STRATEGIC ACTION IN INDUSTRIAL NETWORKS AND THE DEVELOPMENT TOWARDS THE "SINGLE EUROPEAN MARKET"

The purpose of this paper is to apply some basic ideas from our research on industrial networks to the analysis of how firms adapt to the institutional changes proposed by "l'Acte Unique Européen". More specifically, we will focus on strategic actions as aimed at influencing industrial network positions. The paper is based on our contribution to a forthcoming book on industrial networks (Axelsson & Easton (ed.), 1989) and other recent work on networks as governance structures (Johanson, 1988, Håkansson & Johanson, 1988) on positions and strategies in networks (Mattsson, 1987), and on internationalization (Johanson & Mattsson, 1988). A major point in the paper is that when we regard the governance structures of production systems as networks rather than as markets, industrial change will be driven by actors rather than by "market forces". The creation of the Single European Market not only changes some of the institutional conditions influencing industrial systems, but also actors' expectations about future structural changes in the industrial systems.

INTRODUCTION

A basic idea in the industrial network model is that firms are engaged in networks of business relationships. The network structure, that is the ways in which the firms are linked to each other, develops as a consequence of the firms making
business with each other. At the same time, the network structure constitutes the framework within which business is made. This paper develops and discusses a notion of strategic action in industrial networks. Strategic action is interesting not only for its consequences for the firms, but also because of its implications for the dynamics of industrial systems.

There are a couple of specific attributes of the network model in this paper. First, it makes a distinction between two levels in the industrial system: the network of exchange relationships between industrial actors and the production system where resources are employed and developed for production. The network of exchange relationships is viewed as a structure governing the production system. Second, the concept network position is used to describe how the individual actors in the network are related to each other in a network structure. Third, both ends and means of strategic action are closely linked to the position concept.

The three characteristics of the approach are motivated as follows:

1) The separation of the actors in the network from the resources in the production system is analytically helpful in two respects: a) The concept strategic action presupposes actors. Actors have intentions, they make interpretations of conditions in the industrial system and they act. b) There is not necessarily a one-to-one correspondence between a production system and a network of relationships. E.g. an actor in a network may be engaged in business relationships covering several production systems or control different, widely separated clusters of resources in one production system.

2) The use of the position concept is not only a way to move from a dyadic to a network analysis, but also to give a conceptual understanding of how the individual actor is related to, or rather embedded in, its environment.
3) The use of the position concept as both means and ends for strategic action makes it possible to give such action meaning in relation to the conditions for structural change in industrial networks. This is another way of saying that the individual actor's opportunities and constraints depend on the network and on the outcome of earlier strategic action. Thus, the notions of embeddedness and of investments in networks are given strategic meaning (cf. the arguments in Pfeffer, 1987 and Johanson & Mattsson, 1985).

The article proceeds as follows: First, our industrial system model is described. Second, we make a somewhat deeper analysis of the position concept before, in the third section, we discuss strategic action as efforts to change or preserve network positions. Fourth, we apply our model to the influence of the creation of the Single European Market.

THE INDUSTRIAL SYSTEM

In production systems, resources are employed, combined and transformed in industrial production. Coordination and direction of activities in the production systems takes place through governance structures. The production system together with the governance structure constitutes the industrial system. The term production is taken in a wide sense to include all the different kinds of activities needed to create and use products and services (R&D, manufacturing, marketing, distribution, purchasing etc.). These resources are dependent on each other in the sense that the outcome of the use of one resource is dependent on how the other is used. The resources are more or less heterogeneous and specialized. The more they are specialized the stronger are the dependencies. In the extreme case when two resources are completely specialized in a use where they are combined, they are completely complementary. In the opposite extreme two specialized resources are complete substitutes. On the whole, an operating production system can
be characterized according to an industrial logic where resources are complementary and/or substitutable inputs into and outputs from production.

