

Kuoppamäki, Pasi

**Working Paper**

## European Markets for Corporate Control: A Study of Takeovers' Influence on Corporate Behavior and Implications on EC Competition Policy

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## **Keskusteluaiheita - Discussion papers**

No. 491

Pasi Kuoppamäki

### **EUROPEAN MARKETS**

### **FOR CORPORATE CONTROL**

**A Study of Takeovers' Influence  
on Corporate Behavior and  
Implications on EC Competition Policy**

Helpful comments by P. Haaparanta are gratefully acknowledged.

**KUOPPAMÄKI, Pasi, EUROPEAN MARKETS FOR CORPORATE CONTROL: A Study of Takeovers' Influence on Corporate Behavior and Implications on EC Competition Policy.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 1994. 131 p. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; no. 491).

**ABSTRACT:** The main objective of this paper is to study the control effects of (hostile) takeovers on managers and consequently on firms. Separation of control and ownership and the following moral hazard problems give the starting point. The sub-objective is to build a general framework for takeover market analysis and apply it especially to EU conditions. Also the EU competition policy is surveyed.. The model is based on IO's structure-conduct-performance paradigm and the main emphasis is horizontal acquisitions. The last chapter presents also new material concerning the Finnish markets for corporate control. The research demonstrates that takeover threat influences to some extent the managerial behavior by forcing them to act better in the shareholders' interest. The main reason for this is that the takeover risk grows if managers work to their own interests against the principle of value maximization. Europe is fairly heterogeneous in this respect and the area was divided into Germanic, Latinist and Anglo-Saxon groups. In the first of these groups takeovers are rare and within the last group they are normal form of control. Finland has belonged to the Germanic group. The paper shows also that although takeovers improve resource allocation they can also cause serious costs. Problems may be created by conglomeratization, short sightedness, expensive takeover bids, redistribution of power and breach of implicit contracts between different stakeholders. The lastly mentioned may cause difficulties in co-operation, avoidance of firm specific investments and redistribution of profits. The application of Anglo-Saxon form of corporate control to the rest of Europe may augment these problems.

**KEYWORDS:** Takeovers, Corporate Control, Integration, Competition Policy

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**TIIVISTELMÄ:** Tutkimuksen päätavoitteena on selvittää yritysvaltausuhan kontrollivaikutukset johtajien ja yritysten käyttäytymiseen. Lähtökohtana on omistuksen ja kontrollin eriytyminen ja siitä johtuva moral hazard ongelma. Alatavoitteena on rakentaa yleinen kehikko, jossa voitaisiin tarkastella yrityskauppailmiötä ja soveltaa sitä erityisesti EU-alueen olosuhteisiin. Tässä yhteydessä tarkastellaan myös EU:n kilpailupolitiikkaa. Malli pohjautuu toimialatutkimuksen rakenne-käyttäytyminen- kannattavuus mallille, ja tarkastelu keskittyy lähinnä horisontaalisiin yrityskauppoihin. Viimeisessä kappaleessa esitellään myös uutta aineistoa koskien Suomen yritysvaltausmarkkinoita. Tutkimus osoittaa, että yritysvaltausuhka vaikuttaa jossain määrin johtajien käyttäytymiseen painostaen heitä toimimaan paremmin osakkeenomistajien edun mukaisesti. Tämä seuraa lähinnä siitä, että valtauksen riski kasvaa mikäli johto toimii oman etunsa mukaisesti eikä maksimoi yrityksen arvoa. Euroopassa tilanne on eri maissa hyvin erilainen ja alue jaettiin germaaniseen, latinalaiseen ja anglo-saksiseen ryhmään. Näistä ensinmainitussa yritysvaltaukset ovat harvinaisia, ja viimeksimainitussa ne ovat normaali kontrollin muoto. Suomi on kuulunut lähinnä germaaniseen ryhmään. Tutkimus osoittaa myös, että vaikka yritysvaltaukset parantavat resurssien allokaatiota, niistä voi aiheutua myös merkittäviä kustannuksia. Ongelmia voivat aiheuttaa keskittyminen, lyhytnäköisyys, kalliit valtaustarjousjärjestelyt, vallan uusjako ja luottamuksen puutteen syntyminen eri sidosryhmien välillä. Viimeksimainitut voivat johtaa yhteistyön hankaloitumiseen, yritysspesifien investointien välttelyyn ja voittojen uudelleen jakautumiseen. Anglo-saksisen yritysvaltausmallin ulottaminen muualle saattaa kärjistää näitä ongelmia.

**AVAINSANAT:** yritysvaltaukset, kontrolli, integraatio, kilpailupolitiikka

## YHTEENVETO

Yritysvaltaukset ovat yksi markkinatalouteen liittyvä varsin merkittävä piirre, jota kuitenkin on tutkittu melko vähän etenkin Euroopassa. Yhdysvalloissa tutkimus on paljon pidemmällä johtuen erityisesti siitä, että siellä valtaukset ovat paljon tavallisempi ilmiö kuin Euroopassa Isoa-Britanniaa lukuunottamatta. Erityisesti julkisessa keskustelussa yritysvaltauksia pidetään usein ikävinä kasinotalouteen liittyvinä epänormaaleina ja ei-toivottavina haittatekijöinä. Taloustieteellinen tarkastelu kuitenkin osoittaa, ettei asia ole näin yksinkertainen ja yritysvaltausmekanismilla on monia myönteisiä vaikutuksia ilmeisten haittavaikutusten lisäksi. Euroopan integraatio ja lainsäädännön muuttuminen tuovat yritysten kontrollin markkinoille myös monia uusia haasteita.

Tämä työ on Helsingin Kauppakorkeakoulussa 1993 laatimani pro gradu -tutkielma. Tutkimuksen päättävöitteena on selvittää yritysvaltausuhan kontrollivaikutukset johtajien ja yritysten käyttäytymiseen. Lähtökohtana on omistuksen ja kontrollin eriytyminen ja siitä johtuva moral hazard -ongelma. Kyseinen malli on esimerkiksi organisaatioteoriassa tyypillinen lähestymistapa. Johtajien ja yleensä kaikkien taloudellisten agenttien katsotaan siis toimivan jossain määrin itsekkäästi eikä aina edustamansa yrityksen tai sen omistajien eduksi. Alatavoitteena on rakentaa yleinen kehikko, jossa voidaan tarkastella yrityskauppailmiötä ja soveltaa sitä erityisesti EU-alueen olosuhteisiin. Malli pohjautuu toimialatutkimuksen rakenne-käyttäytyminen-kannattavuus (structure-conduct-performance) mallille, ja tarkastelu keskittyy lähinnä horisontaalisiin yrityskauppoihin.

