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7 The nature of the typical Finnish firm

Kari Lilja and Risto Tainio

Whitley and Hull-Kristensen "The changing European firm" chapter 6

INTRODUCTION

It is a bold abstraction to talk about a typical economic actor in any society. The array of firms is wide in all developed societies. However, in the Finnish case as well as in the Danish case we believe that it is possible to detect a specific type of firm which sets the tone and pace for the economy, and even for the wider society. The purpose of this chapter is to take a look at how the interplay of the typical firm and the wider institutional setting has occurred in Finland from an implicit comparative perspective and to draw explicitly contrasts with the Danish case (Kristensen, in this volume). Due to the dramatic institutional changes in Europe and the internationalization of the typical Finnish firm, we also analyse the changing nature of the typical Finnish firm and the development of new managerial capabilities.

In Finland, this typical firm is a capital-intensive raw materials processor which builds its competitive position on privileged access to raw materials and an aggressive pattern of investment for economies of scale and upgrading of the system of production for intermediate industrial products. In more concrete terms, we are referring to Finnish forest product firms, which nowadays are large, vertically integrated corporations. They have gone through several waves of mergers and acquisitions, become diversified, multi-divisional and international corporations since the 1970s (Lilja *et al.*, 1991, 1992; Räsänen, 1993). Due to their small number, the 'typical' firm in fact constitutes an exception among the whole population of firms in Finland. To sharpen this statement further we could say that at the present stage of development we are describing a real type based on four leading forest product corporations (Enso, Kymmene, Metsäliitto Yhtymä and Repola, the owner of United Paper Mills). But

the phenotype model of the typical firm applies equally well to some large mining, construction materials, energy and basic chemical corporations.

Following Whitley's (1994) model of the components of business systems, we shall first analyse the nature of the typical Finnish firm in terms of the components of its business system. Then we shall relate the Finnish case to Whitley's (1994: 170–5) typology of business systems to specify the relationships of the typical firm to the wider institutional system and elaborate specific mechanisms of the ways in which typical firms internalize societal resources and set standards for general societal evolution.

From the description and analysis there emerges a substantive model of the typical Finnish firm. Due to the internal transformation of such firms into Europe-wide players, and within the radically changed institutional environment of the European Union, we indicate also that the typical Finnish firm is currently experiencing a major qualitative change, especially in terms of its operating context. The paper is written in a way which makes it possible to distinguish the major differences between typical Danish and Finnish firms and concludes by drawing up some of these differences.

ACTORS AND OPERATIONS OF THE TYPICAL FIRM

The nature of typical firms as economic actors

Even at the very beginning of the process of industrialization, the typical Finnish firm was large and beyond the control of single individuals. By that we mean that the essential factors of production and business were not readily at hand in the immediate context of the people amidst whom the firm became established. Considerable economic, cultural and cognitive barriers had to be overcome when starting up a business. For instance, the amount of capital needed for the establishment of pulp and paper mills during the latter part of the nineteenth century – as today – exceeded the resources of a single entrepreneur. Thus the joint stock form was important in facilitating the pooling of capital for the huge construction projects and to buffer the risks inherent in the long payback periods of such investments. The histories of single firms exhibit long periods of losses, periodic takeovers by banks and bankruptcies. Decade after decade, the distribution of good years and bad years was very much skewed to the latter (Standertskjöld, 1973).

It is essential to recognize that Finland has been a thinly populated

area and a frontier economy. In order to get the production and logistics to function, firms have had to establish whole communities and facilitate their functioning. From this mill-community tradition it is understandable that forest product firms eventually diversified to various unrelated businesses like engineering, construction, printing, publishing, agriculture, leisure activities, community services, etc. Thus the scope of the business activities has been very wide among the major forest products corporations, to the extent that they were at the same time leading machinery makers for the pulp and paper industry (as in the cases of Ahlstrom, Kymi-Strömberg, Rauma-Repola, Tampella and United Paper Mills; see, e.g., Räsänen, 1993; Kosonen, 1994; Laurila, 1995). This trend towards (seemingly) unrelated diversification continued until the middle of the 1980s, when there was a clear change in strategy. After that turning-point the forest products corporations started to rationalize their business portfolios, and have developed more specialized and international product-based divisions. Here are some of the internal seeds of the qualitative change of the typical firm.

For explicating the societal space within which the autarky of the firm existed, it is necessary to make reference to the concepts of company town or mill village. In several cases, mill communities were able to separate themselves from the surrounding municipalities and establish themselves as independent municipalities, having local taxation rights, considerable autonomy in local administration and democratic institutions. The personalized power structure derived from ownership and positions of top management was, however, very visible (see Koskinen, 1987a, 1987b).

But there is an interesting paradox in the way the self-sufficiency of the firms must be conceptualized. Within the existing sphere of operations, the typical firm was very autarkic. On the other hand, however, when strategic moves had to be made the firm was very dependent on other sources of economic power and the nature, timing and the inter-organizational composition involved in the strategic move had to be negotiated.

Modes of organic growth at the mill sites

The basic consideration and competence in continuous process production systems is to keep the production going close to the limits of the system's capacity and to avoid breakdowns. However, in order to be able to carry out maintenance, the whole production system has to be shut down periodically. The main implication of this duality

is that there are two very different logics of action and sets of hierarchically organized practitioners: one for the continuous process and the other for planned shut-downs and emergency breakdowns (Penn *et al.*, 1992). During the continuous process considerable autonomy is granted to both sets of practitioners, to different organizational levels and occupational specializations. This leeway is disciplined by the impersonal technological rationality. The danger of breakdowns is always present and they are disliked by everybody due to the social inconveniences related to firefighting activities, close direct control, time pressures and huge economic losses.

Learning to orchestrate the complementary codes of the two logics of action within the reproductive mode is the first source of organic growth. By gradual experimentation it becomes possible to spot the contingencies which are related to breakdowns and to find the bottlenecks in the continuous production process. This experimentation goes on from the initial start-up and over the years can improve the yield from the initial capital investment by up to one-third (Lilja, 1989). In a multi-machine corporation it can during a year equal the value of a new paper machine. For this reason a special concept – the ghost machine – has been introduced to describe the emergence of new capacity arising from the trimming efforts of a corporation.

The second mode of organic growth is to enter into a huge development project, the purpose of which is to create a new-generation machine or mill design. The development project is a mobilization of the sector level technological community (cf. Tushman and Rosenkopf, 1992) involving a wide range of firms and research institutes. The final phase lasts from two to five years until the new production capacity is in use. The bringing on stream of completely new capacity is the most dynamic form of growth. An interim mode of growth is to make an upgrade in the production process by a machine rebuild.