The resource specialization and interdependencies are, however, not given by some technical imperative. In the specific situation they are a consequence of earlier use of the resources and of the structure of the production system. Resources are more or less heterogeneous, implying that they have properties in a number of different dimensions, so that, over time, they can be used in different ways, combined in different ways, and transformed in different ways. Thus, two heterogeneous resources which are combined can usually, through experience, become more specialized in their combined use leading to higher joint productivity, higher degrees of complementarity and increased interdependence between them.

In such production systems, where there are innumerable, different, and changing resource interdependencies, there is a strong need for some kind of coordination between resources not only to economize their use, but also to create changes of an innovative nature. Traditionally two different governance modes are assumed to bring about this coordination, the hierarchy and the market. (Williamson, 1985). In the hierarchy, one supreme actor controls all the resources and brings about coordination. In the market model coordination takes place through price signals which inform the autonomous actors about availability of and need for resources. In the present model it is assumed that the production system is governed through a network of exchange relationships between semiautonomous actors. The actors are engaged in and develop exchange relationships with each other and can in this way handle the interdependencies between the resources they control (figure 1).
There is a circular causal relation between the network level and the production level. Through the exchange relationships the actors learn about each other and develop some trust in each other. On that basis they adapt and develop their resource use to increase the productivity which also leads to increased resource interdependence between them. At the same time as a result of interdependence the actors develop their relationships, thus linking them closer to each other. Consequently, unless no other factors intervene, the specific dependence and relationship will become gradually stronger and closer. However, as the specific relationship is embedded in a network of such relationships and the dependence is only one in an intricate fabric of such dependencies there are always such intervening factors affecting the causal circle. Sometimes such disturbances are channelled via the network, sometimes they operate through the dependencies in the production system (figure 2).
The exchange relationship is a mutual orientation of two actors towards each other. They are prepared to interact with each other in order to coordinate and develop interdependent resources that each actor controls. They interact to get access to some of the resources controlled by the other actor. These exchange relationships develop over time and resources are used to establish, keep and develop them. (Our reasoning is similar to that developed in Blau, 1968 on social exchange.) Exchange relationships in networks may become lasting, especially if the heterogeneous resources controlled by the actors become adapted to each other and highly specialized. Exchange relationships also link actors, indirectly, to other actors with whom they do not have any such relationships.

Evidently, actors in the industrial system also use resources which are interdependent without the actors having exchange relationships with each other. This is typically the case with competing actors. Similarly there may be interdependencies between actors with complementary resources, e.g. complementary suppliers who have no exchange relationship with each other. If actors perceive such interdependencies to be important they may start interaction with each other, thus developing an exchange relationship (or get access to these complementary resources indirectly, through another actor as mentioned below). Correspondingly, actors may have more or less "sleeping" relationships with each other, for historical or other reasons without
any resource interdependencies between the resources they control. Such a relationship may be used to combine resources, thus creating productive resource interdependence.

A basic characteristic of networks is that relationships are connected, i.e. exchange in one relationship is conditioned by exchange in others (Cook & Emerson, 1978). The connections may be positive or negative. A positive connection implies that exchange in one relationship has a positive effect on exchange in the other. This is for instance the case with relationships handling a sequence of interdependencies along a production chain. Correspondingly, two competing suppliers to a customer are negatively connected via that customer. The two cases are examples of simple connections via the resource interdependencies in the production system. Evidently, connections in a network may be much more indirect and complex so that two distant relationships in a network are connected with each other in multiple ways, some of which are positive and some negative.

