

The transformation of Finnish corporations:

A SURVEY OF RECENT TRENDS AND ISSUES FOR FURTHER RESEARCH

Keijo Räsänen

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The recent strategic and structural development of the largest Finnish companies is described in the article in order to generate issues for further research on their management processes. Existing evidence allows for the identification of some tentative Finland-specific features. International trends towards diversification and multi-divisionalization can be observed also in Finland, albeit somewhat later than in the most advanced industrial countries. A preliminary account on the relatively high proportion of corporations which have diversified to unrelated businesses is provided. This account serves the purpose of locating problematic issues in the empirical knowledge of the Finnish corporations.

Keywords: Corporation Strategy, Organisation Structure.

*Keijo Räsänen, Ph.D. (Econ.), Acting Associate Prof.
Helsinki School of Economics, Runeberginkatu 14—16,
SF-00100 Helsinki, Finland*

SUOMALAISEN YHTYMIEN VIIMEAIKAINEN KEHITYS

Katsaus kehitystrendeihin ja kysymyksiä jatkotutkimukselle

Artikkelissa luodaan katsaus suomalaisten suuryritysten viimeaikaiseen strategiseen ja organisatoriseen kehitykseen. Tarkoituksena on kehittää kysymyksenasetteluja jatkotutkimusta varten. Käytettävissä olevat empiiriset havainnot paljastavat joltakin suomalaisille yrityksille erityisiä piirteitä. Suomessa voidaan havaita kehitys kohden diversifioitumista ja divisionalisoitunutta organisaatiota, joskin nämä tendenssit ovat esiintyneet täällä myöhemmin kuin pisimmälle kehittyneissä teollisuusmaissa. Suhteellisen suuri osa suomalaisista yhtiymistä on diversifioitunut toisiinsa liittymättömille liiketoiminnan aloille. Tälle kehitykselle esitetään alustava selitys, joka nostaa esille keskeisiä puutteita suuryrityksiä koskevassa empiirisessä tietämyksessämme. Näin voidaan tämentää tehtäviä jatkotutkimukselle.

Keijo Räsänen

1. INTRODUCTION

Today "structural change" is one of the key words in political and economic discussions. Although the exact meaning of this term has remained vaguely obscure, an anticipation of drastic changes has spread through the Finnish society. Signs of new times are visible throughout society and various interpretations of the observations are provided by politicians, sociologists, economists and other prophets. Some people have also experienced concrete discontinuities in their work life in the form of layoffs, new tasks and diminishing or enlarging political constituency.

This paper proposes to shed light on the nature of this "structural change" by reviewing actual changes within one central sphere of the Finnish society, namely the largest Finnish corporations and their management. If there is going on a structural change in the Finnish economy, then it should be visible in these companies. The largest corporations can be expected at least to mediate, or even initiate, the changes.

The purpose of this paper is, however, not to offer any normative conclusions concerning the management of the potential structural changes, or to evaluate their effects. The review of existing evidence serves here mainly the purpose of setting an agenda for future research on the management of Finnish corporations.

It is evident that we know little about the dominant enterprises relative to their significance as economic and political actors. There are only a few theoretically focused, empirical studies on the largest firms. The present study concentrates on their growth strategy and organizational structure. Studies of strategy and structure have been conducted earlier in several advanced capitalist countries and these studies provide a basis to compare Finnish firms with their foreign competitors (see Scott, 1973).

Our major source of data is a survey of strategy and structure of the largest Finnish manufacturing firms in 1973 and 1983 (Tainio et al., 1985), but these observations are complemented with findings from other studies.

2. STUDIES OF CORPORATE STRATEGY AND STRUCTURE

Along the emergence of the modern, diversified and multidivisional corporations a whole new subdiscipline of management studies has been developed. Corporate level management processes and corporate growth strategies are studied under the heading of "strategic management" (Andrews 1971; Schendel & Hofer 1979; Ansoff 1979).

The extensive literature on strategic management includes studies of strategy formulation and strategy implementation (for reviews, see Schendel & Hofer 1979; Jauch 1981; Galbraith & Nathanson 1978; Hofer & Schendel 1978). In these studies strategy formulation is typically regarded as an analytical process aided by such techniques as portfolio analysis, while strategy implementation is viewed as a question of designing organization structure and administrative systems to fit the strategy chosen in the former process.¹

In this literature frameworks and arguments are usually grounded empirically on case studies. "Strategy and structure studies" form an exception, because they produce observations on larger sets of firms. The surveys of the largest firms have documented the spread of the modern corporation in several advanced capitalist countries. These studies have their origins in Harvard research program on "Industrial Development and Public Policy". The major ideas and findings of this project have been summarized by B.R. Scott (1973).