The choice of the operating modes and their combinations occurs in capital intensive industries under the dynamics of competition and the decision to enter the developmental mode is typically triggered by a forecast gap in the demand and supply of an intermediate product. But because this choice is dependent on what competitors do, there is much uncertainty as to the right timing of the investment. This is complicated by two other external contingencies: technological advances in the downstream industries and in the upstream

supplier industries. New technological opportunities and customer needs set the scene for an investment race (cf. Ghemawat, 1991).

Authority relations within firms

Authority relations within the typical firm at the mill level are conditioned by the needs of the two operative modes. The work contexts of both the reproductive and the developmental modes are characterized by teamwork, where hierarchical differences are played down. The reputation of individual engineers is built upon the quality of their contribution to the daily problem-solving activities conducted in teams, in wider meetings and in workshops. In this professional context peer evaluations are a major source of personal pride and reward. However, there is a huge difference in the complexity of social relations and knowledge bases involved in the reproductive and developmental operating modes. In the reproductive operating mode there is a need to create direction for practitioners of internal technological disciplines, whilst in the developmental mode the assignment deals with coordinating the work with external technological communities, i.e. linked with machine suppliers, R. & D. institutions, technological consultants and the technological trajectories of customer firms. The difference between the reproductive and developmental operating mode is also built into the career paths of engineers.

The reproductive context of work is important for finding technological talent among professionals and the work force. For university-educated engineers the research assignments related to the various phases of the production process are the critical initiation tests for analytical skills as well as for social skills because some of the information has to be collected from individual workers and work crews. They have their own norms for revealing and concealing relevant work-related information. These shifting codes are both person- and work-place-climate related. Having the skills to manage the person-related contingency is a good omen for a career in production management. Besides the analytical dimension of compiling results from on-going observations and small-scale experiments, a successful experience curve effect is built from a collective evaluation of the presented evidence and a synthesis which consists of the modelling of the process variables, the technological solutions or the improvements, their cost calculations and implementation plans which take into account not only the improvements but also the lost production during the shut-down.

The process of collective evaluation goes on simultaneously with the more operative tasks of keeping the process at the limits of capacity. Every morning the working day starts with a session where all the professionals collectively share their views on the most important aspects of the on-going development work. The developmental operating mode is organized around projects and there are different degrees to which these project organizations have experts assigned to them on a part-time or full-time basis. In the case of a new mill development project, there is an autonomous project organization which has a core of experts who are in charge of the planning assignment and who can draw on both internal and external resources for special tasks (Alajoutsijärvi, 1993). Participation in the developmental mode of work, from a career point of view, is more attractive than the reproductive mode because it prepares an engineer either to take responsibilities in the next reproductive phase of the project or to enter a similar type of large-scale developmental project. Recruitment processes receive wide attention in the sectoral technological community and are subject to internal politics within the firms. The timing of large-scale investments occurs in anticipation of the growth phase in the business cycle. For this reason they have a national character, they are followed up in the media step by step, and the final go-ahead decisions can change the whole economic climate from recession to boom.

There is strong social pressure for recognition, in the form of official status and a designated organizational empire defined by formal organizational structure and title. This concern has a long historical heritage in the traditions of the forest product firms, because formal positions were linked with a variety of privileges and visibility both in local and regional contexts. In order to make a career progression from the sphere of production management and engineering to the ranks of general management it is typical that the person will have been in charge of several successful development projects.

Work-place industrial relations

The mill community and company town tradition had as its social core a strong paternalistic employment and industrial relations model which relied on personalized social relationships of the employer and the employees and the exclusion of the trade union movement. Social activities in the village were as important as interactions at work for creating a high commitment to work and to socialization into skilled identities, generation after generation

(Koskinen, 1987a). In many cases the social standards and practices developed in the mill communities were highly advanced compared with those in the surrounding society (Haapala, 1986). This created an identity of the mill community which bridged hierarchical and economic differences between the employer and the various groups of employees and paved the way for a deferential stance towards the employer. Thus it was quite evident until the end of the Second World War that the social relations of the typical firms differed from the dominant pattern of social and industrial relations in Finland, which was mostly adversarial (Lilja, 1992).

Since the Second World War, paternalism has been replaced by a pluralistic system of work-place industrial relations and a collectively regulated system of internal labour markets. How has this influenced the classic dilemma in interest representation: that of either dividing or expanding the cake? In the typical firm, long-term considerations for growth have received most attention. The basic reason for that is rather simple: workers themselves have made many types of mill site specific investments. These are related to their careers in the internal labour markets, covering often several members of an extended family and often two generations. Housing and summer cottage investments are not liquid in small communities, etc. This contingency has made it possible to integrate the workers' work-place organization and especially its leadership into both operating modes of the mill sites.

The learning curve effect is supported by clauses on productivity bargaining in the industry level collective bargaining agreement (Koistinen and Lilja, 1988). Additionally, the senior shop steward has an astonishingly strong position, working full-time in the negotiation and participatory organization of the mill site and for the reproduction of the informal workers' work-place organization (Lilja, 1987). Typically, they have had a long career in the work organization as well as in the shop steward committees and the government of the local union before they become elected to the highly prestigious position of the senior shop steward. In that position their visibility extends far beyond the work place and the local community. They have a strong incentive to listen to their constituency because their position is subject to election every third year. With the current technocratic openness of the present generation of managers, the representatives of the workers are fully aware of the general strategic perspectives of the mill sites and can read the terse messages of the corporate management for those aspects of strategic moves which are not publicized.

Thus in the contemporary work organization of the typical firm

there is a mixture of organizational principles in use which regulate and switch the locus of authority. The system of work-place industrial relations is only one example of this. It complements the occupation-based hierarchical division of work and has diminished the status of the foremen and changed their encompassing role to that of a technician or an administrator. Another example is the team- and project-based organization of the developmental mode which draws human resources from all hierarchic levels, across functions, across mill sites and across company boundaries. This script for managing is based on the awareness of the need for multiple types of expertise, covering both theoretical and tacit forms of knowledge.

From the above description it can be concluded that the typical Finnish corporation is a complicated technological system designed for large-scale cost efficient production and to the constant upgrading of the technological system by making both incremental improvements and quantum enlargements in capacity with qualitatively new technological features in the processes and products. This expansionist and aggressive approach to competition, compared with Canadian, Swedish and US firms (Jörgensen and Lilja, 1994), would not have been possible without a set of inter-organizational and intersectoral connections which link the typical firm to the wider contexts of the Finnish economy.

Market relations

Technological innovations have been important in sensitizing entrepreneurs for the location-specific opportunity in Finland to exploit wood chips. But without a market pull they would not have entered into such very risky investments. However, with few exceptions, the established firms lacked strong customer connections. This problem was solved by forming joint sales associations for various products. These associations were so efficient that very few firms attempted to organize their sales independently. Price competition was cut off in export markets and the Finnish sales associations have maintained high visibility and market leadership in many European countries due to their large size and the completeness of the product assortment.