Suuri osa tutkimuksesta on teoreettista kirjallisuuskatsausta, mutta aiheen monimutkaisuuden vuoksi esitellään myös uusi tutkimuskehikko. Muitakin kontrollijärjestelmiä tarkastellaan suppeasti yleiskuvan saamiseksi aihepiiristä. Aiheeseen kiinteästi liittyvää EU:n kilpailupolitiikkaa tarkastellaan melko laajasti. Tutkimuksen loppuosa muodostuu empiirisestä Eurooppa-katsauksesta, joka perustuu suurelta osin aiemmille tutkimuksille. Viimeisessä kappaleessa esitellään myös uutta aineistoa koskien Suomen yritysvaltausmarkkinoita.

Tutkimus osoittaa, että yritysvaltaushyökkäys vaikuttaa jossain määrin johtajien käyttäytymiseen painostaen heitä toimimaan paremmin osakkeenomistajien edun mukaisesti. Tämä seuraa lähinnä siitä, että valtauksen riski kasvaa mikäli johto toimii oman etunsa mukaisesti eikä maksimoi yrityksen arvoa. Euroopassa tilanne on eri maissa hyvin erilainen ja siksi alue jaettiin germaaniseen, latinalaiseen ja anglosaksiseen ryhmään. Näistä ensinmainitussa yritysvaltaukset ovat harvinaisia, ja viimeksimainitussa ne ovat normaali kontrollin muoto. Suomi on kuulunut lähinnä germaaniseen ryhmään, mutta tilanne muuttui 1980-luvun lopussa hieman anglosaksiseen suuntaan vaikkakaan ei järjestelmällisellä tavalla.

Euroopan Unionin kilpailupolitiikka osoittautui varsin ajanmukaiseksi ottaessaan huomioon yritysvaltausten positiiviset vaikutukset. Toisaalta näyttää kuitenkin siltä, että politiikka voi olla herkkä painostusryhmien vaikutukselle ja kaikkia riskejä ei ole otettu huomioon. Lainsäädäntö kuitenkin kehittyy koko ajan ja kansallisilla päätöksentekojärjestelmillä on edelleen huomattava merkitys yritysten kontrollin markkinoilla.

Tutkimus osoittaa myös, että vaikka yritysvaltaukset parantavat resurssien allokaatiota, niistä voi aiheutua myös merkittäviä kustannuksia. Ongelmia voivat aiheuttaa keskittyminen, lyhytnäköisyys, kalliit valtaustarjousjärjestelyt, vallan uusjako ja luottamuksen puutteen syntyminen eri sidosryhmien välillä. Viimeksimainitut voivat johtaa yhteistyön hankaloitumiseen, yritysspesifien investointien välttelyyn ja voittojen uudelleen jakautumiseen. Anglosaksisen yritysvaltausmallin ulottaminen muualle saattaa kärjistää näitä ongelmia. Toisaalta katsottiin, että yritysvaltaukset ovat luonnollinen osa markkinataloutta, ja että niiden liiallisesta estämisestä on enemmän haittaa kuin hyötyä. Tämä tarkastelu ei siis tue kovin tiukkaa yritysvaltauskontrollia, vaan pikemminkin kiinnittää huomiota muiden valtausesteiden kuten ristiinomistuksen osittain varsin haitallisiin vaikutuksiin.

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## ABSTRACT

The modern firm is a complex organization with managers facing moral hazard problems which may lead to non-value maximization behavior. Therefore, managers should be under control, but this is often difficult or expensive to shareholders alone. Without other mechanisms, moral hazard can lead to serious resource misallocation. As a partial solution efficient takeover markets can provide an effective way to influence managerial behavior. European integration places strong requirements to competition policy and to the integration of the emerging takeover market. This study reviews the relevant theories of corporate control, proposes a framework for the analysis of the takeover market and applies it to the European case.

## 1 INTRODUCTION

"The directors of such [joint-stock] companies, however, being the managers rather of other people's money than their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of such a company." <sup>1</sup>

Firstly this chapter introduces the realm of corporate takeovers in the modern capitalistic society. Secondly we will briefly look into the role of competition policy and discuss the welfare implications of takeovers. Lastly it is necessary to explain the purpose and scope of the study and how it is organized.

### 1.1 Presentation of the Subject

One of the main objectives of the EC competition policy is to promote competition within the common market and consequently prevent the abuse of a dominant position. An essential part of this system is the competition policy and fairly tight control of mergers and acquisitions. All this is assumed to be procompetitive and

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<sup>1</sup> Adam Smith, *The Wealth of Nations* 1776, 1937 ed. p. 700

to benefit consumers. Takeovers are often seen as detrimental for competition and many view them as harmful for the whole society.

US antitrust policy<sup>2</sup> is designed in the same spirit, but the markets for corporate control in the USA are in many ways different from European markets (except UK). In the USA corporate ownership is more decentralized and banks do not exercise as significant power as in Europe where they are a major source of capital. European markets have also other major takeover barriers like strong unions and availability of information. It follows that USA has a market for corporate control but European corporate ownership markets are not so well developed. Markets for corporate control may serve as one of the major sources of efficiency promotion in the modern corporation, although there is no general consensus about this.

If managers have no reason to fear takeover by more efficient management, they may face a moral hazard problem and act against the shareholder benefit. There is in principle two ways to control managers, direct control through voting and exit control through security markets. These mechanisms can then be divided into subgroups, the market based solution is to let takeovers serve as a disciplinary force. This paper concentrates to the market based control and tries to find the connection between competition policy and control in a general framework. The agency problem was probably first noticed in literature by Adam Smith (1776), but the earliest major treatise of the subject in academic literature was written by Berle & Means (1932). As the problem became more prevailing also the search for disciplinary mechanisms began, the first one to suggest takeovers as a solution to the problem was Manne (1965). The literature has expanded simultaneously with the importance of takeovers in the society, the next and still influential work after Manne was the article of Jensen & Meckling (1976), and since that the field has grown rapidly. The approach has also been criticized for exaggerating the problems arising from the separation of control and ownership, for example Demsetz (1983)

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<sup>2</sup> The European tradition is to speak about competition policy, but the discussion in the USA uses mostly the term antitrust policy. They mean approximately the same thing but competition policy may be in some cases a broader expression.

says that *"it is foolish to believe that owners of valuable resources systematically relinquish control to managers who are not guided to serve their interests."* This critique, however, does not provide such evidence that it would unjustify the concern and as we shall see the problem is most acute one.