Similar basic trends towards diversification and multidivisionalization were observed in the project among the largest industrial firms in the U.S. (Rumelt 1974), UK. (Channon 1973), Italy (Pavan 1976), and France and Germany (both reported in Dyas & Thanheiser 1976).

In later studies more attention has been paid to the differences between countries in timing, paths and forms of development. Differences behind the overall similarities have become especially pronounced as attempts have been made to specify how strategy, organizational structure and financial performance are related

to each other.² The observations have also generated attempts to develop theoretical explanations for diversification (e.g., Rumelt 1982; Teece 1982) and adoption of a multidivisional structure (see e.g., Fligstein 1985).

The core argument in the studies of strategy and structure has been that structure follows strategy. Strategy is proposed to follow changes in market demand and technological developments. In particular, diversification is assumed to lead to certain administrative problems within the functional organization and these are alleviated by a transformation to the multidivisional form. These are Chandler's (1962) major conclusions in his case studies on the history of large American enterprise (see also Chandler 1977 & 1981). Scott (1973) complements this reasoning by arguing that structure follows strategy if the firms face sufficient competitive pressure, that is, "misfit" is maintained to the extent that the large firms are protected from competition.

In these studies, the terms strategy and structure are used with specific meanings. The extent and type of diversification is considered the core issue in corporate growth strategy. Rumelt (1974, Ch. 1; see also Wrigley 1970) has elaborated a classification with four main categories:

- single business,
- dominant business,
- related business and
- unrelated business.

The categories are defined by the proportion of a firm's revenues that can be attributed to its largest discrete business and by the existence and nature of connections among the businesses. For instance, single business firms earn less than 5 percent of their revenues from other than their largest discrete business. Dominant business firms earn at least 5 percent, but not more than 30 percent, outside this major business. Related business and unrelated business firms earn less than 70 percent of revenues from any single business. In the former, businesses are connected by common skills, resources, or market, while in the latter there are no relationships between new and current businesses. Rumelt (1974) divided these main categories further to subcategories forming altogether nine classes.

The strategy categories account for the relationships between the businesses of a corporation which are not recognized by simple indexes of diversification. The subjectivity of category

assignments has been criticized (e.g. Vancil 1978), and, in some cases, it is certainly difficult for an outside observer relying mainly on published documents to determine whether and how businesses are related to each other.

Corporate structure is defined in these studies as the way by which the managerial work organization is divided into main units. Rumelt (1974) has defined five structural categories: the functional, functional with subsidiaries, product divisions, geographic divisions and holding company. It is obvious that this is an overly simplistic conception of managerial work organization in large firms. Behind these crude categories — for example, the organization by product divisions — one can find an extensive range of different institutional arrangements and managerial processes (cf. Allen 1978; Hill & Pickering 1986). The need for further analysis to complement these categories is undeniable, especially as today a large majority of the largest capitalist firms falls into one of these classes — the product divisional structure.

The conceptual framework of strategy and structure studies allows the identification of the stages of corporate development as snapshots at distinct points of time. To capture the processes by which these states have been achieved, a conceptualization of managerial work processes is needed. Corporations do not change or even remain as they are without managerial work. It would be important to know how managers accomplish the outcomes observed as corporate development.

3. THE DEVELOPMENT OF FINNISH CORPORATIONS FROM THE 1960's TO THE 1980's

Empirical studies of the largest Finnish firms will be surveyed below in order to discover the major trends of development during the time period from the 1960's till the 1980's. Two questions will be focused upon. First, how have corporate strategies developed? Second, how have managerial organizations developed?

Identification of development trends is based on previous published studies, the review of which results in outlining tentative findings concerning the specific characteristics of Finnish corporations. An attempt to account for these features will provide points of departure for further research. However, this task is

complicated by the fact that genuine comparative studies of Finnish corporations and other corporations are rare.

The Virtuous Circle of the Finnish Economy

Finland's economic performance has recently been relatively high in comparison to other OECD countries. No one explanation has risen above all to account for this fact. One of the few solutions offered for this explanatory problem will be utilized below in order to localize essential changes in the Finnish economy since the 1960's.

Raimo Lovio (1984 & 1986) presents one answer which is grounded in the history of industrial development in Finland. He describes a "virtuous circle of the Finnish economy" upon which Finland's success is based. The most recent developments regarding the virtuous circle can be seen as modifications and deviations from this earlier model. It consists of the following elements:

- Due to late industrialization, all problems of maturity have not yet appeared in Finland. Instead, Finnish firms have been able to take advantage of the technological gulf between Finland and the more advanced countries.
- The relatively well-developed scientific and educational institutions, and "the forest industry complex" together with some state-owned enterprises have provided a basis for the development of indigenous applications for the Western technology.
- The Soviet and Swedish markets have offered the grounds for the manifestation of a stringboard effect for the exporting firms.