Due to the stability of the relationships between the production-oriented firms and their joint sales associations, there is only a formal similarity with the duality of skill containers and project coordinators, described by Kristensen in the previous chapter. The sales associations paid the producing firms upon shipment of their products irrespective of the time when the final customer paid. Thus

the sales associations took care of financing the on-going production operations. In the case of new customers, they were also in a powerful position because they had a chance to influence to which company the initial contact and order was directed. The operating arms of the sales association have always been near to the customer, stationed in the various geographic market areas of Europe and elsewhere. Thus the sales personnel have been expatriates who have had great incentives to adopt the values and lifestyles of their customers in order to be able to integrate into local business communities and to structure deals which served the interests of both customers and suppliers. This integration extended to heroic attempts to meet tight time-tables or other special requirements. Such deeds are still recollected often decades after they have been achieved. They become the symbols of the reciprocal obligations and commitments tying seller and the buyer into a long-lasting relationship (cf. Klint, 1985).

It has to be added that the use of joint sales organizations was by no means restricted to the forest industry. It was a common practice also in the textile and engineering industries. Finnish market relations have also been mediated by several large general trading companies for supplying manufacturing customers in Finland and operating as export companies for manufacturers, especially in distant markets (see Inkiläinen, 1994). This tradition is very similar to arrangements institutionalized in Germany and Japan (Orrù, 1993: 187–8). In the retail sector the channels have been organized and to a large extent owned by strong wholesale firms which do not give much space for independent shopkeepers. All these features have important implications for the class structure: role models of independent entrepreneurs have been rare and the small relative size of the petit bourgeoisie in Finland is conspicuous.

A summary of the business-system characteristics of the typical firm in Finland

The descriptive characteristics of the model of the typical firm can be condensed into a characterization of a collective survival recipe. Its core is to extend the life cycle of a mill. Technologically it consists of the right balance of the reproductive and developmental operating modes. In terms of managerial growth strategies it has meant increased vertical and horizontal integration. These shorthand expressions hide the social side of the typical firm. The major internal actor groups consist of:

- the variety of engineering professionals linked horizontally to external technological communities of the engineers;
- the core process and maintenance workers tied to the internal labour markets and to the local community by their mill site-specific personal investments and;
- the sales professionals servicing customers in various market areas.

Enlargement investments have been seen by the engineers as a solution not only to technological problems but also as a way of attracting top-quality recruits from other firms and from the technological universities, as well as for keeping up with technological progress and career advancement. For the core workers their meaning is related to continuity of employment and the survival of the local community. Increased volumes have allowed the growth of the sales office network, and the differentiation of product grades the opportunity to move away from commodity types of transactions to more specific and stable customer niches. Because of the linking of these social stakes to the technological trajectory of a mill site, political processes within and around the typical firm can easily be analysed using a social movement perspective (Laurila, 1995). But there are many more contingencies for the survival of the typical firm. By looking at the historical and societal constitution of the model it becomes possible to give an historically specific explanation of how to secure the economic, human and political resources for the waves of expansion and how to stabilize the system?

THE HISTORICAL AND SOCIETAL CONSTITUTION OF THE TYPICAL FIRM

In this section we elaborate the characteristics of the typical firm by locating it in the wider societal and geopolitical structures. We will start the analysis of the simultaneous constitution of the typical firms and their structural contexts by describing the emergence and maintenance of nationally significant economic power blocs.

Economic power blocs and financial institutions

During the six hundred years to 1809, Finland was part of Sweden. After that it became a Grand Duchy as part of the Russian empire. In the newly formed autonomous Grand Duchy the language of the

educated élite was Swedish. In the 1880s the number of Finnish speaking population was 85 per cent.

It was this Swedish-speaking élite which was most active in taking advantage of the new business opportunities which were created by technological development, the industrial revolution and increasing free trade in international markets. Those families which were significant owners of the new businesses were often relatives and part of the same inner circle. This social homogeneity of the upper class became an obstacle to the development of Finland as an independent nation-state, and so part of the ruling élite decided to integrate themselves with the Finnish-speaking majority by adopting the Finnish language and supporting its use as a source of identity for the emerging nation. This faction of the national élite was called the fennomanic movement. Its programme towards nation-building escalated from cultural, social and political arenas to the economic field during the 1880s (Kuisma, 1993: 403–10). At the end of the 1880s, members of the fennomanic movement started to campaign for the establishment of firms in the financial sector dominated by the Swedish-speaking business élite. Thus the business community became divided by a linguistic cleavage between Swedish- and Finnish-speaking industrialists and businessmen. Two economic power blocs started to emerge.

The Finnish-speaking élite established a commercial bank (KOP) first, in 1889, and two insurance companies (Suomi, in 1890 and Pohjola, in 1891). These firms started to build their own financial group with a sphere of influence in manufacturing and distribution. The flagship corporation of this financial centre has been what is now called Repola Oy and it was created by several waves of mergers and acquisitions between corporations belonging to the same financial group. Currently, part of Repola's corporate empire is also United Paper Mills, the forest products corporation of the flagship.

The emergence and growth of firms owned by this Finnish-speaking business élite led to rivalry at the bloc level, which strengthened the ties of the Swedish-speaking business élite. However, the integration of the Swedish-speaking firms into a bloc happened much more slowly than on the Finnish side, because individual firms were much stronger, having accumulated capital over many decades. Two commercial banks, which later merged to form what is now called the Union Bank of Finland, became the core financial firms of a set of manufacturing firms with Swedish-speaking owners. In the field of the forest industry, the flagship corporation of the Swedish-

speaking economic power bloc has been Kymmene Oy, similarly the result of a long chain of mergers and acquisitions starting in 1904 when Kymmene became one of the largest paper product firms in Europe.

The significance of bloc formation was soon recognized by the farmers and the working-class élites. They launched similar collective projects in various other fields of economic life. For both of these social classes the cooperative movement was the major economic form for mobilizing the masses and controlling their assets. The farmers' cooperative movement has been able to create one of the major forest products firm in Finland, today called Metsäliitto Yhtymä, as well as a bank group with its sphere of influence especially in the food industry. The workers' economic power bloc has not, however, tried to establish firms in the forest products industry. It has been most influential in retailing, food manufacturing, financial services and construction. The major structural change during the last few years has been the withering away of the workers' economic power bloc.