However, the connections between relationships may also take place exclusively via the actors on the network level. In that case they are of a subjective nature and are a matter of the intentions, strategies, views, and "network theories" of the actors (Weick, 1979). Thus, an actor may in a long term view of a network consider two relationships as complementary in some sense, for instance regarding technical development. Similarly the actor may see two relationships as substitutes for each other in a "foreign market" entry. Although there are no interdependencies on the production level the two relationships may be negatively connected. Obviously, the actor mediated connections are much more ambiguous, fluid and invisible than the resource interdependence mediated. Nevertheless, they exist and have important implications for network development.
Network boundaries

Since there are no objective criteria saying which exchange relationships to include in networks and which to exclude the boundaries of a specific network are quite fuzzy. Generally speaking, some interdependence criteria may be used. A production system can be delimited on the basis of resource interdependencies in relation to some focal products, technology, country, region etc. The inclusion of relationships is then a matter of which actors who control relevant resources. The excluded relationships can then be regarded as belonging to other networks and to provide links between networks. If e.g. the focal production system exists in a certain geographic area, relationships with actors outside that area should reasonably be considered as links to other networks. On the other hand, if there are strong interdependencies between resources in that area and resources in other areas, the focal production system should not be delimited on the area basis. One test of such delimitations is whether there are important exchange relationships with actors in other networks. Thus, if the exchange relationships included coordinate resources which according to a specific industrial logic belong to a specified focal production system, a test of the suitability of such a definition is if any excluded exchange relationships coordinate resources that have important influences on the included relationships. Especially as we are interested in industrial development and structural change, influences from actors outside the focal network (i.e. the network governing the focal production system) could be important. As example it is sufficient to mention internationalization of competition, e.g. changes related to the Single European Market. Even if in a way the whole world is connected we need, for analytical reasons, to consider production system boundaries. Thus, analytically there exist many networks and a specific actor may be engaged in several networks. If e.g. we define a focal production system to exclude some of the resource interdependencies which one actor coordinates through exchange relationships, this actor is involved in more than one network. This actor's
resource interdependencies with several production systems might suggest that the delimitation of the production system as well as of the network should instead be "multiindustrial".

The actors in a network may view the network, e.g. its extension and the nature of its exchange relationships in quite different ways and also differently from the description made by an outside analyst who is not an actor. First, the network is extensive and includes exchange relationships in which the actor is not directly involved. Second, even in those relationships where the actor is involved, the counterpart may view the relationship in a different way. Third, network analysis does not only deal with the present but also with the past and the future which means that the interpretations are influenced by differentiated memories and differentiated beliefs about the future. Since the actors form cognitive structures through experience and interpretations linked to theories about "reality", perceptions will be influenced by which conceptual framework the actors use (Zaltman, et al, 1982). If the actor's "theory" is that the industrial system is governed by a network or by a market mechanism will obviously be of importance. This means that there is a potential normative value in the idea that a network has more unclear boundaries than a "market structure", according to the traditional industrial organization model. The actor will focus some attention on influences from "outside" actors and might therefore want to extend the network boundaries and thereby perhaps increase the possibilities for effective strategic action.

POSITIONS IN NETWORKS

Each actor is engaged in a number of exchange relationships with other actors. These relationships define the position of the actor in the network. Since positions can be defined for all the actors in the network, the concept can be used to characterize network structure and network distance between actors. A basic attribute of exchange relationships is that they are established and developed over time and that this
process can be viewed as an investment process. (Håkansson, ed., 1982). Thus, network positions are the result of earlier investments in exchange relationships (Johanson & Mattsson, 1985). Positions are a consequence of the cumulative nature of the use of resources to establish, keep and develop exchange relationships. The position of an actor also connects the separate, individual relationships with each other. The position characterizes the actor’s links to the environment and is thus of strategic significance. The positions of all the actors in the network is also a major characteristic of the environment in which the actor is embedded. The position characterizes the basis for the actor’s development of exchange relationships in the future, i.e. the base for the actor’s strategic actions. Furthermore, in our model strategic actions are aimed at influencing network positions.