The wood processing industry has been the core of the Finnish economy (and society) since Finland was "forest industrialized" in the late nineteenth century (e.g. Koskinen 1985). The forest industry formed a complex which provided developmental impulses for several related branches. It was only after World War Two that other industries, especially the metal industry, gained a prominent position. The effects of this wave of industrialization on the Finnish society have been well documented by sociologists (e.g. Valkonen et al. 1980). It was a "structural change" in many senses.

Though the virtuous circle Finland has avoided direct technological dependence on specific Western corporations and countries. As an

open and small economy, Finland has, nevertheless, been highly dependent on international trade and its fluctuations. Smallness has also meant that domestic markets have provided only limited options for corporate growth. The largest Finnish companies are still relatively small in comparison to the largest corporations in the world (see Table 1).

Table 1. The twenty largest firms in Finland and Sweden and the twenty largest manufacturing firms in the United States (by sales in 1985).

Rank	FINLAND			SWEDEN			USA		
	Firm	Industry	Sales (billion FMK)	Firm	Industry	Sales (billion FMK)	Firm	Industry	Sales (billion FMK)
1	Neste	Chemicals	35	Volvo	Metal	62	General Motors	Cars	599
2	Kesko	Wholesale	21	Asea	Metal	29	Exxon	Oil company	538
3	Eka	Diversif.	16	Electrolux	Metal	29	Mobil	Oil company	348
4	SOK	Wholesale	12	Ericsson	Electronics	23	Ford	Cars	328
5	Nokia	Diversif.	11	Saab-Scania	Metal	23	IBM	Electronics	311
6	Rauma-Repola	Diversif.	8	KF	Diversif.	21	Texaco	Oil company	288
7	Hankkija	Wholesale	7	ICA	Wholesale	18	Chevron	Oil company	259
8	Kemira	Chemicals	7	SKF	Metal	14	AT&T	Electronics	217
9	Enso-Cutzelt	Forest	7	Sabaföretagen	Retailing	14	Dü Pont	Chemicals	183
10	Valmet	Metal	6	A. Johnson & Co.	Commerce	14	General Electric	Electronics	176
11	Vallo	Wholesale	6	SAS	Aviation	14	Amoco	Oil company	169
12	Perusyhtymä	Building	6	Nordstjerner	Diversif.	13	Atlantic Richfield	Oil company	139
13	Kymi-Strömberg	Diversif.	6	Televerket	Communication	11	Chrysler	Cars	132
14	Wärtsilä	Metal	6	Skanska	Building	11	Shell	Oil company	126
15	Ahlström	Diversif.	5	Vattenfall	Energy	11	U.S. Steel	Oil and Metal	114
16	Outokumpu	Metal	5	Stora Kopparberg	Forest	9	United Technologies	Aviation ind.	97
17	Kone	Metal	5	SSAB	Metal	9	Phillips Petr.	Oil company	97
18	Tukkukauppojen Oy	Wholesale	5	SCA	Forest	9	Tenneco	Oil company	96
19	Yht. Paperitehtaat	Forest	5	Sandvik	Metal	9	Occidental Petr.	Oil company	90
20	Imatran voima	Electricity	4	Procordia	Diversif.	9	Sun	Oil company	86

Source: Talouselämä 20, 1986, 34, 102—103.

The group of the largest Finnish firms is small and it has been rather stable from the nineteenth century onward (Hjerppe 1979). The roots of the companies are in the few dominant industries and their ownership is typically in Finnish hands. The increasing openness has not so far led to significant foreign ownership. With only a few exceptions, the top one hundred companies are owned by Finnish families or institutions.

Altogether, there are more than one thousand companies with significant foreign ownership (Ulkomaansijoitustolmikunnan mietintö 1985). However, only in nine firms among the top one hundred is the proportion of foreign ownership at least 50 percent: Shell, Teboil, Esso and Suomen Petrooli in petroleum retailing; Ford, Scan-Auto and Volvo-Auto in car retailing; Saab-Valmet in car manufacturing; and IBM in electronics wholesale (Talouselämä 20, 24/1986).

Corporate Strategy

During the 1970's and 1980's, the above virtuous circle has been changing somewhat as the largest firms have sought for growth opportunities from new directions. These developments in corporate growth strategies can be surveyed with respect to three interrelated issues involving major strategic choices for the largest Finnish firms:

- (1) diversification,
- (2) investment in R&D and
- (3) internationalization.

Diversification

A general trend towards increasing diversification can be observed among the largest Finnish firms during the period covered by the present study. Several multibusiness corporations were formed already before the Second World War, especially through the merging of the wood-processing and metal industry (see Kontinen 1977). However, in the 1960's and the 1970's many large firms diversified further into new businesses, and in some cases this process has continued in the 1980's. In the middle of the 1980's there appears to exist a dual structure: there are many vertically oriented dominant business firms alongside a set of highly diversified firms.