When entering into the developmental mode, the typical firms needed a strong bank connection. The capital intensity as well as the long payback periods of the investments have necessitated access to bank loans (cf. Zysman, 1983). Equity capital has always been scarce in the Finnish financial markets. On the other hand, the typical firms were good customers for the banks and in most cases the banks and typical firms were tied to each other by cross-ownership and cross-representation at supervisory board level or even on the boards of directors. These double positions gave access to inside information and coached both parties in the specific business logics of both manufacturing and financing. In the forest products firms the main substantive issue is the necessity to understand the importance of the long-term which means at least seven to ten years, the whole business cycle and the even more longer-term, twenty to thirty years which is the technical usability time of major capital investments. There are numerous cases in which top managers have during their managerial career held top positions both in the banks and in the typical firms. This sharing and circulation of managerial cadres within the bank spheres of influence is typical also in Japan (Orrù, 1993: 190). In the Finnish case the engineering background of the top management of the typical firms and their synchronization with the banks has led to a growth mode in which all kinds of strategic and internal management problems are solved by investing in the technological base.

There are few cases in which the bank spheres of influence have been broken through acquisitions, and hostile takeover bids have been rare and, if tried, not successful. This constitutes a striking contrast to the Anglo-American market for corporate control and attempts to make money by selling acquired assets to new hosts. The banks have taken care of the competitiveness of their flagship corporations by restructuring manoeuvres.

The role of the state in the economy

The role of the state in the economy has to be looked at from four angles. First, how did Finland's position as a Grand Duchy within the Russian empire give the initial demand pull for the typical firm? Second, how did the economic power blocs use the independent Finnish state after its emergence in 1917 to further their collective projects? Third, how did the state copy the model of the typical firm and implement it in its own sphere of economic influence? Fourth, how did the state expand its own sphere of influence through trade relationships with the Soviet Union?

Since the beginning of the Russian era, Finnish firms were able to export goods to Russia without paying customs duty, or at least paying lower duties than firms in central and western Europe. This advantage gave the initial impetus for investments in the pulp and paper industry in the eastern parts of Finland after the beginning of the 1870s. From this corner of Finland, there was a good railway connection to the heartlands of Russia and its empire. The growing demand, good quality and cost-efficient production gave the Finnish firms a competitive edge over the Russian pulp and paper firms and led to the construction of capacity which greatly exceeded the national demand in Finland. The Russian revolution changed these commercial relations completely. Finland became independent in 1917 and bolshevik Russia adopted a mercantilistic trade policy. The forest industry was, however, able to find new markets in western Europe where it established a viable position. Trade with Russia dropped from a very high level in 1913 to zero in 1918, and stayed low until the 1950s when it started to grow as a natural continuation of the war indemnity which was demanded by Soviet Union after the Finno-Soviet war of 1941–4.

After independence in 1917 it became possible to launch a nationalist industrial policy. A paradigmatic case of this active and interventionist economic policy was the acquisition of a forest products corporation, Enso-Gutzeit Oy, which had been under the own-

ership of Norwegian entrepreneurs (Kuisma, 1993: 509–31). Thus the state was used to bring one of the core forest products firms into Finnish ownership. It is also important to note that the acquisition of Enso-Gutzeit was a continuation of the strategy of the fennomanic élite. In general, it has been characteristic of élites in Finland to operate through and with the state.

The state-owned manufacturing sector expanded from forest products to mining, engineering, energy, chemicals and even to oil-refining based on imported crude oil. If private firms were not willing to take the huge initial risk in making the investment and financing the project while no cash flow was available, the state would do so. In the late 1940s and the 1950s, the establishment of state-owned firms supported regional development which was especially important for farmers and the agrarian/centre party. The expansion of the state-owned manufacturing sector was as eagerly promoted by the social democrats and the communists, who had an increasing base of support at the large industrial work places. State-owned firms have strengthened the Finnish-speaking business élite and stabilized its self-esteem to the point where the language cleavage no longer figures.

Having established firms in many industries, the state became responsible for their future. One key to this problem was trade politics. After the Second World War, trade with the Soviet Union started to grow. The institutional peculiarity of this trade was that it was based on agreements made between the states, and was monitored by bilateral commissions controlled by the states, causing an exceptional centralization in the trade relationships with clearly identifiable figures, such as the state presidents and the chairmen of the commissions who were influential top politicians. The major actor on the Finnish side was the state-owned oil-refining corporation, Neste, which had the right to import oil from the Soviet Union. In exchange for this oil the other Finnish corporations could sell products to the Soviet Union at prices fixed in bilateral negotiations. These trade arrangements boosted the establishment and growth of state-owned manufacturing corporations in Finland, and an unusual degree of state intervention in the economy, compared with other west European countries. This policy supported the diversification of the manufacturing base in Finland and provided business opportunities for other firms operating as suppliers or in the service sector. Additionally, the technological community of engineers has provided the complex applied engineering knowledge needed in the processing of the varied raw materials.

Economic interest organizations

The need for specialized economic interest organizations of the economic élite emerged with the radical parliamentary reform which occurred in Finland in 1906. In the earlier estate-based parliament, economic and political representation were unified and the nobility, clergy and bourgeoisie could easily shape the legislation according to their economic interests. Thus the development of class-based organizations experienced a major shift after the parliamentary elections of 1906, in which women also had voting rights, for the first time in Europe.

The distinct position and interests of the typical firm in the total population of manufacturing firms can easily be detected by looking at the history of the economic interest organizations of firms. The typical firms – being forest products firms – were strongly oriented towards exports and contributed until the late 1950s about 80 per cent of export revenues (Seppälä *et al.*, 1980). Thus it is very clear that the interests of the typical firms and those of the home market firms differed as to the economic policies of the state. Consequently, these lines of manufacturing industry had a separate peak interest organization until 1976. By that time firms in other industries than the forest product industries had gained market shares in international trade and the views on state economic policies, especially on currency policies, had become more homogenized to allow the creation of a joint peak organization.

Besides influencing the economic policies of the state, the economic interest organizations of the forest industries have had important functions for fostering cooperation between the member firms. A good example of the latter role of the Central Association of the Finnish Forest Industries is a commission which regulated and controlled the investments for new capacity of the chemical forest industry companies. The commission was established in response to the competitive over-investments of the corporations in the early 1960s, which resulted during the recession of 1966–7 in a huge overcapacity. The commission was in operation from the end of the 1960s until the middle of the 1980s. Such an exceptional mechanism between major competitors and members of different power blocs was possible because the Bank of Finland was informally involved in its operation. Foreign currency exchange was regulated by the central bank until 1986. Because major investments often required loans from abroad, the consent of the Bank of Finland was important for the final investment decision. Another

concern was the sufficiency of wood raw materials in the forests. These issues drew the firms into joint negotiations.