The positive effects of takeovers imply that a tighter antitrust control may cause an efficiency loss in corporations through diminished control over managers and less efficient resource allocation. Already Manne (1965) suggested that the antitrust policy may have adverse effects, the argument was that society could benefit from efficient firms acquiring inefficient ones but due to too restraining antitrust policy it was difficult<sup>3</sup>. Anyway, managers may expand firms beyond their optimal size and increase their own benefits in order to maximize their utility instead of shareholder wealth. If we want to study the effects of competition policy, we should not ignore either competitive effects or moral hazard and efficiency problems like X-inefficiency. This implies that there may be some optimal amount of control and the current system may overemphasize the procompetitive side. Therefore, the conventional wisdom about the blessings of antitrust policy may be erroneous because it overlooks the trade-off between the competition and control effects. If other takeover barriers are strong, it may well be that governments should promote mergers, not block takeovers that increase efficiency. The efficiency enhancing and welfare improving effects of takeovers are closely related to the concept of dynamic competition. If static competition without time-dimension is protected too cautiously, the dynamic development of the industry may suffer severely. The importance of industry dynamics has been emphasized by many economists like by the representatives of Austrian school, although they have not explicitly considered the influence of takeovers as a disciplinary force. Also Chicago school has criticized competition policy from restraining market mechanism, but they have also sometimes rejected the whole idea of significant agency problems<sup>4</sup>.

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<sup>3</sup> See for example Franks & Mayer (1990) for more recent discussion

<sup>4</sup> Demsetz (1983)

Antitrust control should be seen as a means of improving the prevailing commercial culture and developing a supportive business environment. In its present form it may serve as an additional barrier to effective business and make adjustments in many increasing scale and declining industries more difficult. Especially the Chicago school of IO has emphasized the importance of relatively liberal merger control, but there is no general consensus about this matter. Truth is that we live in an imperfect world where solutions are often misguided but the removal of some of these distortions may lead to welfare loss<sup>5</sup>. Accordingly we often have to make second best decisions with inadequate information. We do not know for sure if it is beneficial to allow free mergers as long as there are other distortions like entry barriers or protectionism.

Even though takeovers have been studied quite extensively, it is not generally agreed upon that market for corporate control enhances efficiency and forces managers to maximize the shareholder value. Financial economists, industrial organization researchers and behavioral scientists have all different views about what is the impact of a takeover threat on corporate efficiency. In addition, lawyers have always had special interest to takeovers. This study employs mainly the methods of industrial and financial economics as these are the two branches of economics to which the takeovers are of special interest.

The competitive effects of mergers are also unclear. Classical microtheory says that concentration creates market power which diminishes competition, but if there are no entry barriers there are always potential entrants which maintain the competition. If the markets are oligopolistically competitive and there are some entry barriers, it may justify government action to monitor and control competition and mergers. But when markets are increasingly internationalizing and competition is global, it may be that there is no fear of loss in competition due to mergers<sup>6</sup>. Furthermore, if there are still significant economies of scale left, it is worthwhile to consider mergers as means of improving national welfare. Small European

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<sup>5</sup> Removal of one distortion may not necessarily improve welfare if there are other distortions left. See for example Gravelle & Rees, p. 486

<sup>6</sup> See Rosenthal & Lipstein for short general discussion

countries may have gained from banning big mergers, but the integration of European markets, commodity and capital, creates a new situation which calls for new policies in many areas.

Anyhow, the existence of protectionist policies has often constrained the reallocation of resources from unproductive, sheltered sectors to more competitive and efficient businesses. The integration process in Europe makes it more difficult if not impossible to protect such inefficient industries within Europe and it may steer countries to specialize more to industries in which they have comparative advantage. This pressure with more global competition has already in the 1980s caused a wave of restructuring. From 1985 m&a transactions rose from \$15 billion to nearly \$140 billion in 1989 in the EC<sup>7</sup>.

The many economic, political and cultural differences between European countries make it difficult to form a truly integrated common market within short time period, or even in the long run whatever it then might be. This makes also the harmonization of corporate control mechanisms more difficult and maybe even unnecessary due to these differences which can make the transition period needlessly hard and long. As the mergers in Europe face two major barrier, institutional and psychological, the company laws of some member states do not recognize such operations and others often impose strict legal control<sup>8</sup>.

The US merger boom in the 1980s shows that the separation of ownership and management can cause inefficiencies which can lead to overinvestment and depress the market value of equity. The most popular example is probably the oil industry<sup>9</sup>, because of oil firms' bad investments it was cheaper to "buy oil from Wall Street" than from companies in USA. The managers invested the free cash flow into unprofitable projects instead of decreasing their operations. This may be the case also in Europe, inefficiently run companies are taken over and more

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<sup>7</sup> Mullaney, p. 41

<sup>8</sup> de Jong, 1988 , p. 30

<sup>9</sup> See for example Michael Jensen, p. 32

efficient management replaces the old management. But if there exist strong barriers, legal, cultural or market based, this restructuring may not take place and Europe may suffer from inefficient business as global competition increases. The table (1) shows the most important barriers to takeovers in some European countries. Merger control law is not included but it most certainly is a barrier. It should also be remembered that the factual EC merger control law was enacted in 1990, that is after the research.

Competition policy is often thought to improve shareholders' ability to monitor management. Jean Tirole<sup>10</sup> has observed that in addition, capital owners, though able to monitor through comparison the managerial efficiency of competing firms, are less able to monitor the managerial efficiency of a firm that is protected from competition, because protection from competition tends to undermine the basis for comparison. This should improve the ability of capital owners to monitor managers and improve the functioning of the market for corporate control. However, this is in contrast with the notion that efficient markets for corporate control cannot exist if there are strong merger barriers like tight merger control law. This comparison of similar firms can help shareholders to restructure the firm internally and put pressure on management through bonus system.

Markets for managerial talent can also help to restructure the company efficiently and force managers to work more efficiently. Lack of major active owners and highly specialized skills needed to run companies can make this more difficult, if not impossible. There is also another caveat, managers may respond by herd behavior which means that they simply mimic the investment decisions of other managers ignoring important private information<sup>11</sup>.