Table 1 shows that, in spite of the smaller size of Finnish firms, five of the top twenty fall into the "diversified" category while only three Swedish firms fall into this category. In the classification of the Finnish journal *Talouselämä* "diversified" means that more than 40 percent of earnings are obtained outside the major field of business.

More precise numbers are depicted in Table 2. Data on the strategies of manufacturing firms among the top one hundred in Finland for the years 1973 and 1983 can be compared to Rumelt's observations on U.S. firms for the years 1964 and 1974. Because the figures for the American firms are time wise from an earlier time period, their interpretation must be approached cautiously. Nevertheless, some comparative conclusions can be drawn because the figures are based on the same strategy categories.

Table 2. Strategies of the Largest Finnish (in 1973, 1983) and U.S. (1964, 1974) Manufacturing Firms (percentage in each category).

Categories of Strategy:	FINLAND*		USA*	
	1973 %	1983 %	1964 %	1974 %
Single Business	24	22	22	14
Dominant Business	28	25	33	23
Related Business	27	22	37	42
Unrelated Business	21	32	9	21
	100	100	100	100

* Finland: Manufacturing firms among the top 100
USA: Sample of manufacturing firms among the top 500

Sources: Tainio et al. (1985, Table 3.1, p. 50);
Rumelt (1981, Table 1, p. 361)

In Finland the share of firms which have diversified beyond one dominant business has increased from 48 percent in 1973 to 54 percent in 1983. In the U.S. the respective proportions were 46 percent in 1964 and 63 percent in 1974. If differences in firm size are not taken into account, the data indicates that the diversification trend has appeared in Finland later and with less intensity than in the U.S.

However, a closer examination of the categories shows that Finnish corporations have diversified much more often to unrelated busi-

ness fields than their larger American counterparts. In 1983 one third of the manufacturing firms among the top one hundred were in the unrelated business category. The respective proportion in the U.S. was 21 percent in 1974. If this observation is valid, then one might conclude that Finnish firms have for some reason been particularly eager to diversify to areas not linked to their core businesses.

Investment in R&D

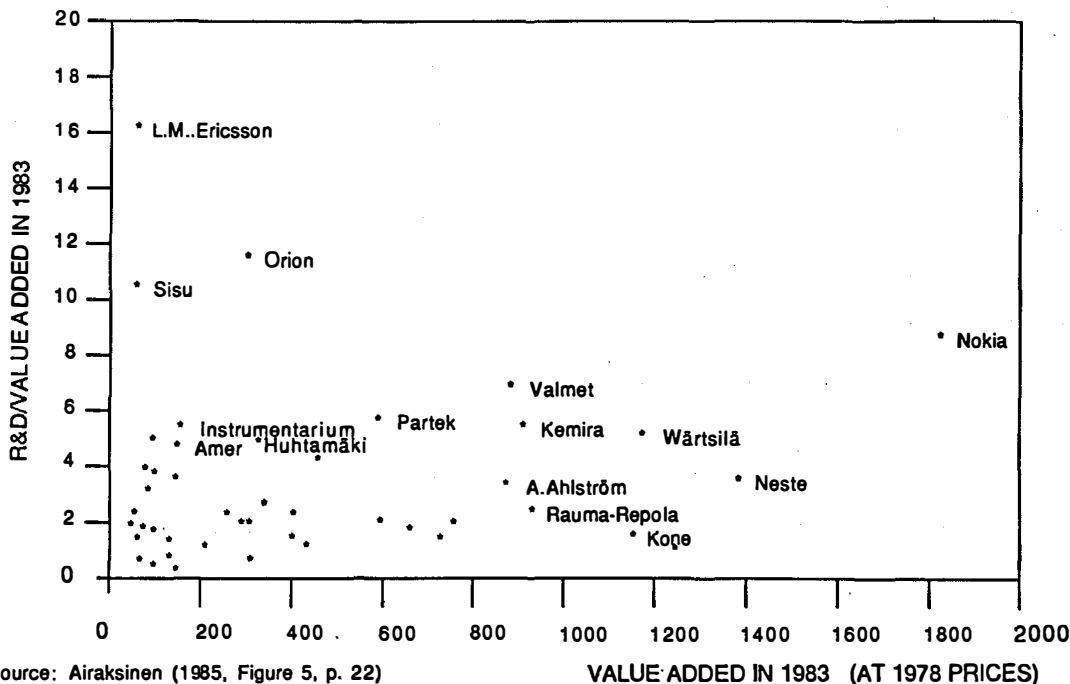
Investments in R&D, new patents and high-tech products are concentrated in the chemical industry and some branches of the metal industry. These industries have been relatively underdeveloped in Finland. Therefore, Finland is technologically one of the medium-level countries in international comparisons. Other small countries in this group are Austria, Denmark and Norway. These countries import technology from the more advanced OECD countries; in Finland's case from Germany, Sweden and the U.S.

