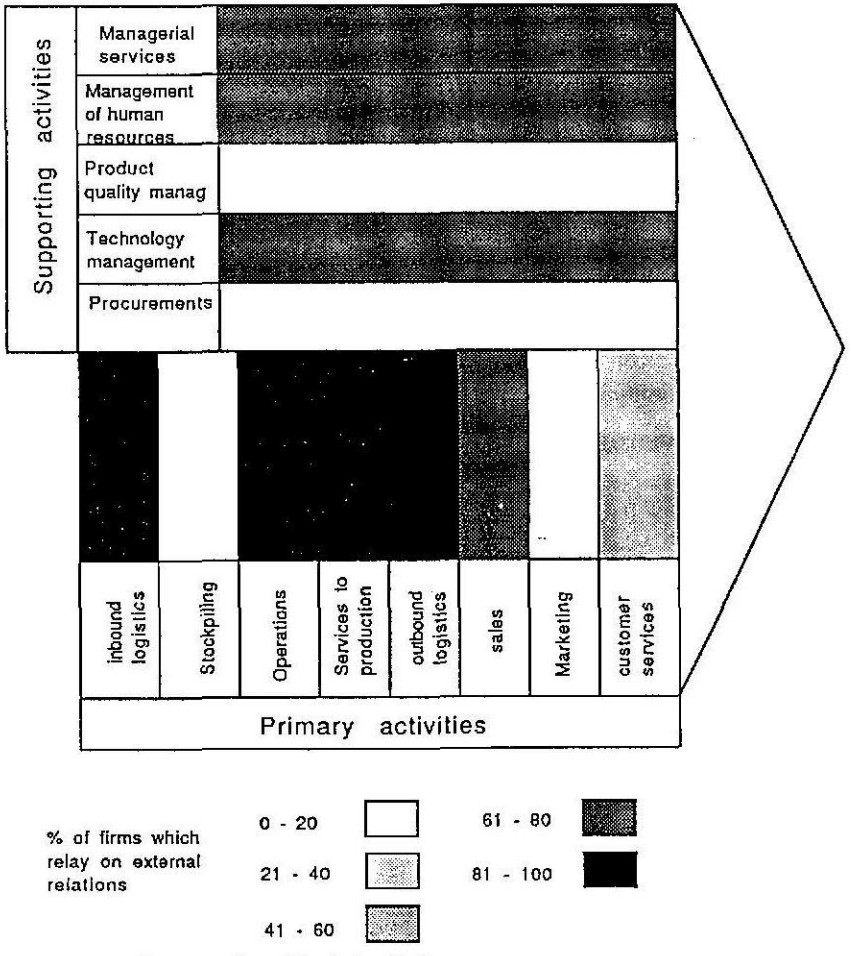
How do these considerations apply to our sample of small and medium firms? In this case a global approach is one in which a firm decides strategically which activity to perform and how to relate with other firms (whether partly independent or affiliates) along the product(s) value chain(s). The extent of this integration - the result of the choice between buying or making - is visualized in Fig. 11.

It is clear that in our sample many activities are externalized, especially in direct production and in in-bound and out-bond logistics. This is so even along the supporting activities for strategic functions such as managerial services, management of human resources and technological up-grading. In general, 96% of firms externalize at least one piece of their productive process to other firms. Firms tend to concentrate on activities such as procurements and product quality management along the supporting activities and in stockpiling, and marketing along the primary activities. For the remaining activities, various degrees of external collaboration are present.

The international localization of these inter-firm activities is visualized in Fig. 12. A comparison between the extent of cooperation along the value chain and its localization abroad shows a high national orientation of many activities, with a balance between local and national sources. Except for technology, supporting activities are not internationally externalized. Various degree of external relation appear along primary activities, especially for in-bound logistics, operations and sales. Marketing and after sale services are either ignored or supplied directly.