Because of the large number of state-owned corporations, leading politicians and civil servants have been on the boards and supervisory boards of the firms owned by the state. They have been as well-informed of the industry logics of the typical firms as the directors of the financial groups. That is why it has not been difficult to communicate the needs of the typical firms to those arms of the state machinery which formulate the economic policies of the state (Tainio *et al.*, 1989).

The density of membership in the various interest organizations is high. The main motivation for that has been the great importance of centralized representation in policy-making committees of the state concerning economic policies and negotiating collective bargaining contracts. The interest organizations of the business community constitute the fourth pillar in the corporatist negotiating system operating between them and the state, the farmers' interest organization and the labour movement. Due to the class coalition of the business community and the farmers, the labour movement has not had such a central position in the system of political power as has been typical in Sweden or in Denmark. Another peculiar feature has been the powerlessness of the representatives of the small business sector. The main explanation for this is the narrow social base of small business in Finland, implied by the dominance of large firms both in manufacturing and distribution, with a heritage of being self-sufficient in a wide range of operational tasks.

The system of collective bargaining

The chemical paper industry has set the tone for the development of the Finnish industrial relations system in three different phases. First, after the civil war in 1918, the united employers' front refused to enter into collective bargaining agreements with the unions. This stance was led by the employers' association of the forest industries. Thus Finland was cut off from the development of the Scandinavian model of industrial relations (Lilja, 1992). Employers' associations in Sweden, however, were eager to persuade their Finnish colleagues to adopt industry-level collective bargaining because they estimated that cheap labour in Finland was a major advantage for the Finnish firms in the international markets where they competed (Kalela, 1981).

Second, after the ending of the Finno-Soviet war in 1944, it was the employers' association of the forest industries which made the first industry-level collective bargaining contract and opened the gates to normalization according to western European standards. This move, and the subsequent approach of the employers' association, paved the way towards a very exceptional track in industry-level collective bargaining: whilst Finland is known for its high propensity to strike in manufacturing, and there have been several waves of worker mobilization, the Paper Workers' Union has not called full-scale industry-level strikes because of disagreements after the negotiations (Lilja, 1983, 1992).

Third, at the end of the 1970s when attempts to introduce a law for regulating employees' participation in firms was about to be passed, the chairmen of both the employers' association and the Paper Workers' Union intervened and were able to shape the law to reflect the basic features of the system of workers' participation in the pulp and paper industry. This intervention prevented the system of shop stewards being overridden by a heavy compulsory mechanism of works councils, and there is less separation in the systems of collective bargaining and employees' participation. Similarly, the negotiating mechanism stipulated by the law in the event of essential changes at the work-place imitated the clauses of the collective bargaining contract in the paper industry. In this way the typical firms were able to continue their established pattern of work-place industrial relations by making minor adjustments, whilst small and medium-sized firms experienced the regulatory change as a problem which required top management attention. This ability to build on internally created institutions is a major strength of typical firms.

Based on the decision made in the convention of the central organization of the workers' unions in the early 1920s, the union structure was designed according to the principle of industrial unionism. This reflects the relative weakness of the craft unions at that time. Their relative weakness was mainly due to the fact that craft unions were not direct inheritors of the traditions of the guild system. Thus the Paper Workers' Union has had a long tradition of being an industrial union. However, in maintenance departments there have been pockets of electricians who have belonged to the Electrical Workers' Union, due to their education and past employment history. Similarly, workers in mechanical maintenance have belonged to the Metal Workers' Union, which has been the strongest industrial union in manufacturing. Little by little, however, the growing prestige of the Paper Workers' Union and the improved wages of the core process workers have drawn other blue-collar workers at the mill sites to the Paper Workers' Union. Thus, in practical terms,

the employers at mill sites are facing a single local union for the blue-collar workers and its shop steward committees. The foremen and clerical staff have their separate local units of representation.

The 'labour aristocracy' character of the paper workers is very visible in the union structure: workers in mechanical woodworking or in forestry do not belong to the Paper Workers' Union – the former belong to the Mechanical Wood Workers' Union and the latter to the Union for Rural Workers. This separation represents the technological and locational core–periphery segmentation of the workers in the typical firm. It is the more significant because on the employers' side the corporations typically have all these related industries under the same authority structure. Very often the mechanical forest products factories are on the same integrated mill site, but even so paper workers have insisted on the separate union structure due to the greater heterogeneity of the other related industries. Thus at the industry level the representation of the employers' interests is unified in one association, but workers are in three separate unions. This separateness has, however, not weakened the bargaining power of the paper workers.

The associational strategy of the Paper Workers' Union can be understood better if we look at the operating procedures inside the union. The striking feature in the union government is the strong position of the rank-and-file representation. There is no other union in Finland where the distribution of power in a union is balanced between the union officials in the central office and the work-place representatives. In the case of the Paper Workers' Union it is possible to talk about dialogical union democracy in a very exceptional sense (cf. Lipset *et al.*, 1956; Offe and Wiesenthal, 1980). The reasons for this exceptionality are interesting, not only for understanding the classical theme of the iron law of oligarchy (Michels, 1949) but also how the union leadership conditions the typical firm.

There are about fifty large mill sites in Finland, which account for about 80 per cent of the workers in the paper industry. The senior shop stewards of these work-places have an annual conference at which they, together with the central office, plan the collective bargaining strategy. Because they know the economic situation of each of their firms, they are in a good position to put effective pressure on the employers. Both sides are intimately aware of the situation-specific bargaining power of the other party. There is a very rare link with talk and action, not only in the off-the-record informal negotiations but also in the publicized views of the parties. Thus it has become possible to create a tradition where neither side

pushes short-term power advantages too far in the industry-level collective bargaining, on the basis of shifts in the business cycle. That would lead to an escalating spiral in the use of open power. However, the employers' association has had to strike a balance between resisting inflationary wage pressures and running the risk of lost production and reliability in servicing the customer. So far preferences have been skewed to the latter.

The educational system

The typical firms were among the first to establish private primary schools in the late ninteenth-century Finland and later on, especially in the inter-war years, private vocational schools, as part of their community-building efforts. Similarly, the typical firms, along with other large firms, have been instrumental in setting up and supporting higher education at technical universities and business schools. However, when analysing the interrelationship of the typical firm and the Finnish educational system over the long term, the dominant trend has been the externalization of the basic education of the labour force, as well as the higher levels of specialist and professional education, from the typical firm to the state and local authorities, keeping only highly specific tailor-made schemes for further training in the joint domain of the typical firms.