A distinction can be made between a limited and an extended definition of positions. The limited definition refers purely to the network level. According to the limited definition the position of an actor is a matter of the exchange relationships of the actor and the identities of the counterparts in those relationships. The identities of the counterparts are, in consequence, a matter of their relationships to others. When operationalizing the limited definition it is possible to view relationships as variables with the possible values zero and one. This corresponds to the way the position concept is used in sociometric network analyses (Di Maggio, 1986). It is, however, also possible to view relationships as variables with possible values between zero and one depending on the strength in some sense of the relationship. Evidently, it is also possible to view relationships as vector variables with values depending on the strength of a number of bonds - legal, social etc.
The extended definition refers also to the role the actors have in the production system. Thus, according to the extended definition the position of an actor includes also its production - in a wide sense - and its resource interdependencies, directly and indirectly. The production role has two dimensions, one qualitative and one quantitative. The qualitative dimension says which function the actor has in the production system. In a sequential chain linking the separate resources, the individual actor has one or more specific functions, for which the resources it controls are specialized. The quantitative dimension says which relative importance the resources of the actor has in relation to the resources of other actors, i.e. how much of the total quantity of substitutable resources that is controlled by the actor.

The position of the actor gives some power of the actor over resources controlled by other actors. This power is in no way absolute since exchange relationships depend on the voluntary mutual orientation and not on coercion, even if some relationships are influenced by legal agreements.

Evidently, positions of different actors in a network are more or less interrelated. This has to do with the basic idea that networks are sets of connected exchange relationships. Connectedness means that exchange in one relationship is conditioned - facilitated or hindered - by exchange in the other. Connectedness can occur on the production level. Through direct and indirect resource interdependencies the positions of two actors are interrelated. This type of position interrelation can be seen as objective. It is a matter of the industrial logic. The stronger the resource interdependencies, the stronger are also the position interrelations. This means that the closer two actors are in a production chain, the stronger are their position interrelations. This means also that the more specialized the production of the actors are in relation to each other in a network the stronger are their position interrelations. It means also that the more "closed" the production system is in relation to other production systems, the stronger
are position interrelations in the system. Furthermore, positions of different actors may be positively or negatively connected to each other in the sense that when the position of one actor is strengthened, the position of the other is strengthened or weakened. This can also be seen as a matter of the industrial logic.

However, interrelations between positions can also lie on the network level, which means that they are a matter of intentions and interpretations of the actors, that is they are of a more subjective nature. It seems reasonable to assume that the longer the time perspective the less important are the objective interdependencies according to the industrial logic and the more important are the intentions and interpretations of the actors. Thus, in a long term perspective, position interrelations is more of a subjective matter. The knowledge and the values of the actors are important factors. Likewise it seems reasonable to assume that the smaller the investments in the production systems, the more important are the subjective views of the actors for the interrelations between positions. This does not mean that there are more or less position interrelations in soft industrial systems such as R&D systems or service industry systems than in manufacturing industry systems or that there are less position interrelations in the long term, only that they are more ambiguous. Generally, however, it can be assumed that the position interrelations are stronger the closer the actors are connected on the network level, as they will tend to have more similar "network theories".

To sum up: The position of an actor is described by the characteristics of its exchange relationships. A limited, basic definition is that the position is a matter of which the actors are with whom the focal actor has exchange relationships. An extended definition of a position also involves the role of the actors in the production system. The role is comprised of the function according to the industrial logic and the relative importance of the actors.
The position of an actor is all the time changing not only because new exchange relationships are developed, some old are interrupted and others change character, but also because the counterparts' positions are changing and, furthermore, the positions of third parties, with whom the focal actor has no direct relationships, are changing. This follows from the definition of positions as being a matter of the identities of counterparts. But the ways in which positions change may differ depending on whether the changes take place on the actor (network) or on the resource (production system) levels.