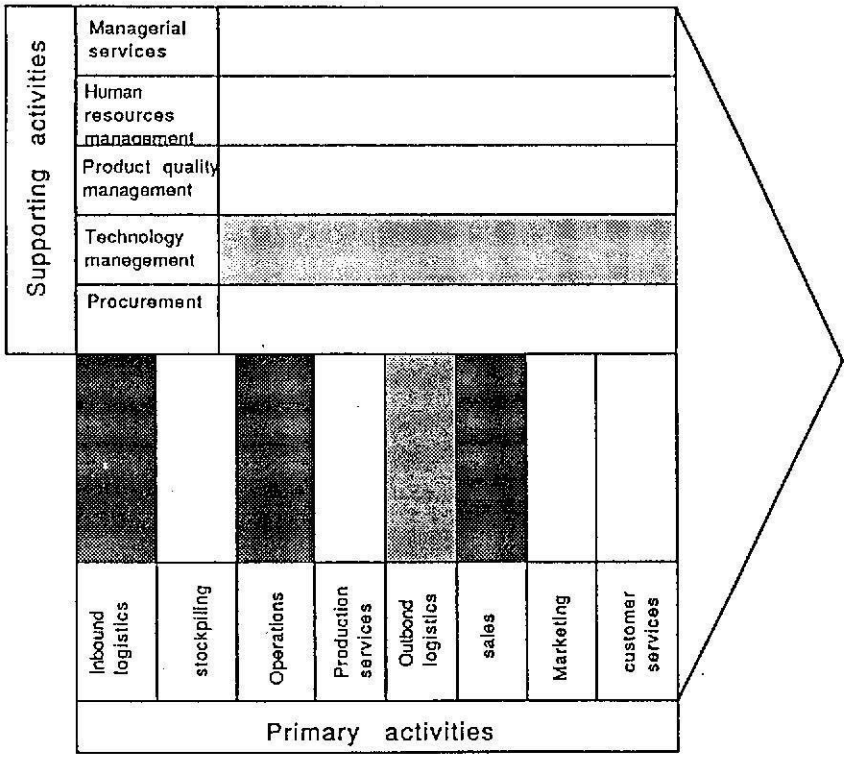
A striking result is that the simplest motivation of global sourcing (lower wages), although present, often constitute only one aspect of a more complex strategy. In most cases a search for lower labour costs and materials is associated with a strategy of technology upgrading. In general firms tend to develop various combinations of different strategies in different markets. Sometimes they act alone but more often they do so in cooperation with some local partner(s).

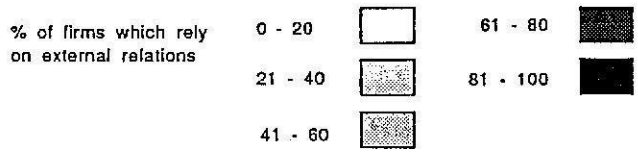
Fig.11. DEGREE OF EXTERNAL ACTIVITIES ALONG THE VALUE CHAIN



Source: Grandinetti, 1991.

Fig.12 INTERNATIONAL LOCALISATIONS OF ACTIVITIES ALONG THE VALUE CHAIN





Source: Grandinetti, 1991.

5.1 Direct investment abroad

28% of the firms are involved in activities of direct production or commercialisation abroad (alone or with a minority local partner). Because of the composition of the sample, this figure seems quite high, but it is hard to conceive these activities as similar to those of a multinational firm. Here are some examples.

Italmosaic opened an affiliate in Hong-Kong, in 1950, as a base for exports but also because the location was considered the most favourable environment to experiment and test new technologies in glass mosaic (learning opportunity).
Trudi, a small and young producer of quality toys, reduces its labour costs thorough two joint ventures (one in Korea, another in China), keeps firm control of quality and design, and opens a new affiliate in France for product development and market testing (global sourcing and learning opportunity).
Lima, a producer of high-tech metal prosthesis for medical use, opens an affiliate in USA because of the high standards there required for its products (learning opportunity).
Sirix, a producer of inert glass containers, integrates vertically and buys many small firms in France to face demand oscillation and some instability in the chain of sub-suppliers (global sharing).
Ise, a group of eight small firms specialized in the joint production of country stile furniture, first open a officiate in England for assembly lines and then use it also as a commercialisation platform (global sourcing, global sharing).
Seima (a producer of auto parts) uses its direct presence in the principal market (Germany) to test Holland in other lines of production (learning opportunity). Its principal activities abroad, though, consist in licences for new technologies and products which it does not not to produce to favour its customers (we shall return to this later).
Maddalena, a producer of hydraulic meters, sells its technology to China and signs for a fading-in joint venture aimed at supplying finished products to Europe (global sourcing).