Finland exports technology to the Soviet Uni-

on, other Nordic countries and the developing countries. For example, Finland's share of the total amount of forest industry machinery imported to the Soviet Union in 1981—1985 was about 50 percent (Eronen 1987, 19). Typically, the products of Finnish metal industry (e.g. wood-processing machinery and ice-breakers) are technologically simple and their global markets are limited. (Lemoia & Lovio 1984; see also Airaksinen & Tammisto 1982; Väyrynen 1985.)

Since the early 1970's, when the Finnish structural policy started to emphasize state support for R&D activities, research expenditure has increased, on the average, faster than in other OECD-countries: in 1971 it was 0,91 % and in 1983 1,32 % of the GNP (Lovio 1986, 11). The largest firms have also increased their R&D investments substantially. Airaksinen (1985) reports in a study on 47 large manufacturing firms that the total amount of R&D expenditure almost doubled in real terms during the period of 1978—1983. The annual growth rate was on the average 11,6 percent. He also depicts R&D intensities for each of the firms in his sample (Figure 1). (See also Lovio 1986, 12—13.)

Figure 1: R&D Intensities of Large Finnish Manufacturing Companies.



Source: Airaksinen (1985, Figure 5, p. 22)

The direction and results of Finnish R&D work are today mainly determined by such large diversified corporations as Nokia, Parket, Wärtsilä, Huhtamäki, Amer, Ahlström, Rauma-Repola, Kone, Orion and Instrumentarium. Some state-owned companies, for example Valmet, Kemira and Neste, are also prominent having also diversified to an increasing extent beyond their original lines of business. According to this indicator, forest industry is no longer central in this respect. There are no pure forest industry-based companies among those named in the figure. Perhaps one indication of possible future trends is the fact that the most R&D intensive company is the Finnish subsidiary of L.M. Ericsson, the Swedish multinational corporation in electronics.

Internationalization

In the 1980's Finland has become a net exporter of capital. There has been a significant increase in direct foreign investment. Although previously exports had an important role in the Finnish economy, only a few firms made significant investments abroad. A notable exception was Kone Corporation. It was the only corporation in the mid 1970's whose major share of operations was abroad. Now the conviction of the need to internationalize operations has spread throughout the corporations. "Strategic programs" towards that end are either under formulation or implementation in almost all of the largest Finnish firms. (Luostarinen 1982; Ulkomaansijoitustoimikunnan mietintö 1982, ch. 3; Tainio et al. 1985, 97—103.)

The forest industry companies made previously most of the direct foreign investments, but the leading role in this respect has now been passed on to the metal industry. Large investments have been made also by some state-owned chemical companies (Kemira and Neste), by Huhtamäki (originally in food-processing) and by several companies in the electronics industry. Four companies earned at least 50 percent of their revenues from abroad in 1985: Kone earning 65 %, Nokia 60 %, Fiskars 59 % and Huhtamäki 50 %. In ten corporations foreign turnover exceeded one billion Finnish marks. In addition to those mentioned above, this group includes Ahlström, Kymi-Strömberg, Partek, Valmet and Wärtsilä. (Talouselämä 20/1986; cf. Lovio 1986, 27—32.)

The virtuous circle of the Finnish economy

has recently been changing because of the developments described briefly above. There are still several important dominant-business firms, but some of the largest firms have diversified outside the previous core, the forest industry. In many cases they seem to have invested in businesses unrelated to this original area. The increased investment in R&D indicates that they aim at a more active utilization of technological change in building corporate growth strategies. Involvement in the so-called high-tech industries requires balancing the previously one-directional stream of technological knowledge from the more advanced OECD-countries to Finland. At the same time new growth potential is sought for from outside the small domestic markets and the slowly growing trade with the Soviet Union.

Management

The strategic changes of Finnish corporations are produced by the management. What exactly is known of its recent development?

Professionalization of Finnish managers took place mainly only after the Second World War (Laaksonen 1962; Ahlstedt 1978; Hajba 1982). Today most general managers working in large companies have university degrees either in engineering or business economics. They have also access to several training institutions: JOKO, INSKO and SEFEK for junior managers, and LIFIM for senior managers. Several large firms have also increased investment in internal general management training courses (e.g. Nokia, Wärtsilä and Rauma-Repola).

Such avenues as supply of training, expanding management consulting services and direct contact with foreign institutions provide Finnish managers access to recent international developments in management techniques. One would expect this to lead to "internationalization" of Finnish management practice. Unfortunately, it is undetermined whether a specific "Finnish management culture" exists and if so, there remains uncertainty concerning its precise features. These features should be visible in the criteria used in recruitment, rewarding and promotion of managers (cf. Gunz & Whitley 1985), but data on these issues is scant.