STRATEGIC ACTION

In the general strategy literature, strategic actions are efforts by actors to influence their relations to the environment. In the network approach, suggested here, this general notion is translated to mean that strategic actions are efforts by actors to influence (change or preserve) their position(s) in network(s). This discussion is about the position directed action by one focal actor. Thus, the strategic objectives are defined in terms of network positions. Almost all actions in networks have some effect on network positions. This is, for instance, the case with action in an exchange relationship aiming at production. When two actors carry out exchanges they develop their exchange relationship thus modifying their positions as well as those of other actors in the network. In this article, however, only action which aims primarily at the positions is considered strategic. Evidently, it is difficult to make a distinction between such position directed action and more production directed action. The strategy literature differs according to how freely the actor can select and implement strategies. (Compare e.g. the contributions to Pettigrew, ed., 1987). Our view is that the individual actor is much constrained by its environment, but that it controls some means that can be voluntaristically used to structurally influence its future relations to its environment and thereby also influence the structure of the environment.
According to our definition strategic action can be network or production oriented.

Network oriented strategic action aims at influencing actors, relationships and network structures. It can be directed at the relationships of the actor, but it can also be directed at relationships between other actors in the network or at relationships with other networks. In all those cases, it may aim at breaking the relationships, at establishing new, at changing the character in some way, or at preserving the relationships when their present character is endangered by "adverse" strategic actions by other actors.

Obviously, an important reason for such actions may be resource interdependencies which have to be handled. Network oriented strategic action may also aim at actor based connections between relationships. Such action may aim at making the "network theories" of sets of actors (i.e. their view of the network structure) more consistent or at developing them in different directions. In this way it may aim at disconnecting the network into sections which are only connected via one actor or it may aim at connecting different network sections or even networks.

This type of strategic action can also go one step further by influencing the "network strategies" of the actors, that is influencing their ways of handling different relationships as complementary or substitutable or their ways of connecting different sections of the network.

Production oriented strategic action aims at changing interdependencies in the production system. Such action may aim to weaken interdependencies, for instance in order to increase the autonomy of the actor or to reduce the dependence of a network on resources in other networks.
Inversely, strategic action can have the objective to strengthen interdependencies in the production system. An obvious reason to do this is to increase the dependence of some other actor on the resources controlled by the focal actor. The overall objective of the strategic actions by a focal actor is not only to increase its "network effectiveness" given that the desired position changes have come about. It is also a matter of creating a base on which strategic actions in the more distant future can be developed and implemented. Please note that our use of the term production oriented has nothing in common with the discussion in the marketing literature of production oriented vs sales oriented vs marketing oriented strategies.

After this general discussion of the objectives of strategic actions, we are ready to say something in general about the means of strategic actions before, in the final section we turn to the Single European Market application.

The means for strategic action by a focal actor are

1) its production resources in its present form and after investments related to the strategic action have been made

2) its "network theory" which is the actor's view of its own and other actors' network positions

3) its network position, i.e. the characteristics of its exchange relationships and of its connections to other actors' positions

The three types of means are not independent of each other. Thus the quantity and quality of the production resources influence the resource interdependencies which is an important aspect of the exchange relationships. The network position influences the "network theory" since that "theory" is to a large extent based on information channelled through the
exchange relationships. Of the three types of means, the network position has a special status, since the strategic objectives are also defined in terms of network positions. A specific strategic action can also involve explicit coordination with other actors than the focal one. In such cases, the means also include those at the disposal of such other actors.

STRATEGIC ACTIONS AND THE DEVELOPMENT OF THE "SINGLE EUROPEAN MARKET"

The creation of the Single European Market (SEM) is usually seen as the process by which different institutional barriers to the free movements of people, goods, services and capital between the member countries of the EEC are removed. Not only is this change intended to increase the efficiency of the present industrial system in the EEC, but more importantly, the opportunities for structural change should help to develop a dynamically more efficient industrial system. Economies of scale in production (basically R&D and manufacturing but also to some extent distribution) and increased competition due to less discrimination between competitors are the basic driving forces according to the underlying "theory" of the single market. (See the analyses in the research projects on the "Costs of non Europe", Cecchini et al, 1988.) The institutional changes are often grouped as follows:

1) No controls at national frontiers

2) Homogenization of technical standards between countries

3) Public procurement with no discrimination against other EC country based bidders

4) Free movement of labour force, professionals and students
5) No discrimination of service sector firms based in other EEC countries

6) Free movement of capital

7) Legal rules more permissive of interfirm cooperation, mergers etc. between firms based in different EEC countries

8) Homogenization of indirect taxes

Adopting a network perspective, we can see that these institutional changes will affect

a) the efficiency of existing exchange relationships between actors in EEC-countries A and B

b) the connections between existing positions in A and B

c) the opportunities for strategic action to influence positions.

An obvious example of a) is that a supplier in A can transfer goods to a buyer in B more efficiently if there are no barriers at the frontier. An example of b) is that the complementary resources controlled by a supplier in A and a buyer in B can make the supplier's and buyer's positions more positively connected when there is no frontier control and no differentiation of technical standards to decrease the degree of complementarity between the resources. Another example of b) is that a supplier in A perceives his position to be more negatively connected to a supplier of substitutes located in B as various forms of discrimination against A against firms in B and vice versa.
The most interesting applications of the network approach to the analysis of the SEM consequences, however, are related to c), i.e. how opportunities for strategic action are influenced. Before we discuss that we would like to point out a few quite obvious, characteristics of the present European industrial systems. First, the degree of internationalization of the systems is already high. Positions located in a nationally delimited network are often highly interrelated with positions in other, also nationally delimited, networks. Second, the degree of internationalization is different in different sections of the industrial system and also as regards different actors. (Johanson & Mattsson, 1988). The network positions of highly internationalized actors in highly internationalized systems imply obviously quite different strategic situations compared to those of actors with a low degree of internationalization that belong to networks with low degree of internationalization.

Opportunities and needs for strategic action

Let us start by strategic actions that are primarily production-oriented.

There are opportunities to decrease interdependence between resources due to homogenization of technical standards and easier access to develop new exchange relationships with actors located in other countries. But there are also opportunities to increase the interdependency between resources because they can become more specialized and more efficiently coordinated. This is not only true for manufacturing resources, but also for the interdependence between R&D, manufacturing and distribution/marketing. Reorganization of manufacturing resources within already highly internationalized firms to allow for a higher degree of specialization at each plant is often referred to as a structural adjustment made possible by homogenization and more efficient transfers between countries (ref.). The same idea can also be implemented by reorganization of production between separate firms. Increased interdependence between
resources can also be developed if one actor controls a larger share of the available substitutable resources. There may be some scale economic "production system"-advantages to such a strategic action, but it can also be motivated by an actor's wish to change the sign of its position connection to another actor from negative to positive.

For efficient use of an actor's resources in the production system, it is important to have some balance between the actor's own resources and complementary resources controlled by other actors. E.g. an increase in the capacity to manufacture a specific product cannot be efficiently used if it cannot be coordinated with complementary increases in capacities devoted to the use of the specific product. Such capacity adjustments are important processes in networks and require the use of earlier investments in exchange relationships and/or investments in new relationships. An interesting question is to what extent the SEM tends to increase the opportunities to develop more integrated resource structures involving many actors. Since efficiency in a production system is not only related to resource utilization by separate actors (in "industrial plants"), but also to coordination between resources controlled by separate actors, we believe that the SEM will make production "sub-systems" more integrated, especially across national boundaries (cf. conclusions reached in Hertz, 1989). The opportunities and needs for strategic action aiming at such structural changes are especially important due to the proposed changes on public procurement, for service sector firms and for interfirm cooperation and intrafirm organization.

Strategic actions that are more network-oriented influence the governance structure for the production system. The actors' "network theories" are important determinants. If e.g. an actor believes that the SEM will lead to a higher degree of connectedness between positions it is influenced not only to take strategic actions that influence the connectedness, but also to
influence other actors in the same or opposite direction. Many mergers, acquisitions, joint-ventures and strategic alliances are of this nature.