5.2 Cooperation abroad

The majority of firms, however, develop foreign markets in strict collaboration with other firms without retaining direct control of the activity;

60% of firms do so with any other partner, 48% with at least one foreign partner. Firms of average dimension are more active than smaller and larger firms.

The dynamics of cooperation show that inter-firm collaboration is a very recent phenomenon (78.6% of firms start it in the 80's) and that it concerns a group of firms, in particular (the increase in the number of agreements is higher then the increase in the number of firms involved).

Because of the high diversity in the types of agreements, it is not possible to identify simple cases. 28 agreement were subscribed by 15 firms. As most of the agreements do not pursue a single target, we can proceed examining the principal motivations that emerged.

5.2.1 Cooperation in buying and selling

This is the main target in our sample of firms. It concerns 39.3% of the agreements. It is the dominant purpose but only in few cases the only one. Buying through a cooperative agreement is mainly directed toward other local firms (for components and services). It is aimed at reducing production costs through specialization, flexibility and reliance on experience and skills. Some times economies of scale are sought. Joint ventures among small local competitors are founded for buying components and raw materials in larger quantities and thereby reducing their costs.

Selling through a cooperative agreement shows a much higher international character. It represents a complex case, as shown in the following examples.

Socopel is a small successful co-operative which tans hairy sheep hides. It is owned by 50 workers who bought the firm 10 years ago and saved it from bankruptcy. It cooperates with an Irish competitor to face discontinuity and oscillations in product demand (therefore reducing the sunk costs of a higher productive capacity). It is also looking for partners abroad to whom to sell similar solutions of productive capacity, plant lay-out, work organization and marketing skills (replicas of its) plants and marketing skill.

Lima, a producer of components in special alloys, allows its subsidiary in USA to distribute the products of Weissenfels, another local firm

which produces metal chains. Again, the high sunk costs that some primary activities of the value chain present (sales, marketing, after sale services) are divided between partners with mutual benefit.

Delser, a firm specialized in biscuits and snacks, export very little, but chooses to supply Barilla with some products of a special brand (Mulino Bianco) which are exported by Barilla at a world scale. Commercialisation costs are considered too high to be faced by a medium size firm. Therefore Delser moves to consolidate its brand locally and to increase product and process innovation. The firm is now diversifying from major customers to free itself from the possible danger of monopsonistic behaviours. This is clearly a case of *indirect* international expansion.

Global sourcing and global sharing assume here a slightly different connotation from those mentioned before. Small and medium firms form alliances to gain access at the same cost reductions which are possible under the organization of a multinational firm. However, there is a strong tendency against hierarchic structures. Organization is produced through informal deals and the existence of a mutual interest.

5.2.2 Cooperation in direct production (operations)

3.7% of the agreements include this case. The purpose is never exclusive and seldom dominant. Instead it is often considered, again, as complementary to other forms of cooperation. It either integrates other agreements for supplying components and parts or complete (downstream) a technology transfer to other firms.

The only case when this is a central motivation of an agreement is that of the consortium Acciaio Veneto. In this case a pool of firms specialized in steel components for large constructions is created in order to win international bids and share the execution of the contract. The aim is to reach the minimum dimension which gives access to large contracts. Other agreements are under formulation for applied research studies and joint projects.

5.2.3 Cooperation for commercial penetration

This is also a frequent motivation (35.7% of the agreements), but here the *international* development of markets is the dominant (and sometimes exclusive) feature.

For Fantoni, it is interesting to follow a particular product line of the firm, i.e. the furniture for offices. The national market was developed in the past through franchising to previous agents of the firm. A network of independent firms were created. They buy from Fantoni and commercialize exclusively its products but share some services (after sale assistance, advertising). The same pattern is now developed by Fantoni for international markets, following a strategy of progressive involvement of the foreign partner into its line of business. This technique was applied in England and Belgium and is now developing in France and Spain. The purpose is to equalize the national and the international distribution networking.

Other firms who experience this form of cooperation in developing foreign markets are Adriaplast, Lima, Maddalena, Seima, Trudi, Veneziani and Vetroresina. Global sharing is often associated with a strategy of entry across barriers and the aim of reaching the minimum efficient dimension for global business.

5.2.4 Technology transfer

A technology transfer is present in 25% of the agreements. It integrates other forms of collaborations. In all cases, except one, the transfer is out-ward. It concerns developing countries and is often the result of a policy of product diversification. Firms who produce a product also sell the plant that produces the same product. Competition is not feared in the product market or at least is said to be avoided through that particular agreement.