These externalization efforts have also been favoured by the Finnish state, which adopted a universalistic approach to the structures of sectoral administration. The Finnish-speaking élite has supported this strategy because it was part of the emancipation strategy for opening all levels of education to the whole population. Though this administrative universality seemingly has no linkage to the internal functioning and social codes of the typical firm, there are many informal practices which bring the special interests of the typical firms into the educational agenda. The most conspicuous example is the sectoral specialization of the technological universities in research and teaching of the technologies linked to the forest sector. Thus, for instance, the Helsinki University of Technology has the largest and most diversified department by staff, research and teaching in the whole world which specializes in the process technologies of chemical forest products. Moreover, in other departments and laboratories of the university a complementary specialization is well known. Similar forest sector-specific approaches to education and research are typical also in other technological universities and faculties, as well as in ordinary universities and business schools.

The socialization of the university-educated engineers to the technological problems and organizational cultures of forest product firms has in most cases started much earlier than in the university. Very often their parents have worked in forest products firms. Thus some of the social skills related to forest products operations are learned at home. Partly they are acquired during the informally dualistic educational system of the university-educated engineers, who work as trainees during their summer holidays. During their studies they take assignments as foremen and technicians and finally, at the end of their studies, they produce a master's thesis on a problem suggested (and also paid for) by the employer. This gives a socialization period of ten years during which the interaction of both practical duties, social relationships at work and theoretical studies prepares the university-educated engineer both for a specialist or more managerial phase of his/her career.

The emphasis on training of the core process and maintenance workers was part of the paternalistic employer policies from the early days of the forest product firms. Since the 1970s, this tradition has been backed up by considerable training budgets and several mills have adopted a policy whereby workers are not laid off during recessions, when the mills are shut-down, but instead participate in in-house or external training courses. The Paper Workers' Union has demanded the introduction of a sixth shift to the prevailing five-shift manning scheme to formalize the training logic as the newest layer in the multiplicity of organizational principles of the mills.

The professions: interpersonal social networks

In Finland, the role of civil society is restricted. Personal life projects and local grass-roots initiatives are squeezed either by the universalistic and bureaucratic principles of the state administration and its sectoral policies, or by the well-elaborated societal programmes of the economic power blocs enhanced by corporatist negotiations. For this reason, professional communities do not have a societal significance beyond the established structures of the power blocs and their typical firms. Moreover, the centralization of societal decision-making can extend even beyond the power blocs, due to the existence of cross-sectoral and inter-bloc social networks. Such top-level network connections make those based on professional logics less significant. But at a more humble level of the routines of typical firms, the professions have significant effects.

Though the loyalties of the professionals are divided, with several powerful spheres of influence among the engineering professions, there is a long-established tradition for sharing experiences on the working of specific machines, technologies and work routines (cf. von Hippel, 1987). This sharing occurs across corporate boundaries at the individual level due to various kinds of cohort effects (e.g. joint education or work history) and at a more formalized collective level through the activities of the professional associations and their educational centres. Thus, for instance, the educational centre of the engineers arranges workshops in which highly focused problems of leading-edge technologies are reviewed and where examples are presented from firms which have had relevant experience. These workshops allow suppliers, users, researchers and technological consultants to confront each others competences. They are part of the technological innovation networks through which the technological trajectories of the whole sector are explored. This sharing of insights upgrades the technological competence of the whole profession, irrespective of specific roles and corporate connections (cf. Tushman and Rosenkopf, 1992).

Central characteristics of the Finnish business system: deep and wide mobilization and centralized risk-sharing

This analysis of the Finnish case corroborates Whitley's suggestion that the elements of business systems have strong interrelationships and that distinct national patterns can be discerned. In the Finnish case we can talk about a collaborative or a coordinated type of business system (Whitley, 1994: 170–5). The nationally specific features of the typical firm consist of an inner and outer layer of actors and two linking mechanisms between these layers.

The first linking mechanism consists of the deep and wide mobilization of actors for ambitious technological leaps expanding the capacity or conquering new upgraded product segments for the typical firm. We have shown that in the Finnish case the vertical synchronization of actors for large-scale investments in the typical firms is extremely deep. Not only banks and the bank-linked power blocs have been involved, but also the state, through its top civil servants and politicians and through its ownership of typical firms and by multiplying the forest products firm-based model in other raw-material processing industries. At the other extreme, the vertical synchronization of stakeholders extends to the shop floor, at least as to the style the leadership of each mill site's workers' work-place organization chooses for interest representation. The width of the

mobilization is related to parallel intentions of the typical firms and power blocs: they compete with each other in most of the product groups. Because there are short leads and lags in the diffusion of strategic knowledge for new investment opportunities, all of the typical firms and their power blocs have attempted to adopt similar strategic moves. This contingency has resulted in periodic over-investments, overstretching of resources and overheating of the economy. The demands of the typical firms for supplies which are basically internal to the nation-state trigger huge multiplier effects in the whole economy. Thus the parallel vertical mobilizations add a further degree of ferment to the inherent instability of the Finnish economy which has been based on the export of very cyclical intermediate industrial products. For this reason there has been a strong need for risk-sharing and multi-level associative mechanisms.

Due to periodic economic crises, the power blocs and the state have been forced to take over the risk-sharing function, adding another dimension to the very centralized system of national decision-making. To moderate the competitive races over new investment opportunities, informal and formal practices for inter-bloc coordination have emerged. Neutral meeting places, provided by annual meetings of some jointly owned firms, state committees, sports and cultural organizations have been important. They have allowed focused communication, informal exchanges of ideas, opportunities to initiate conciliatory processes and mutual adjustments. Periodically these neutral meeting places have been turned into influential 'quasi-boards' where inter-bloc and inter-sectoral policy making occurs (Korhonen, 1990).

THE CHANGING NATURE OF THE TYPICAL FIRM

While there are some routines and managerial competences of the typical firm which can be maintained despite the changing institutional environment, or which can even be transferred to different institutional environments, it is not difficult to point out wider contextual changes which create considerable pressure for the reproduction of the typical Finnish firm. We first highlight these erosive trends in the institutional embeddedness of the typical firm. Second, we specify the rational core and the learning gaps of the management of the typical firm in the new context. Third, because the success path of the typical Finnish firm has been very much a product of a collective project, the question must also be asked: in what ways is there still the basis for a collective project?

Contextual pressures for change

The factors tending to erode the institutional security of the typical firm can be quite extensive. Some of the key issues are:

1 withering away of power blocs and bank control;
2 decreasing relevance of national level institutional support;
3 competing sectoral logic.