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<sup>10</sup> Tirole, pp. 75 - 78

<sup>11</sup> Scharfstein & Stein, p. 465

**Table 1 : Barriers to takeovers in European Countries**

	France	Germany	Italy	NL	Spain	Belgium	Denmark
<b>Employee rights</b>							
Supervisory board	-	+	-	+	-	-	+
Union power	0	+	-	+	-	-	0
Worker's council	0	+	-	+	0	+	0
<b>Shareholder rights</b>							
Voting rights	+	+	+	+	-	+	+
Electing management	-	+	-	+	-	0	0
<b>Company barriers</b>							
Entrenchment powers	+	+	0	+	n/a	n/a	-
Fiduciary responsibilities	-	+	0	+	-	+	-
Investment power	+	+	+	-	n/a	+	0
<b>Market structure</b>							
Equity ownership	-	0	+	-	+	0	+
Cross-holdings	+	+	0	0	+	+	0
Protectionism	+	-	0	-	+	0	0
Family attitude	0	+	+	0	0	+	n/a
Registration	+	+	+	+	+	+	+
Tax disclosure	-	-	+	-	+	n/a	-
Accounting	0	-	0	-	+	+	-
Financial information	0	0	0	-	+	+	-

Symbols : + significant barriers to takeovers exist, - significant barriers to takeovers do not exist, 0 barriers exist but are not usually significant, n/a information not available. Source : Barriers to Takeovers in the European Community, U.K. Department of Trade and Industry, October 1989 ( field work by Coopers & Lybrand ). See also Mullaney.

However, in most cases the competition legislation prohibits only biggest mergers which are considered to create a dominant position and to increase monopoly power. The present EC merger policy sets specified limits for mergers within the common market. If the merger is within the limits, national authorities can still take action to prevent the merger and there may be significant national variations in the freedom of takeovers and mergers. Otherwise the merger plan has to be notified to the Commission which gives its decision of the merger's feasibility. The Commission has power to prevent mergers which are thought to create a dominant position. The analysis of the feasibility is often conducted only with only minor use of economic analysis<sup>12</sup> and this can lead to decisions which prohibit welfare improving mergers. When competition is globalizing even the EC wide partial equilibrium analysis is often inadequate. An analysis that considers both global industry structure and general equilibrium effects would lead to more efficient decisions. However, general equilibrium models are so complicated that there exists no adequate model to incorporate control effects into it, and therefore this paper also focuses mainly to partial equilibriums.

Takeovers have also many drawbacks as disciplinary mechanisms, it has been claimed they may be expensive (launching the bid, advisors, lawyers, takeover defenses etc.) and they may fail at identifying poorly performing firms<sup>13</sup>. Talented managers have to put effort into takeover considerations instead of real business. There are also other costs, for example managers may find it difficult to rely on long-term contracts and the takeover threat may force managers to concentrate on short-term performance. However, these fears may be somewhat unjustified as we shall later see. Nevertheless, these costs imply that it may be profit to improve the internal control and restructuring prior to takeovers, which then offer the final correction<sup>14</sup>.

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<sup>12</sup> In the USA economists are widely used even in courts, although courts have had difficulties accepting economic theories as basis for decisions. In the Weinberger vs. UOP case (1983), the Delaware Court rejected the plaintiff's discounted cash flow method as not corresponding with "either logic or the existing law". This decision was reversed later and DCF was accepted.

<sup>13</sup> Jenkinson & Mayer, p. 3

<sup>14</sup> Shleifer & Vishny (1988), p. 18



## 1.2 Influence of Mergers on Competition and Welfare

Although this paper concentrates on the positive and efficiency enhancing effects of takeovers, there are naturally also adverse effects on the economy. The competition effects of mergers are important because they may influence nations' prosperity and welfare. A simple trade-off model<sup>15</sup> of mergers effects in partial equilibrium analysis can be presented graphically as follows in figure (1). A merger leads to cost savings through increasing scale ( $AC'' < AC'$ , where ' denotes pre-merger and '' post-merger conditions), but extended market power leads to higher price<sup>16</sup> ( $P'' > P'$ ). Originally  $MC = AC' = P'$ , but after merger  $P'' > AC''$  because MR shifts down away from the competitive level.

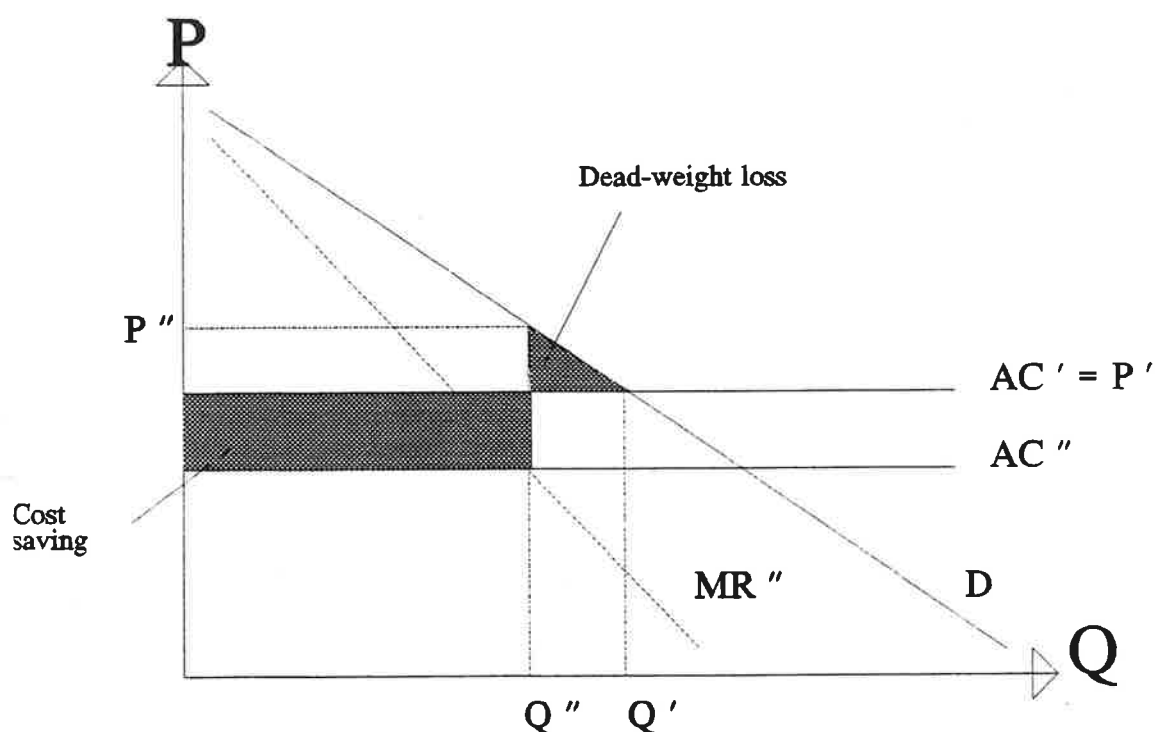


Figure 1 : Simple trade-off model

If cost savings are greater than the dead-weight loss, merger is welfare improving.