For Seima, the transfer of technology is induced by its customers. Some European producers of cars suggest Seima to licence two new products, not yet produced but developed indoor, to two other firms: one in Yugoslavia, another in Morocco. These products are a new plastic component for auto lamps and a new kind of motor horn respectively. Seima gains royalties and supervises standards and quality; local firms allow their country to buy European cars in exchange for their parts.

Another case is that of Vetroresina, a producer of multi-purpose large containers in glass resins. Technology is transferred two-ways. A long term contract with suppliers of raw materials involves the development of products and processes. A transfer of technology also takes place from Vetroresina. This is sponsored by some customers (a Japanese trading company and some international engineering firms). The partner is often a local public-owned firm involved in large programs of development (infrastructures, irrigation, oil pipelines).

The transfer of technology is sometimes associated with a strategy of cost reduction in raw materials. ISE, for example, establish a joint venture with a Russian partner in which ISE supplies the plants and the know-how for wood processing in exchange of pine wood below market price.

5.2.5 Cooperation within the same group

Some firms of the sample belong to a conglomerate. Even in this case various degree of inter-group cooperation emerge for different activities. For example, Adriaplast, which belong to the group Solvay, can count on large scale economies for procurements of raw materials (organized with many other firms of the group) but is very flexible in the commercialisation of its products. In fact it relys on the group distribution chains for Western Europe and on its own marketing facility for Eastern Europe.

Other supporting activities show various degree of inter-firm collaborations. Human resources, managerial services and technology are often shared within the group but large autonomy is left for other activities.

5.3 Inter-firm rivalry

In general firms show no propensity to fight with rivals and even tend to collaborate with them. The strategy is defensive and in most cases a niche strategy is pursued. A symbiotic relation is often engaged with larger firms. In fact, given the size of our firms, the strategy of *moving away* (to another source of advantage or another product) in case of attack from larger firms, seems the most sensible.

Gemona Manifatture, a producer of cotton yarn, could both be considered as a *process firm*, for the ingenuousness of its plant lay-out and the robots recently introduced and a *product firm*, for the outstanding quality of its

products. In various cases it worked as an adviser of private and public buyers of competitors for plant restructuring and organization. It has no problems in opening its gates to other firms of the sector, on the base of reciprocity (in one case it regrets of having done so).

Socopel, already mentioned, has only one important national competitor, whose production costs are much lower because it is located in the South of Italy, where incentive for borrowing make money cheap and wages are lower[38]. Here we find a niche strategy. It consists of adding to the leather different layers of film which have a fashion content (connections are developed both upstream and downstream: with new fashion designers, with the garment industry and with the footwear industry). The firm changed its positioning and let the rival gain the market of standard sheep hides[39].

A defensive attitude was also found in two other firms who said that they chose to remain small either because they were afraid that competitors could gain access to their product technology or because they would have been compelled to change the family structure of the firm's leadership. Higher salaries and fringe benefits are sometimes given to workers to retain their skill. As there is no evidence of any management of inter-firm rivalry in general, a global approach to it seems out of question.

5.4 Further changes in the business formula

If networking allows firms to exploit economies of scope and gain access to learning opportunities, we must add a third dimension to the Matrix of the Business Formula (Fig. 2). Firms will position themselves somewhere *above* their previous source of competitive advantage, reducing cost or enhancing sales through formal and informal agreements with other firms.

When firms move along this new dimension, they may, or may not, reinforce the type of competitive advantage chosen before cooperation was considered as a practical option. If relevant discontinuities appear (and this is likely to happen if we refer to cooperation with the rest of the world) a certain degree of re-organization will be necessary, at least in some activity of the value chain.