From a focal actor's point of view, the number of actors with a high degree of present or potential positive or negative connectedness could be quite limited in a specific network. If e.g. one actor, A, takes a strategic action that changes the nature of its exchange relationship to another actor, B, then the network structure is changed and the strategic alternatives for a third actor, C, has become different than before the change in A's and B's positions. Furthermore, A and B can now contemplate new strategic actions given the new network structure. A might e.g. be a manufacturer who reaches an agreement with a distributor, B, that leaves A's competitor C without sufficient access to resources for distribution. Or A, B and C might be manufacturers of substitutes who each need to increase production capacity and access to users to take advantage of the SEM. Thus, network-oriented strategic actions are aimed at influencing not only the actor's own position, but the network structure.

Joint ventures and strategic alliances are different from each other in the extent to which the network positions are changed. A joint venture is more limited and involves specific resources controlled by a "new" actor that is institutionally connected to each of the partners in the joint venture. A strategic alliance is not a "new" actor, but a change in two or more actors' degree of mutual orientation which can influence exchange relationships and interdependence between resources in a more extended network context than is the case in a joint venture.

A change in the nature of interrelatedness to one actor will also change the focal actor's position in relation to other actors. If e.g. A and B are competitors and merge, A might get access to some of B's customers and suppliers and vice versa.
Since network-oriented rather than production-oriented strategic actions are directed towards the interrelatedness of positions rather than the specific production resources controlled by the actors, a basic issue then is to what extent the exchange relationships can be controlled and in cases of acquisitions be "transferred" to another actor. Among reasons mentioned why mergers often fail to reach the objectives are that the resources in the production system controlled by the merging actors cannot be as effectively coordinated as it was hoped. From a network perspective an obvious hypothesis is that the problem often lies in lack of ability to keep and develop one or both of the merging actors' exchange relationships.

Strategic actions by actors outside of the Single European Market

Outside actors are by definition "discriminated" against. Without specific strategic actions outside positions will be less positively or more negatively connected to inside positions than before the creation of the SEM. This does not mean that outside actors cannot also benefit from the institutional changes and from the opportunities for strategic action. In a static view, i.e. the influences mentioned under a) and b) on p. 17, an outside actor would have to control resources inside the SEM. Since some of the discrimination is related to physical transfer of goods such resource control would have to involve manufacturing and "local content". Also, in a "static" sense, the outsider needs to develop exchange relationships to suppliers inside the SEM. Obviously, there may be characteristics of the outsiders' present network positions that are considered by the actors to be more than outweighing the negative influence of the discrimination. It is, however, interesting to note that there will be a tendency for outsiders to take predominantly production oriented strategic actions to adjust to the "static effects" of the SEM. This means that the outsiders will already for "static reasons" influence the network structure and thus also the opportunities and needs for insiders' strategic actions. While insiders can
receive some "static" benefits from the SEM without network changing actions, this is not true for outsiders.

Concentrating on the opportunities for strategic action by outsiders, we will link our reasoning to our analysis of internationalization processes in Johanson & Mattsson (1988). Figure 3 shows four situations. The focal actor that interests us in this section is the "outsider", i.e. an actor who is predominantly located outside of SEM and who is regarded as an outsider when the "SEM institutions" are applied.