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<sup>15</sup> See for example Williamson, pp. 6 - 8

<sup>16</sup> This model assumes quantity-competition i.e. there is an "auctioneer" who sets the price so that markets clear, the result may be reversed if the competition is price competition without production constraints like in Bertrand-models where price = average cost in non-cooperative equilibrium. Even a monopoly firm may use average cost pricing in contestable markets.

Although the figure (1) shows this to be the case the result could be the opposite. This model is naive in the sense that it is restricted to one sector. There may be substitutes for the product and a bigger company may be more innovative and create external economies. Anyway, the merging parties have to expect some gains from the merger if the deal is believed to be advantageous. If  $V$  is the value of a firm, then we expect that  $V_{a+b} > V_a + V_b$ .

In international competition it may also be in the nations advantage to allow mergers to create bigger companies to preserve employment and diverse production structure. Politics and pressure from lobbyists are probably important in this respect, and there is a risk that the competing trade blocks start to build up strong industries with significant government aid which increases industry-government interdependence and damages world trade liberalization. Thus, national welfare maximization creates a basis for conflicts between nations and worldwide welfare may not be maximized<sup>17</sup>.

In other words, mergers may be welfare improving without any significant losses in competition, if there exist international competitors and simultaneously trade and entry barriers are low enough. It is in the European Community's interest to allow big crossborder mergers if there are big US or Japanese competitors or entry is possible. This is not to say that all mergers are beneficial. Mergers leading to monopoly or one company holding a dominant position in some specific factor of production may harm the society and keep potential foreign competitors away from the common market.

### **1.3 Objective of the Study**

Many aspects of monopoly theory, optimal control and corporate control have been widely researched and the US takeover markets have been under extensive study. However, European markets for corporate control are not so deeply covered and there is no adequate theory to compare the many effects of merger activity

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<sup>17</sup> Caves (1982) p. 113

and the policy implications. Moreover, European integration poses new questions relating to takeovers. Some simplistic frameworks exist, but there is no general theory which could help us to make any solid conclusions about the corporate behavior. The most relevant academic studies of European conditions have been published in theme numbers of Journal of Economic Perspectives (1988) and Oxford Review of Economic Policy (1992), and by Franks & Mayer (1990) and de Jong (1991).

US markets have been so active that a large empirical literature of mergers and acquisitions already exists. European markets for corporate control are just emerging and many barriers for mergers make it difficult to draw conclusions whether management can act according to its own interests or is it forced to maximize shareholder value. Since competition policy's efficiency depends largely on competitive and control effects which both increase efficiency, it is important to study managerial behavior in European environment. It seems that in many countries companies are protected from takeovers and management can increase their perquisites and the market share of the firm in order to gain more power and respectability. The table (2) shows the performance of companies in some European countries and in the USA and Japan. The sample was 20 companies in each country that between 1979 and 1988 showed the fastest growth of turnover and profitability<sup>18</sup>.

Companies from more "liberal" countries ( USA, UK ) were forced to maximize profits, but companies from countries without effective external control seem to have aimed at growth through maximizing their turnovers. They are able to follow this strategy because there is no real threat of takeover. Japanese managers think that shareholders' profit is not so important and many viewed shareholders fourth in a list of those to whom the companies should belong, with employees first<sup>19</sup>. This statistics shows that markets for corporate control can have significant

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<sup>18</sup> The above analysis is based on accounting data and one should be careful when making comparisons between countries. However, the analysis gives some insight into the international scene.

<sup>19</sup> Milgrom & Roberts, p. 41

influence on corporate behavior. However, the implication on national welfare is

Table 2: Percentage growth and profitability, 1979-1988

Country	Growth of sales	Tax adjusted profit rate
United Kingdom	45	9
France	51	4
The Netherlands	53	5
Germany (FRG)	80	4
USA	48	10
Japan	190	4

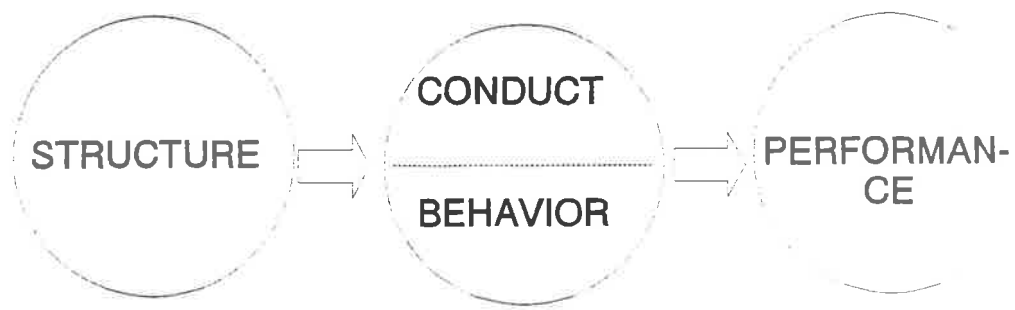
Source: De Jong, H.W. (1991)

not so clear cut, Germany and Japan have prospered even without workable takeover markets but UK has had some serious economic troubles in the past. These countries could also be described as representing different models of capitalism.

**The main objective is to study the takeovers' influence on corporate behavior in the European Community.**

The purpose of this paper is to review the relevant theories and create some new information especially of European markets. Most of this study is a kind of literature survey with some new perspectives. Because the field is so fragmented, a framework for the analysis is also presented. The model is based on traditional structure-conduct-performance paradigm from IO-theory. It considers conduct as an industry or capital market macro phenomena and behavior reflects the micro or managerial side which includes the agency problem (figure 2). This could also be seen as a challenging view about the role of the competition policy, the traditional competition oriented policy could be more efficient if it recognizes the trade-off between the competition and control effects.

The subject is empirically quite complex and hard to test, but when seen necessary empirical tests and case studies are included. Although the theory cannot give so robust results, implications for future antitrust rules are also discussed because



## **2 Framework for takeover market analysis**

this influence of takeovers on managers has often been overlooked. The model is based more on empirical observations and loose theories than on rigorous mathematical or formal models. The reason for this approach is that the relevance is preferred to rigor as there is no satisfying formal model to cover the whole topic. However, if one wishes to continue using the framework, it certainly needs some refinement.