The survey conducted by Talouselämä (29/1986, 28—32) on the characteristics of CEOs in the largest manufacturing firms, banks, insu-

rance companies and public enterprises resulted in the following observations: 84 percent of top managers had an academic degree, the nature of educational background was most often commercial (43,3 %), or technical (26,3 %), the most important factor influencing their nomination was their experience within the firm (44 %) or elsewhere (43 %), and the most important part of this experience was gained most often (52 %) in marketing. On the average, these managers were 48 years old, worked 52 hours per week and earned 37 000 FIM per month. Highest salaries were paid in the metal industry, 60 % of CEOs earning more than 40 000 FIM. About half of them would have voted for the National Coalition (conservative) Party.

Virtanen (1984) has studied the control of profit centers in 46 manufacturing corporations which are all among the fifty largest ones. He concludes that today most of these firms follow the principles of profit responsibility in their managerial processes. They have usually a two-level profit-center organization with a corporate office, divisions and profit-centers. Operational decision-making is usually delegated to profit-center managers in such issues as marketing, production and purchasing, while investment and financing decisions are made centrally by the corporate headquarters. Business units and their managers are evaluated primarily according to their short-term economic results calculated with relatively advanced management accounting systems. In these respects Finnish companies are similar to U.S.-based corporations. Virtanen (1984, 98—100) observes some differences, too. Profit-center organization was adopted later in Finland, accounting methods are somewhat different and in Finnish firms salaries of managers are not usually bound directly to the economic performance of their units as they are in the U.S.

Our findings on the top management of the largest Finnish firms are similar to Virtanen's observations (Tainio et al. 1985). The trend observable in the development of unitary, functionally organized firms into divisionalized organizations with more decentralized management of distinct businesses can be seen among the largest Finnish manufacturing firms (see Table 3).

This first experiments with organizations where the main units are divided according to the different business fields were launched in the late 1950's. This organizational model was adopted by most firms in the late 1960's and

Table 3. Structures of the Largest Finnish (1973, 1983) and U.S. (1959, 1969) Manufacturing Firms (percentage in each category).

Categories of Structure:	FINLAND*		USA*	
	1973 %	1983 %	1959 %	1969 %
Functional	54	27	49	21
Multi-divisional	46	73	51	79
	100	100	100	100

* Finland: Manufacturing firms among the top 100

USA: Sample of manufacturing firms among the top 500

Sources: Tainio et al. (1985, Figure 3.1, p. 52);

Rumelt (1974, Table 2-11, p. 65).

1970's. In 1973 and 1983 the proportion of the largest manufacturing firms having a multi-divisional structure were 46 % and 73 % respectively.

The trend is thus similar to that observable in the other Western countries in which structural change has been mapped (Scott 1973, cf. though for Japan Cable & Yasuki 1985). There is, however, a clear time lag between Finland and the other countries. The multi-divisional form was invented in the U.S. shortly after World War I, first by Du Pont de Nemours & Co and General Motors (Chandler 1962). It has since become an increasingly widespread characteristic of most large American firms. As early as 1969, 79 percent of the largest industrial corporations had adopted it (see also Fligstein 1985).

Adoption of the multi-divisional form and the principles of profitresponsibility have involved an essential transformation in management processes. Data on the work histories of fifteen Finnish CEOs reveals the major issues on which these top managers have been working during the recent years (Tainio et al. 1985, ch. 4). There has happened a gradual, but relatively fast, transfer from such operational issues as arranging production or improving sales activities to solving problems of competitiveness in particular lines of business and tackling such corporate level problems as diversification, internationalization, utilization of organized R&D for the creation of new business opportunities and procuring funding for the bigger strategic moves like acquisitions, merges and joint ventures. Designing a functioning multi-divisional organization has been one necessary condition for the differentiation of corporate level strate-

gic management and management of distinct businesses.

4. DISCUSSION

The above review proposes to determine how the recent development of largest Finnish firms can be characterized with respect their growth strategies and management. The available evidence is limited, but it evokes some important questions. How can we account for the "Finland-specific" features observed? What do the changes mean with respect to the logic by which the Finnish corporations operate and are governed?

Accounting for the Finland-Specific Features

The general trends towards diversification and multidivisionalization are common to firms in Finland and in other Western countries in which comparable data has been collected. The same trend appears in Finland, but somewhat later than in the other countries.

Another "Finland-specific" feature appears to be the tendency for a large proportion of corporations to have diversified to unrelated businesses. Presently, there seem to exist two major strategic types: vertically oriented dominant-business firms and unrelated business firms. A large proportion of Finnish corporations fall into one of these two categories.

The observed changes in the organizational structure of the Finnish firms do not contradict Chandler's thesis that structure follows strategy. The multi-divisional form was adopted during a period of increasing diversification. The tardy adoption of the new structure in Finland is also understandable in the light of later diversification. The smaller size of Finnish companies adds one further element to the explanation (cf. Virtanen 1984).