Degree of internationalization of the industrial system

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<thead>
<tr>
<th>Degree of internationalization of the firm</th>
<th>Low</th>
<th>High</th>
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<tr>
<td>Low</td>
<td>The Early Starter</td>
<td>The Late Starter</td>
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<tr>
<td>High</td>
<td>The Lonely International</td>
<td>The International Among Others</td>
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Fig. 3 Internationalization of the firm and internationalization of the industrial system (from Johanson & Mattsson, 1988, p. 298)

As mentioned earlier, the adjustment of "insiders" to SEM will lead to increased interconnectedness between network positions located in the different SEM-countries. In this sense, there is a tendency towards increased internationalization of both the firms and of the industrial system. Strategic actions by outsiders are also contributing to this development, but the opportunities are different when we compare firms in the four situations.
The Early Starter case is increasingly rare. Outside Early Starters are at a disadvantage compared to inside Early Starters, due to the "discrimination" referred to earlier. There will be less opportunities to grow gradually over extended time periods in terms of production resources and exchange relationships, since the SEM networks become increasingly interconnected.

The Lonely International is by definition also controlling resources inside SEM even if it is an "outsider". If it takes no strategic action it will likely find that both its positively and negatively connections will become increasingly international. E.g. when it formerly encountered local competitors, local customers and local suppliers, it will find increasingly internationally connected actors in its "local" networks. A possible type of strategic action by the Lonely International is to be proactive and use its network positions and other means to e.g. strengthen the exchange relationships with important complementary actors and change the sign of the connection to competitors by acquisitions, strategic alliances etc. The Lonely International as an outsider has certain advantages over its insider competitors due to its network positions and network theory that give opportunities for strategic action in response to SEM.

The Late Starter who is an outsider cannot build on its own international network positions and its network theory is less "international" than for many of the other actors in the industrial system. The Late Starter can become more internationalized by efforts to change its connectedness to other actors who are already more internationalized, e.g. by development of old or new exchange relationships to complementary actors with resources that are located in the focal actor's geographical proximity or by letting itself be acquired or in some other way become positively connected to suppliers of substitutes who want to further increase their internationalization to include also outsiders.
The International Among Others is in a situation where network positions are already much internationally connected involving positions both inside and outside SEM. Network theories are probably rather similar across actors and strategic actions by one actor will highly influence the strategic situation of other positively and negatively connected actors. Network oriented strategic actions become very important since the network theories are probably quite future oriented, the positions are highly interrelated and the resources are specialized. We stated in Johanson & Mattsson (1988) that for the International Among Others, increased internationalization most importantly is a matter of increased integration between resources and exchange relationships in different countries. Furthermore, one of the basic ideas behind SEM is to allow for more coordination across production resources in different SEM-countries. The International Among Others who is an outsider will probably consider strategic actions that increase its resources located inside SEM and develops exchange relationships with insiders. This could lead to a weakening of investments in exchange relationships to complementary actors who are outsiders.

TO SUM UP

The development towards a Single European Market is driven by institutional changes described in "l'Acte Unique Européen" and by industrial actors inside and outside of SEM-countries. The need for and the opportunities for strategic action is, according to our analytical framework, dependent on the industrial network structure both as this structure reflects resource interdependencies in the production system (the industrial logic) and as it reflects the "network theories" of the actors. The network positions, i.e. a description of a network as a governance structure for the production system a) are cumulative results of earlier strategic actions, b) one of the means that an actor can use for strategic action and c) the major objective for strategic actions. Internationalization of firms and of industries can be described as gradually increasing
degrees of connectedness between positions located in different national sections of industrial systems. Such connectedness is on the network level of a rather subjective nature (the actors' network theories). A major influence on network theories are the objective resource interdependencies in the production systems. It follows from our framework that, even if adjustments to the SEM development partly is driven by the institutional changes on the "EC-level", the needs for and opportunities for strategic action by individual firms are much dependent on their present network positions and the present structure of the network. It is also important in our framework to relate the industrial adjustment to SEM to the global industrial systems' development and to other conditions explaining internationalization.

The governance structure in our framework is not the market. According to our model, the most interesting aspect of the development of the Single European Market is that it is an important driving force for structural change both of the network governance structures and of the production systems. Investments by firms to lead in or to adjust to such structural changes are not only in "internal" resources, but also in exchange relationships that can be used to coordinate increasingly interdependent and specialized resources in industrial systems.
References