38 Under these conditions, and according to the traditional theory of international trade (factor proportion models), one would expect Southern Italian firms to be more export oriented then their Northern Italian competitors. This is certainly not so in manufactures

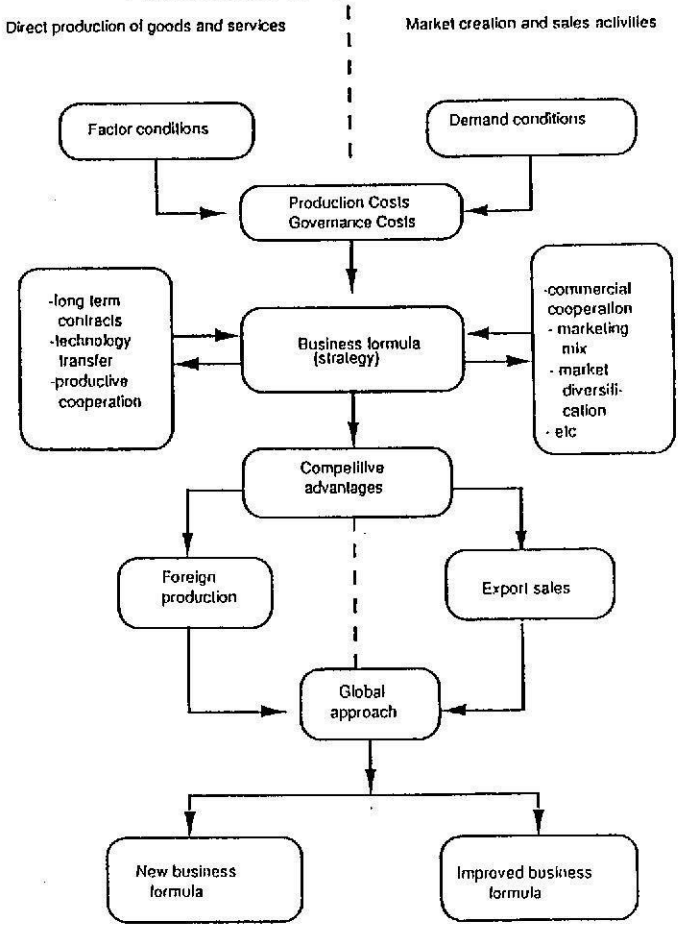
39 It is interesting that today the Southern Italian firm is strongly challenged by Turkish competitors.

As a result, either the business formula will change (and firms will position themselves away from where they were before) or different goods and services will be supplied, extending the original type of advantage to other lines of production. In both cases firms need to up-grade important functions of their internal and external organization. We shall look at this mechanism, before concluding, concentrating on how to learn from international relations.

6. The feed-back mechanism

The evolution of competitive advantages and the feed-back mechanisms which make firms learn from their international experience is sketched in Fig.13. The results are explained in the following way.

Fig.13 EVOLUTION OF COMPETITIVE ADVANTAGES



The left part of the flow-chart concerns direct production of goods and services; the right part concerns various activities of market creation and development. A firm's strategy, within every industry structure, depends on both general factor conditions and demand conditions. These are important both in aggregate terms (for their influence on production costs) and in qualitative terms (for their influence on which goods and services to produce and how to govern internal and external transactions). The availability of credit and skilled labour together with the characteristics of local demand will be particularly important in influencing the efficiency of technical production functions[40]. If a relevant piece of information is not transmitted by prices, governance costs[41] will determine the minimum efficient scale of the production units coordinated within the same firm.

The strategies aimed at improving each firm's direct production function(s) and governance function(s) will determine a business formula in which various economies of scale, of scope and flexibility) will be obtained at different degrees. Cooperation with other firms affects these strategies either through cost reductions (left hand-side) and/or through market creation and development (right hand-side). The competitive advantages thus created are likely to lead, in a second stage, either to foreign production (with or without cooperation) and/or to a further growth of export sales. New sources of competitive advantages are then perceived by firms present in the international markets because of a better information on supply and demand conditions and on latent organization possibilities. As a result, a global perspective becomes the strategic feature of future development.

A redefinition of the firm strategy is likely to occur when global scenarios change and competition sets new industry structures in every area of interest of the firm. A modification of the business formula is likely to occur, under the stress of competitive forces and new latent cooperation opportunities. New competitive advantages are to be created, when the old ones are captured by other firms. Otherwise, the old ones are to be strengthen and improved.

40 We refer here, in particular, to those demand condition which are stressed in Linder's theory of international trade. See Linder, 1961

41 According to the new industrial organization literature, these costs depend on a governance function that should be added to conventional production functions to take into account the set of organizational tecniques available to govern transactions between production units. See Antonelli (ed), 1988, pp.3-4

7. The extent of the learning experience in the sample

How do the firms of our sample perceive the picture sketched along these oversimplified lines? It is by now clear that the left part of the flow-chart is still bound at a local level of organization. Cost reductions are often considered as if they were a *family business*. For *product firms*, they are not even very important (only recently a higher sensitivity is growing in this respect). With some exceptions, firms are much more inclined to perceive the international scene as one in which to develop their exports. To do so, they often cooperate with other firms, both locally and internationally. However, direct foreign production, even in cooperation with local firms, is a very recent phenomenon.