**The sub-purpose is to develop a framework for takeover market research and apply it to the European conditions.**

Before this study can be undertaken, it is necessary to define the scope of this study more carefully. In order to do so, the next pages cover the relevant definitions of the firm, types of takeovers and the general framework for the analysis. Terms merger, acquisition, takeover and combination are used in this text as approximate synonyms, but some clarifications are given if seen necessary. Mostly they refer to change in the control from old owner(s) to new shareholder(s), i.e. merger happens when the majority of votes is transferred to the acquirer. Moreover, most of the analysis is about horizontal mergers which is not always explicitly mentioned. The legal definition of merger would require the firms to become one firm but this is not always the case in major acquisitions. Furthermore, firm, company and corporation indicate the same, modern corporation with shareholders as residual claimants.

## **1.4 Structure of the Study**

This thesis is organized into five chapters, the first being this introduction. The research problem divides into three different part and the subsequent chapters are derived from these parts (see figure 3).

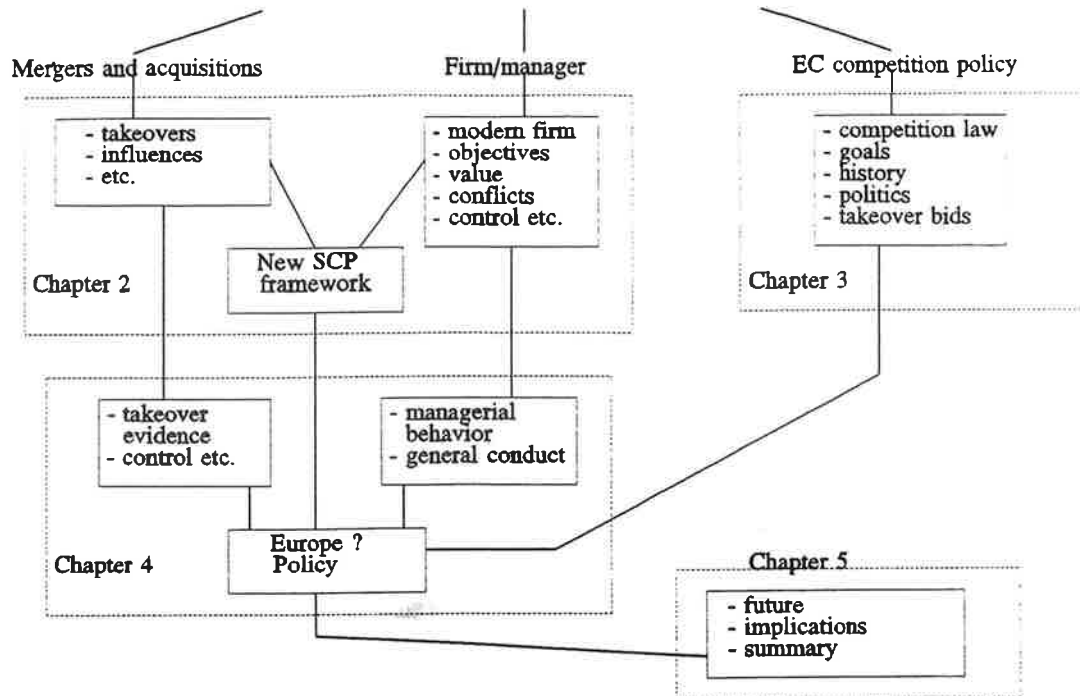
The second chapter covers the theory of the firm, managerial aspects, different forms of mergers, traditional SCP paradigm and as the most important part introduces the applied structure-conduct-performance framework for the takeover market analysis. This chapter includes all the economic basics needed in the takeover study in following chapters.

As the purpose is also to research the implications to the formulation of competition policy, the third chapter is devoted to the study of EC competition policy and takeover bid regulation. Chapter includes the most essential part of the relevant legislation and some background from the political and institutional sides.

The fourth chapter has more intense approach to takeovers and managerial behavior and it finally draws the material together in European takeover market analysis. The discussion is theoretically weighted though it contains empirical evidence and proposes some possible new directions for future research. The main theme is the application of the SCP framework.

The fifth and last chapter reviews the theory and discusses the implications for future competition policy and related research. Finland is presented as a short takeover market case study. The figure (3) presents the basic setting and how the chapters are organized and related to each others.

**Problem :** How do takeovers influence managerial behavior and how does this effect EC competition policy ?



### 3 Structure of the study

## 2 THE THEORY OF THE FIRM, INDUSTRY AND TAKEOVERS

"It is traditional that a corporation should be run for the benefit of its owners, the stockholders, and to them should go any profits which are distributed. We know now, however, that a controlling group may hold the power to divert profits into their own pockets... The extensive separation of ownership and control, and the strengthening of the powers of control, raise a new situation calling for a decision whether social and legal pressure should be applied in an effort to insure corporate operations primarily in the interests of the "owners" or whether such pressure shall be applied in the interests of some other or wider group." <sup>20</sup>

This chapter is about the modern firm, industrial organization and applied structure-conduct-performance framework. First it is necessary to study the nature, value and financing of the modern firm which is at the center of economic activity. The passage concerning financial structure is relatively long because it is of theoretical interest, not because we would be going to test the postulates. Second issue is the general nature of mergers and acquisitions. Last theme is the applied SCP model which is presented together with the main principles of the traditional model of industry.

### 2.1 The Firm: A Complex Set of Contracts and Objectives

Simple economic models treat firm as a black box, inputs are used to produce outputs but the nature of the process is ignored. Economists have had difficulties defining the boundaries of the firm and the study of modern firm and organization is a fragmented field. One useful way to define the firm has been presented by Jensen and Meckling (1976), they state that " *the private corporation or firm is simply one form of legal fiction which serves as a nexus for contracting relationships and which is also characterized by the existence of divisible residual claims on the assets and cash flows of the organization which can generally be sold without permission of the other contracting individuals* " <sup>21</sup>. While this definition is quite loose and emphasizes the legal form of the firm on the cost of the economic nature, it provides a useful and generally applicable model for the study of conflicts within the firm.