If the dominance of forest industry and, recently, that of some branches of the metal industry is taken into consideration, the timing of the organizational change becomes even more understandable. Chandler (1962) has observed differences across industries in the timing of the adoption of the multi-divisional form. According to him, certain industries (e.g. machine, chemical and transportation) have technological reasons to diversify, and they adopt the multi-divisional form earlier. The vertical in-

tegration being the typical growth strategy for some industries results in adoption of the new form to a lesser degree. These industries include lumber and paper, metal making and mining. The analysis corroborates well the Finnish case as the industries, especially wood processing, have been central.

Another important issue concerns the tendency for firms to so often diversify into unrelated businesses and not to some related line of business. One potential answer can be found in the technology used and developed by such core industries as wood processing.

In the U.S. Rumelt (1974) found that in his sample none of the "dominant-verticals" in such mature industries as paper and primary metals managed to move into the related business category. One major barrier was their technology which was based on the process rather than the product function or science. Their technologies were not transferable to new fields of business. This, together with large reinvestment needs and lack of experienced general managers in an organization built around production sub-units and respective specialists, limited their opportunities. Production of paper and steel depends on scientific knowledge and complex technologies. However, this large knowledge base has not been transferable to other areas as is the case with those of the chemical, electrical, electronic, and internal combustion engine industries.

Channon (1973) has made similar observations in relation to British firms. Dominant product concerns were identifiable in industries without transferable technology or skills. Among the diversified corporations, the group with unrelated businesses originated from a wide range of industries including paper. A low level of technology led to a low level of new product generation which, in turn, led to limited opportunities for technologically-related diversification. These firms achieved diversification mainly by means of acquisition; and this strategy was originally adopted due to the increased competition in the original domestic markets. Rumelt (1974) called this group the "unrelated-passive". Typically they had administrative problems concerning the few unrelated business clusters which were diversified but internally related. This situation had developed through the evolution of a holding company, through the merger of two or three already large and often diversified companies or through a strategy of expansion into both related and

unrelated areas, usually undertaken in order to diversify away from some major business area.

These observations of firms in the strategy categories "dominant-vertical" and "unrelated-passive" are interesting as a large proportion of large Finnish firms fall into either of these two groups. Moreover, Rumelt (1974) has analysed these two groups in detail, because in his sample they were the two most poorly performing categories with respect to financial performance.

In the case of Finland there appears to be an interesting paradox requiring further research: many Finnish corporations follow growth strategies which have been observed to lead to poor performance in the U.S., and yet Finland's economy has performed relatively well according to macroeconomic indicators. Either these strategies have led to better financial results in the Finnish context or the higher performance of companies following other strategies has compensated for the more moderate success of the corporations utilizing these strategies.

The Finnish corporations have only recently begun to invest in R&D. This may result in changes transforming Finnish corporations into the most successful firm type in Rumelt's (1974) analysis — the "science-based corporation". The "dominant-constrained" and "related-constrained" groups were the best overall performers. These firms entered only those businesses that built on, draw strength from, or expanded some central strength or competence. According to Rumelt, science-based research is one of these core skills. Another direction in which Finnish firms attempt to grow is indicated by their increasing investment in internationalization. Investment in R&D is often linked to the need to build a new basis for corporate growth at the global markets.

To summarize the logic of the overall development, Finnish firms sought first growth opportunities from vertical integration and expansion in the original businessfields. The phase was followed by a diversification wave and consequent organizational change. Increasing international openness and saturation of Finnish markets forced the growing firms to adopt new strategies. Diversification was probably considered more easier than internationalization in terms of direct foreign investment, which has actively been attempted only in the early 1980's. Both the diversification to high-tech fields and the need to develop new aspects of strengths in respect to international operations

emphasized the importance of investments in R&D.

Through the above summarized logic one can account for the overall trend toward multidivisionalization and for its timing. At the same time, the trends in strategic changes are linked to the historical context of Finnish industry. The reasoning involves, however, several weak links. The manner and sequence of actual responses to the developments by different firms remains unknown. What followed what and why? For instance, empirical knowledge of the actual competitive situation in different businesses is not available. The claim that "competition has become more intensive" is a phrase with equal analytical depth as the observation of the actuality of "structural change". Furthermore the financial performance of corporations following different growth strategies is also unknown.

The changing and Multiple Logics of Management

One major advantage of the strategy and structure studies is that they explicitly acknowledge the versatility of modern corporations. In this respect the framework functions well in the case of corporate strategy. The categories of organizational structure, however, are too broad to depict adequately difference and developments in corporate management. Moreover, cross-sectional data is not very helpful in discovering how strategy, structure and performance are related to each other (Galbraith & Nathanson 1978, 140; Donaldson 1986).