In general, firms rely on advantages which are located in the right part of Fig. 13 and pay a minor interest to the left side of the figure. A tendency to rest on earlier success implies a conservative attitude toward business formulas. This is quite understandable, as a shift in a firm's strategy is more likely to take place under condition of strain rather than during good times. Only firms who feel threatened are considering possible changes of their formula. A smooth trend toward mixed strategies is perhaps taking place. This will lead to a slight convergence of firms positioning toward the centre of Fig. 7 but a global perspective of markets is often lacking. In Fig. 13 this means that new sources of competitive advantages are sought but the foreign experience is somehow restrained by a view which remains *local oriented* for still a good part of the firms of our sample.

A global approach to foreign market implies that a firm should perceive possible new sources of competitive advantages from the information gathered on the international scene and organize itself at this scale. This means that a transformation in a trans-national sense should take place both in the firm's perspective (global strategies) and in its internal and external organization (networking). All activities of the value chain should be reconsidered and adjusted under a global perspective.

We have already stressed the advantages that stem from local sources and informal knowledge. However, if firms count too much on their historical and geographical identity and on their niche strategies, they somehow refuse to learn everything they can from their international experience. It is therefore clear that at least some profit opportunities will be lost. In fact no situation of excellency could be imagined, a priori, in *every* single activity that a firm can

perform along the value chain. A better internal and external organization is always possible, under condition of global competition.

The international experience should be a strategic part of this learning process when globalization is taking place *anyway* in current markets. There are some notions, though, that are easy to assimilate and others that find sometimes a strong resistance within the firms. In our study we found that some features of foreign operations were learned very quickly. The most cited difficulties of operating in foreign markets (what H.G. Johnson[42] called the "psychic distance" between countries) are easily overcome if they consist in using other currencies, in speaking a foreign language, in adopting different standards, in following various export procedures, in allowing for differences in habits and traditions. However, when foreign experience reveals failures of a general order in the firms organization structure, learning is much more difficult. This was particularly the case with management failures and financial weakness[43].

The strong dynamism of competitors in global markets does not allow firms to underestimate these difficulties. Firms must face the higher complexity of global markets and assimilate it entirely. If they don't, a wave of take-overs by global firms will probably occur for firm which are slow to adjust[44]. A global perspective should also include, among other things, services, management and finance, in order to reach international standards of performance.

If this picture is correct, at least in part, facing competitors with no handicaps should become part of a new agenda for industry policy. Rates of exchange policies, and even export incentives or import restrictions, should be partially replaced by policies aimed at improving the market performances of firms and a better fine-tuning of their internal and external organization to global conditions.

National firms should be helped to become trans-national, no matter their dimension, their sector and their source of competitive advantage. Networking should be stimulated. A global perspective should be advertised. This task should not be left to market forces alone. Signals are too week to be

42 Johnson, 1968

43 We also believe that cost reduction strategies should not be considered out of date, only because they lost part of their importance in the last two decades. Dramatic changes could be induced by the political and economical turmoil of Eastern Europe, for example.

44 In fact this is already happening for several dynamic firms located in the area (not included in our sample), especially in the food processing industry.

relied upon, and when they are not, sometimes firms tend to disregard them. Furthermore a country might consider the price of adjustment too high, in terms of unemployment and productive losses, if left to market forces without microeconomic support.

A few lines of industrial policies to favour global expansion could be suggested, to conclude, from the result of our study.

8. Theory and policy: conclusions

It is by now clear why a policy aimed at helping national firms to become global is much more difficult than any other traditional industry policy. Instead of lowering the costs of international expansion (through financial and regulations support) this policy should weaken or eliminate those bottle-necks which slow down (or nullify) the learning process that international expansion bring about. Unfortunately there is no general "theory of bottle-necks" which could help us solve this problem.

For a "policy of globalization", an evolutionary theory of international expansion is needed. This theory should describe the learning stages and the organizational changes brought about by the foreign involvement of a firm.