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<sup>20</sup> Berle & Means, p. 333

<sup>21</sup> Jensen & Meckling, p. 311



Many different stakeholder groups have their interests in the firms and all of these groups have their different objectives. The firm is founded by its original shareholders who may hire a professional manager and separate the ownership and control. The original shareholders are free to sell their shares in the market and the majority of shareholders or the voting majority is entitled to change the management. Shareholders can also be described as residual claimants who gain the proceeds after all deductions and have the ultimate power in the firm. The firm is then actually a hierarchy of contracts where shareholders are at the top. Because the future contingencies are hard to depict, complete contracting is expensive<sup>22</sup>. As a result of the "bounded rationality" many of the contracts are implicit and the corporation must be trustworthy even without legal enforcement. As these implicit long term contracts reduce costs, the credibility is a valuable asset to a firm. Hence, establishing and sustaining a good reputation is of strategic significance<sup>23</sup>. One way to do this is to develop an appropriate corporate culture<sup>24</sup>. The problem with these implicit contracts is that although both parties benefit ex ante from these contracts, ex post it might profit shareholders to default.

The firm needs many contracting parties to participate in the business. Shareholders are only rarely the sole source of financing, and the bondholders are especially in crisis situations a very influential group. The firms employees have their interests in their salaries and the security of their jobs which depend highly on the performance of their employer, with whom they often have only an implicit contract. The government is worried about its tax incomes from corporate taxation and the employment. Buyers of the firm's products and the sellers of the firm's inputs have their own interests too. Sometimes the importances of these different

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<sup>22</sup> Shleifer & Summers, p. 36

<sup>23</sup> Holmström & Tirole, p. 76

<sup>24</sup> The term "culture" is somewhat ambiguous and trivial if not properly defined. Therefore, hereafter the expression "(corporate) culture" denotes *a set of contractual relationships, trustworthiness and individual preferences or utility functions which are dominant in the environment in question and are affected by common history*. While this definition may not be generally applicable, it helps to explain certain characteristics in this text.

groups are confused and thought to be equal in many respect. But one should always remember that shareholders are the most important contracting party and the only group that has normally the right to decide of the survival of the firm, the overall strategy and the hiring and firing of the bosses. The other groups importance lies mainly in their satisfaction and resources which may contribute to the commercial and financial success of the firm, which in turn should benefit the residual claimants i.e. shareholders.

Because shareholders' objectives can be seen as the most important ones, it is important to develop a simple decision-making rule that distinguishes between "good" and "bad" decisions. Shareholder's utility may depend on many variables, but by assuming the standard utility maximizing behavior in efficient markets we can see that the utility is maximized by maximizing the shareholders' wealth<sup>25</sup>. Shareholder's wealth consists of portfolio of assets which can be valued as the present value of their cash flows. According to Fisher separation principle investment decisions are separated from shareholder preferences and therefore managers need only know the discount rate and the cash flows of their investment projects. This implies that the value of the firm is the sum of its discounted future cash flows and all projects that have positive net present value should be taken and this can be formally demonstrated as follows<sup>26</sup>.

- $V_i$  = selling value of the firm prior to making the investment
- $Q_{is} = \Phi_i(I_i, s)$  = state-contingent production function
- $I_i$  = investment
- $p_s$  = price of the product

$$(1) \quad V_i = \sum_s p_s Q_{is} - I_i$$

The production function is assumed to be a continuous differentiable function of

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<sup>25</sup> See for example Copeland & Weston introduction for utility analysis, Fisher separation, p. 18. This may not hold if the shareholder is simultaneously a customer and/or a supplier.

<sup>26</sup> Copeland & Weston p. 124

I with diminishing returns to scale. The optimal investment rule is then obtained by differentiating equation (1) in respect to investment  $I_i$ .

$$(2) \quad \frac{dV_i}{dI_i} = \sum_s p_s \Phi'_i(I_i, s) - 1 = 0$$

The equation (2) shows that for indivisible investment projects with finite scale the optimal investment policy is to accept all projects with positive net present value. Thus, as long as the marginal revenue of new projects exceeds the marginal cost the projects should be undertaken. If this rule is violated, more efficient decision making increases the value of the firm.

## 2.2 Firm's Value and Financing Decisions

### 2.2.1 Market Value of the Firm

A firm's production is dependent of its manufacturing capabilities and demand conditions. These factors determine together with the money market condition the firm's cash flow. The firm is then worth of the net present value of its cash flow after all payments to employees, raw material suppliers, debtors, government etc. have been paid. Future cash flows should be discounted by the market interest rate and after some simple algebra the present value of the firm is given by equation (3)<sup>27</sup>:

$$(3) \quad V_0 = \sum_{t=0}^{\infty} \frac{[R(t) - O(t)]}{(1 + \rho)^{t+1}}$$

where  $R(t)$  represents the stream of cash receipts,  $O(t)$  cash outlays and  $\rho$  rate of time preference i.e. market interest rate. Previous model is a risk free valuation model and it is too simplistic to describe the real world. However, it shows the basic relation between cash flows and the firm's value and many real world conditions like taxation can be added into it.

However, market rate is difficult to define and use, and a more popular solution to

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<sup>27</sup> Miller & Modigliani (1961) p. 416

this problem is to use weighted average cost of capital (WACC). A simple formula for calculating WACC is the following.

$$(4) \quad WACC = \frac{E}{D+E} * r_E + \frac{D}{D+E} * r_D * (1 - \tau)$$

- where: E = equity
- D = debt
- $r_E$  = cost of equity and  $r_D$  = cost of debt
- $\tau$  = corporate tax rate (interest expenses are deductible)

Equation (4) WACC formula is a riskneutral one, if the investor is risk averse and wants risk to be noticed, then this formula has to be adjusted accordingly<sup>28</sup>, but that is not the subject here.

If FCF is the free cash flow after all deductions, the theoretical value of the firm is

$$(5) \quad V_0 = \sum_{t=0}^n FCF_t * (1 + WACC)^{-t}$$

- where n = last operating year, if going concern then n =  $\infty$

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<sup>28</sup> It is possible to calculate the cost of equity by using various models like the capital asset pricing model CAPM, where  $r_i$  is the return on the asset i,  $r_0$  is the risk free return,  $\sigma_i$  is the standard deviation of the asset's return and  $r_m$  is the market rate of return, then the simple formula for the cost of equity is

$$r_i = r_0 + \frac{\text{corr}(r_i, r_m)}{\sigma_i^2} (r_m - r_0) , \text{ where } \frac{\text{corr}(r_i, r_m)}{\sigma_i^2} \text{ is usually called } \beta$$

The present certainty equivalent,  $V_0$ , of some uncertain future cash receipt,  $V_1$ , may be written as follows (Copeland & Weston p. 404), this model could be expanded into a multi-period model.

$$V_0 = \frac{E(\tilde{V}_1) - \lambda_0 \text{cov}(\tilde{V}_1, \tilde{V}_{ml})}{1 + r_{f0}} , \text{ where } \lambda_0 = \frac{E(\tilde{V}_{ml}) - (1 + r_{f0})}{\sigma^2(\tilde{V}_{ml})}$$

From this simple model can be seen, that the management cannot only focus on the near future cash flow, discounted future cash flows are also valuable and if they were neglected, the firm's value would be lower than attainable. Therefore, also long term investments and R&D projects can increase the value of the firm and there should be no fear of takeover due to investments with positive net present value. The corporate WACC can be used in capital investment analysis to determine the NPV, but the project has to have the same capital structure as the firm.