Withering away of the power blocs and bank control of the typical firm

During the long recession of the early 1990s it has become obvious that risk-sharing within the economic power blocs is no longer possible. It led to the collapse of the economic power blocs of the working class and the collapse of the savings bank group. The whole banking sector was maintained only by massive state support. The whole concept of the banks' sphere of influence has come under scrutiny, for five reasons:

1 The EU directives and Finnish banking laws set strict limits on the risk concentrations of the commercial banks, as well as requirements for the minimum proportion of own capital within the total balance sheet. These regulations set limits to lending for the flagship corporations and put pressure on their liquidity and solidity.
2 Due to the deregulation of the financial markets most large firms have set up their own intra-firm financial units, which are often located abroad. These units are capable of operating in financial markets with international merchant banks in a way which make these services of the Finnish banks redundant or at least subject to competitive bids.
3 The size of the typical firm is now such that during booms their cash flow allows them to make large-scale investments without borrowing money.
4 Foreign investors revived their interest in Finnish corporations at the bottom of the recession in 1993, when the Finnish mark was weak and the stocks were undervalued. As the restrictions on foreign ownership have been abolished, the level of foreign ownership has jumped in many core Finnish corporations. The attractiveness of the stocks of the Finnish-based corporations has also revitalized the privatization of the state-owned corporations. Most of the investors are pension funds which do not intend to

exert voting power in the corporations. However, the existence of loose, short-term placements looking for profits in the markets indicates that foreign firms may try to get decisive control of the typical Finnish firms. There have also been negotiations in which mergers across the banks' spheres of influence have been tried out (e.g. between Kymmene and United Paper Mills). Thus the sacred status of the ownership connection to a bank is diminishing and the propensity of the typical firms to search also for cross-border mergers has increased in line with other industries (e.g. construction materials, electrical engineering, shipbuilding, etc.).

5 The rationalization needs of the Finnish banking system are widely acknowledged. Rumours of the merger of the main two commercial banks have been strong. Such a move would completely undermine the concept of economic power blocs.[1]

All these developments lead to the conclusion that the flagship tradition of the major commercial banks is becoming outdated because large corporations will no longer commit themselves to one bank in exchange for an open-ended risk-sharing contract. Nor is the bank control of the typical firm through ownership possible any longer because of the wide diffusion of ownership of the typical firms and the danger of law suits from other owners in cases where particular owner interests are violated.

The decreasing relevance of national level institutional support

Finnish management has been characterized as strong in operational and institutional management. The success path of the typical firm can be explained in terms of these managerial competencies. It has not, though, demonstrated a high level of excellence in business management and/or strategic management. In the new European and global context the old competence in institutional management is less relevant. There are no Europe-wide power blocs on whose support in risk-sharing the typical firm can rely. Nor are there sympathetic state authorities to lobby for a stabilization of the institutional environment. Even the most primitive aspects of organizational intelligence have to be reorganized in order to be able to make sense of the on-going European-wide transformation in each relevant industry network. The new managerial agenda is filled with European-wide R. & D. consortia of various sorts of technologies which directly influence the shape of the offerings of the typical Finnish firm. New regulatory pressures for preserving the natural

environment are also causing radical rethinking on raw material inputs, in processing technologies, product choice and mill locations.

Competing sectoral logics

The sector-based competitive advantage of the forest firms has been considered an impediment for the diversification of the Finnish economy because the economic policies of the state have, especially during crises, aligned with the needs of the forest sector firms (Lilja *et al.*, 1992: 144–5). By becoming international firms through foreign direct investments and becoming partly owned by foreign owners, the Finnishness of the typical firm has dramatically diminished. At the same time some dominant firms in the economy have cut their roots to the forest products industry (e.g. Nokia) or the wider forest sector industries (e.g. Kone). The success of some of the smaller research based corporations has given new momentum to the hi-tech lobby in Finland. It is clear that the notion espoused by the forest industry of being the leading national industry is now easier to challenge. The technological policies and venture capital funding of the state are being geared increasingly to the new, product innovation-based industries than to the well-established typical firm.

The hard core and learning gaps of the typical firm

It is obvious that the professional and craft-based competencies linked to the two operating modes of the typical firm constitute its hard core. These competencies contain deep and wide sectoral linkages and the sector-wide upgrading dynamics. The abundance of management skills of both the operative and the developmental mode is a partial explanation for the fact that Finnish firms have been able to increase their number of production units at a quicker pace than their competitors, allowing them to be first movers in upgraded products with technologies based on economies of scale. However, depending on the complexity of the technological package and the intended operating mode, there are clear interrelated infrastructural, social and geographic constraints.

An obvious issue is the inclusion of the marketing profession and sales organizations into the structure of the typical firm and its various divisions and profit centres. The abandonment of the joint sales associations has developed to the point where practically all major pulp and paper corporations have their own sales organiza-

tion. However, it does not mean that cross-functional managerial capabilities have emerged. The marketing function is still a very underdeveloped activity (Rohweder, 1993).

Through the disintegration of the sales associations the independent sales office network at local market areas has become thinner and perhaps less visible. It also means that the new sales offices cannot offer a full range of products or their technical properties. It also takes a long time for new offices and their personnel to establish social relationships with the customers and a sense of belonging to the local business community. Though in some cases Finnish firms have been able, through acquisitions, to buy themselves into local business communities by retaining the earlier owners and key managers as part of the new management team, the amount of investment needed in communicating commitment to a market area is underestimated. This is basically due to the fact that the production end of the chain is not sufficiently well aware of the activities carried out at the sales end. Also the shift to more customer-specific products is a rather recent phenomenon which means that the 'bulk product, anonymous market' mode is still the actual script for calibrating the relevance of marketing investments.

The internally generated growth path has led to the establishment of European-wide divisions. A third of the capacity of the Finnish-owned paper production industry is already abroad. This has increased the variety of both cross-national organizational cultures and work-place industrial relations. Attempts to lever increased economies of scale by rationalization of the types of production runs are very vulnerable to the defence mechanisms of local mills and sales offices. It is easy to get the support of established customers against switching production from one country to another within the division. Brand naming of products, which is the newest development in printing and writing papers, locks customers even further into existing locations of production. Though the Swedish and Finnish organizational cultures and institutional traditions are not so far apart in European-wide terms (e.g. Hofstede, 1980), Finnish managers have already encountered in Sweden an organizational culture which they are not so well equipped to deal with. Basic criticisms of the Swedes are related to weaknesses of the new owners in communicating strategic intentions in case of acquisitions, intolerance of lengthy discussions and negotiations, etc. (Vaara, 1992).

The managements of the new European-wide divisions are facing radically different regulations on industrial democracy, consultation and collective bargaining. Subsidiarity means that this heterogeneity

is going to persist. It is clear that when traditional cleavages between management and workers are complemented by national and mill-specific cleavages between the management and employees of a European-wide division, it also makes the handling of division-wide organizational politics extremely difficult. It means that perceived synergies are difficult to realize within the divisions.