Some elements of this theory are already recognisable, from what we gathered in our study and from the latest experience of the Italian economy.

In a first stage, firms see international expansion as emerging from the development of a few foreign markets. Foreign transactions are organized by two main media. External (market) transactions are organized by prices. Internal transactions are organized by management planning. Firms tend to grow because of the existence of economies of scale and economies of scope. Both organizational structures (the market, the plan) show systemic features in innovation creation and diffusion. Both systems coexist and enhance competition as long as markets expand.

This situation raises particular problems related to these markets only. The organization structures generate specific competence, *ad hoc* strategies and particular solutions to the problems created by every specific market. Services are specialized for foreign operations; firms rely first on banks for foreign exchange operations, finance and warranties, then to suppliers and/or customers, then to national or local public agencies, finally to the general public.

The mercantile model of expansion of national firms (*country specific*) is coupled with a model of expansion of some multinational firms, fostered by *firm-specific* and/or *industry specific* competitive advantages. At this stage a useful policy to help national firms to grow consists in supporting export sales, supplying specialized services and financial incentives for foreign operations. Here we find a strict correspondence between micro-economic targets (export's support) and macroeconomic performance (balance of payments improvement, increase in sustainable growth).

To what extent is this a permanent situation? In a static framework, a mercantilistic approach is possible, without conflict, when other countries are willing to run trade deficits and/or foreign net indebtedness. In a dynamic framework, a higher competition is likely to occur among firms and a second stage of foreign expansion will take place when information technologies, for example, eliminate barriers among agents and geographical areas, creating the base for a further market expansion.

At this stage a strong inter-action takes place among various sources of competitive advantages. Economies of scale can be coupled in various degrees with economies of scope and/or with those economies of flexibility that new technologies induce. The growth of firms' size and the development of networking (within the same firm and among independent firms) generate further market growth *and* a higher competition. At this stage, firms spread internationally in every direction; more countries are involved, a larger variety of products develops and firms can experience different sources of advantages and pursue alternative strategies to achieve comparable levels of excellence[45].

The international division of labour among firms is now more complex; it implies various degree of involvements in every activity of the value chain.

45 A profit maximization behaviour is here substituted with the concept of equi-finality: i.e. a situation in which the same results can be achieved by different systems following different paths and adopting different solutions. See Von Bertalanffi, 1983

The *country* and *industry specific* sources of advantages lose part of their importance. Firms show various paths of international expansion which are very different from one another in strategy and positioning.

This does not mean that every explanation should be *firm specific*. On the contrary, evidence suggest that firms not only operate as systems in organizing their internal transactions; they also behave as elements of a wider *system*[46], organized at two different levels: the *local district* and the *networking* system. Synergism may characterize both the development of each system and their interaction. Further research is needed to understand the systemic features of each local environment.

Various policies have been expressed locally, in Italy, to favour a district organization but no policies have been explicitly developed, so far, to favour networking systems. We said that this is a difficult task. The reason is twofold. First, a firm should be induced to join a networking system even when it is not an exporter or an off-shore producer. All firms are involved, if exposed to competition forces. Second, policies should have a general *factor improvement* content, rather than being targeted toward specific areas, sectors or activities. As various cases of management and organizational failures might occur, Governments should not be selective; firms should be.

There are some actions which could be suggested immediately. Others require a deeper investigation into the nature of the relations involved in networking. Among the former there is certainly a local policy to improve the environment in which firms operate. This should consist at least in:

a. favouring the maximum exchange of information among local industrial activities (exchange of skills and knowledge among firms of every local sector and every dimension);
b. infrastructure the environment with information technologies which allow for an organized access to global information (data banks, laboratories, quality warranties and related services, specialized communication services, etc.);
c. developing an industrial culture able to learn and generate specialized languages to be used in industry and services (basic and applied research, product and process development, University and post-University programs);
d. assisting with specific measures the changes that firms identify as crucial

46 In Italy, it is precisely the system of a firm's external relations and the organization of its externalities which allows to overcome the difficulties emerging from a small scale and a limited experience.

for their involvement in networking systems.

Further actions could be taken if more details were available on this difficult passage toward a global economy. In particular it should be worth investigating how a firm's choice of which activity to perform is influenced by the international division between material production and immaterial generation of codes and languages. But that is another story.

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