The conceptual framework and the methods of strategy and structure studies allow for the identification of the stages of corporate development only as snapshots at distinct points in time (see Scott 1973). This approach does not provide a genuine historical understanding of the mechanism generating corporate transformation. Chandler's (1962) historical findings should not be elaborated or tested in an ahistorical way.

Such approaches are needed which will capture the historically specific and multiple logics of management in reproduction and transformation of business organizations (Teulings 1986; Lilja et al. 1987; Räsänen 1986a, 1986b). Examples of theorization along these lines can already be found.

Ansoff (1987) sketches a picture of historical

development in which single-function orientations of "production-driven", "product-driven", "market-driven" and most recently, "technology-driven" firms have begun to converge to a multifunctional "strategic orientation". Karpik (1978) has outlined contours of socio-historic analysis of the "logics of action" in the governance of large corporations under an emerging form of society, called Technological Capitalism. He has also carried out concrete research on how corporate strategy, organizational structure and the operating principles of the industrial elite are related in the French context (Karpik 1987).

With respect to the organization of managerial work processes, there are grounds for a conviction that a major transformation in the logic of managerial action has been going on in the largest Finnish firms (Tainio et al. 1985). The logic and tasks of "strategic management" are differentiated from the management of distinct businesses along the introduction of the multi-divisional organization form. This has led to many changes at all levels of the managerial hierarchy. Relationships between corporate management and business unit level management, on the one hand, and between business level general managers and functional managers, on the other, have been under reorganization simultaneously. This means that one cannot expect the Finnish corporations to have any single, dominant logic of action in their management processes, nor can they be expected to be totally in the control of top management.

5. CONCLUSION

The purpose of this survey of available evidence on the recent strategic and organizational developments in the largest Finnish firms is primarily to specify questions for further research. It also proposes to provide a perspective concerning the topic of "structural change" in the Finnish economy.

Future research needs to proceed on two distinct empirical fronts. First, the survey of strategy and structure has to be replicated in order to increase the reliability of observations on the development of the largest firms. Descriptions of different corporate types can be enriched by broadening the measures of corporate strategy to include such variables as internationalization and R&D-investments. By collec-

ting data on the financial performance of these firms, it is possible to study how these different corporations have succeeded in their strategic and organizational choices.

On the second front, case studies on the history of Finnish corporations would provide understanding of the work processes by which strategies and managerial work organizations have been produced. The hypothesis that the process of "strategic management" is at the moment being introduced to the corporations can help in focusing these studies. One important focus will be on the level or "business management" where some stable forms of organization can already be found. This level is also crucial, because new corporate strategies are usually initiated and implemented by managers at the business level (Burgelman 1983; Moss Kanter 1984).

Such a focus would also allow for the identification of different business management types and their historical determinants. In Finnish firms the differences in the process and the context of management between forest industry business units and the newer high-tech units might be one fruitful point of comparison. The relations between business managers and corporate managers as they become manifest in the "struggle for strategic control" form an important issue of inquiry.

Although the list of open questions for further research is long, some preliminary conclusions concerning the alluded "structural change" in the Finnish society can already be drawn from the existing evidence. The studies reviewed here include information of what is happening to the core organizations of the Finnish economy. This information is necessary if structural changes are to be discussed in concrete terms. These organizations are essential in the determination of the direction and speed of the transformations.

The diversity of Finnish corporations is evident. It is not useful to speak about *the* strategy or *the* logic of management in the large corporations. There are different firm types with specific problems. Moreover, strategies and managerial organizations are not transformed overnight. These changes take time and require a lot of managerial effort and skill. Therefore, one cannot assume that the corporations operate today according to a unified logic under the total-control of top management. A necessary condition for managing structural change within a corporation is first the "rationaliza-

tion" and coordination of its processes of strategic management and business management. This state of affairs cannot be assumed *a priori*. It provides an empirical question for further research.

NOTES:

- 1 This mainstream perspective on the process of strategic management has, of course, been questioned by many researchers. They have pointed out the political nature of the process (e.g. Pettigrew 1984), the appearance of several modes of strategic management, not just the "planning mode" (Mintzberg 1973; Quinn 1976), and the influence of structure on strategy. The emergence of a growing literature on "strategic control" indicates that the translation of corporate strategy into structural models in highly problematic (e.g. Haspeslagh 1986; Prahalad & Doz 1981; Schreyögg & Steinmann 1987). Even the idea that management is able to make genuine strategic choices is debated (Hrebiniak & Joyce 1985).
- 2 See Rumelt (1974 & 1982), Amour & Teece (1978), Steer & Cable (1978), Grinyer et al. (1980), Cable & Dirrheimer (1983), Lecraw (1984), Cable & Yasuki (1985), and Hitt & Ireland (1986).

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