The old raw material-based identity of large process-oriented corporations has proved to be inert in the face of new market niches and end-uses of pulp and paper-based products. These industries are becoming more and more segmented as to the nature of raw materials, production processes, product grades, delivery modes and value constellation in which many firms jointly produce the offering (Normann and Ramiréz, 1993). A good example is the printing and writing papers, where the rapid diffusion of home printers, copiers and telefaxes has made office papers a consumer product (Rosenbröijer, 1994). This market demands a completely different distribution and logistical chain than that required by the graphic industry and large corporate and public sector customers. In paper converting, the segmentation of separate businesses becomes a hundred times more complex than in the paper business, due to the delicate differences in the end-uses of converted paper. In this changing context the typical Finnish firm has adopted a rather monolithic stance, emphasizing quick implementation of European-wide domination strategies in advanced printing and writing paper grades but relying on scale economies. For instance, US forest product corporations have adopted a completely different strategy in Europe, being able to conquer the most consumer-oriented market: the production and distribution of tissue papers. The complexity of the whole chain, from fibre cultivation to consumption, is open for different types of business concepts and there will be considerable variety in the future configuration of types of business logics. For Finnish-based corporations this potential variety is an opportunity space where they clearly have new inter-organizational roles to learn.

The disappearance of the collective project?

In the agenda of the typical firm, one of the top priorities is to become more focused in business operations and to reach a higher position in the European or even global league in the industries and product groups in which the firm chooses to operate. A necessary condition for such a development path is that managerial comet-

ences for both business and strategic management become institutionalized within the typical firms. This implies a higher degree of self-sufficiency at the level of extended competition, i.e. in the competition for future business opportunities. If this agenda is implemented, is there still something to be achieved by the collective project approach which for so long has dominated the Finnish economy? Recent history offers some clues to the future.

There are two stepping stones for business operations on a European and global scale for Finnish firms. The first is the existence of world-class knowledge of the whole range of forest sector technologies. The second is the captive market of Finnish-owned forest industry business units already existing, or planned to be established, abroad. This 'international' demand has formed the basis of internationalizing business operations of Finnish firms beyond the forest industry. These two conditions have helped to develop international business operations for the following types of businesses: forestry, pulp and paper and mechanical woodworking machinery, industrial textiles, filler minerals and coating chemicals, finance and investment banking, insurances against breakdowns, consulting for forestry, technological and management issues, auditing, EDP-based communication network services, software products for mill-wide operations control, etc. Thus it appears that there is a special Finnish way of internationalizing business operations based on the tight coupling of inter-firm relations in connection to a sectoral knowledge base.

COMPARATIVE CONCLUSIONS

Though, in international comparisons of nation-states, Denmark and Finland share many similar features such as size, prosperity and overt institutional framework of the Scandinavian tradition, the descriptive account of the models of the typical firms (see Table 7.1) and their institutional embeddedness has revealed striking differences. By not choosing a matched pair design for the coordinated research, the differences in the models of the typical firms is not the message. The point is to illustrate how the types of relevant social actors, typical firms and institutions systematically differ between two small developed countries. Differences in raw material base, pre-industrial heritage and geopolitical position are important initial conditions but in a period of over one hundred years there is considerable space for social actors to shape their values, world-views and interrelations.

Table 7.1 The nature of the firm

	Denmark	*Finland*
Phenotype	(1) skill container; (2) project coordinator.	Vertically integrated mill sites in multi-business corporations.
Market relations	Many-layered relations connecting skills across firms.	Oligopolistic buying operations; joint sales associations with institutionalized customer relations.
Authority relations	Technical superiority of managers; horizontal codes of work honour.	Efficiency through technically rationalized obligations; innovations by respecting the plurality of knowledge bases.
Mode of development	Reducing market dependency by expanding to: (1) multi-product contractor; (2) assembler.	Experience curve effect; new generation design for technological leaps; adding new business units.

The main coordinates along which the Danish and Finnish business systems differ are the centralization–decentralization of the system and the relevant time horizon. Centralization is accentuated in the Finnish case due to the large size of the typical firm, its power bloc connection, the collective nature of the establishment and expansion of the typical firm (involving also the employees and local communities), and the importance of state mediation in copying and multiplying the typical firm model and in its being involved in risk-sharing. In the Danish case the skill containers and project coordinators are built bottom-up through the accumulated skills of clearly identifiable individuals and primary groups, with locally known reputations. The system is kept together through social ties and shared history of joint project-type business operations with infrastructural support only of the institutional system of the wider society (cf. Kristensen in this volume). The major constitutive mechanisms underlying these differences are summarized in Table 7.2.

Differences are similarly dramatic on the temporal dimension. In the Finnish case the relevant timescale for major changes in the question of being or not being in business is the interval of the whole

Table 7.2 The societal place of the firm

Constitutive mechanisms	*Denmark*	*Finland*
	Partitioned economy with communitarian cooperation.	Collaborative economy with state meditation.
State	Decentralized segmentalist but inclusive.	Centralized unified.
Élites	Competing fractions with unclear recruitment criteria.	Overlapping interest structures.
		Enforced consensus due to external threat.
Associations of the business community	Independent of their constituency; state inclusion; mechanisms for imposing particularized private agendas on the state.	Forums for intersectoral and inter-élite negotiations of the agenda.
Financial memberships	Variety of institutions, e.g. building societies, as a source of independent finance; lack of bank representation in manufacturing.	Influential bank groups; inter-board memberships; shareholdings between banks and manufacturing.
Vocational training	Dual craft system; vertical and horizontal mobility.	School-based state-regulated occupational layers; horizontal mobility of professionals.
Unions	Craft-dominated.	Industrial.
Professions	Weak associations; weak ties to industry.	Weak associations; strong ties to industry.
Social role of the firm	Means for human expression and communitarian positioning.	Symbol of power bloc capabilities.

business cycle or the time-span of the technological viability of a machine or mill investment. From a social point of view, the latter time horizon is relevant because in most cases of failure, firms or

their production units have found new parents, whilst the old owners have suffered the losses. This does not mean that the timing of the huge capital intensive investments is not important. Its evaluation is possible only on a longer term. In the Danish case the critical time period is months rather than years because the customized project assignments do not last long. Orders cannot be stockpiled because the inputs are essential for the work processes of other skill containers or project coordinators. Relationships between firms are as strong as the last delivery. At the extreme, it could be said that the reputation of a social actor is created by being able on a daily basis to improvise and adjust to the unexpected contingencies of the inter-firm and customer-mediated production processes. The difference in the relevant time horizon of the typical Danish and Finnish firms is strongly correlated with the structural shape of the business systems and is reflected in many of the individual institutional dimensions.

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NOTE

1 In February 1995, the two major commercial banks in Finland made an announcement of their merger, ending the era of separate 'Swedish-speaking' and 'Finnish-speaking' financial power blocs. This agreement is going to have deep-rooted consequences to the ownership structures of firms in all sectors of the economy.

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