The above NPV model is not the only valuation model that has been developed. Virkkunen (1992) has divided the theoretical valuation models into three groups, the basic idea is that the value of a firm is generated by current assets and the value due to expectations of capital market.

a) Investment opportunities approach, valuation under certainty, the model (3) is a basic version of this, these static models were first presented by Miller-Modigliani (1961)

b) Economic or monopolistic returns, uncertainty, originally developed by Thomadakis (1976), based on the CAPM and imperfect competition

c) Option valuation formulas, these models were pioneered by Miles, Pindyck and Majd. The total value of the firm  $V_0$  is according to Pindyck (1989) the following:  $V_0 = C_0(K;a) + F_0(K;a)$ , where the first term is the present value of expected profits generated by current capacity  $K$  with current demand shift parameter  $a$ , and the second term is the present value of growth if the firm adds more capital in the future.

Furthermore, many academics and practioners are dissatisfied with the current state of the valuation methods like the standard NPV<sup>29</sup>. They claim that the NPV undervalues many projects with real operating options to change the strategy after

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<sup>29</sup> Trigeorgis, p. 1

the initial investment. Therefore, a new path of research has tried to find a way to expand the model as follows: *Expanded NPV = Passive NPV + Combined Option Value*. One major implication of these option based valuation models is that volatility of the value of the firm's assets may be beneficial from the stockholders point of view. Higher volatility means higher level of a "good" result and consequently higher value of the equity. These new option-theory based approaches may provide us new insight in the future, one interesting possibility is that the implicit contracts may enlarge managerial flexibility thus increasing the value of the real options and consequently the value of the firm. Although these option approaches are interesting, we utilize here mainly the traditional NPV models as they satisfactorily provide us the basic concepts of value maximization. Future studies may benefit more of the new valuation models as they mature.

However, investors may find it too difficult to obtain reliable information about the firm's future earning power, and if the financial markets are only semi-strong efficient in Fama's classification investors may be shortsighted<sup>30</sup>. Consequently managers who's salary depends on the share-price performance are tempted also to focus on short term performance, which improves the indicators which the investors follow<sup>31</sup>. Nevertheless, US evidence shows that stock prices rise after the firm's announcement of increased R&D, which lowers the cash flow in the short term<sup>32</sup>. Other reason for short-termism might arise from managers education<sup>33</sup>, managers with financial training may have difficulties estimating the future cash flows from R&D and new innovations which leads to "technological

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<sup>30</sup> Milgrom & Roberts, p. 471

<sup>31</sup> Almost classical example is the difference between the implications of Price/Earnings ratio and the DCF method when the firm changes in accounting from FIFO to LIFO. In Last In First Out method the value of the stocks is higher and the result is smaller accounting profit but higher cash flow because of reduced taxation which is based on accounting profit. P/E shows that the firm is doing badly but the DCF method values the firm higher after the change.

<sup>32</sup> Milgrom & Roberts, p. 474

<sup>33</sup> Milgrom & Roberts, p. 454

short-sightedness". There exists also an "equilibrium short horizon" model based on arbitrage<sup>34</sup>. In equilibrium the net expected return from arbitrage must be the same and since arbitrage in long term assets is more costly than in short term assets, the former must be more mispriced for the returns to be balanced. Since the mispricing of long term projects vanishes slowly, such projects may be avoided by managers. Moreover, if managers believe that market's conjectures correlate positively current earnings with future earnings potential and consequently with the share prices, then managers may behave myopically despite of the true market efficiency. In other words, managers may be "trapped" into behaving myopically<sup>35</sup>. Additional reason for different time horizons between countries may naturally occur if the market discount rate is different. Jensen (1989) believes that managers may sometimes be myopic but that markets are not myopic. He also presents wide evidence to support his claims. But if there really is short-termism, it might be better that the stocks were owned by long-term institutional investors.

### 2.2.2 Financial Structure of the Firm

The determination of the capital structure of a firm is one of the most important issues of modern theory of finance. Interestingly many of these models are closely related to the agency problem and corporate control. According to the original model of Modigliani and Miller, there is no optimal amount of debt, the question is irrelevant and the firm can be financed totally by debt or equity<sup>36</sup>. But this model ignores taxation, agency and bankruptcy costs which affect the financing decision, tax deductions increase the debt but bankruptcy costs make it impossible to finance the firm totally by debt. Since M&M the literature about the capital structure has grown and Harris & Raviv (1991) identified four determinants of capital structure. They ignored taxation theories for several reasons, but if those

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<sup>34</sup> Shleifer & Vishny (1990)

<sup>35</sup> Stein, p. 656

<sup>36</sup> Modigliani & Miller : The cost of capital, corporate finance and the theory of investment, American Economic Review 48 June 1958. They demonstrated that in absence of tax subsidy and bankruptcy costs the value of the firm is unaffected by the capital structure.

are included, the list of the models explaining the capital structure is the following:

- conflicts between agents and principals ( the agency approach )
- convey private information to markets ( the asymmetric information approach )
- influence the nature of products or competition in the product/input market
- affect the outcome of corporate control contests
- tax-benefit explanations

The first and the fourth categories are of special interest to us and next we will see these models more closely. A useful way to determine the capital structure is to use agency cost analysis by Jensen and Meckling<sup>37</sup>. They assume that there exists three sources of capital : inside equity held by manager (  $S_i$  ), outside equity (  $S_o$  ) and debt held by outsiders (  $B$  ). Then the total market value of the firm is  $V = S_i + S_o + B$ .

Outside financiers face the moral hazard problem because the managers have the incentive to "exploit" them by breaking the (implicit or explicit) contract to run the firm as efficiently as they can. When the management is the only source of equity, they encounter themselves all the changes in the value of the firm and they are more willing to maximize the firm's value<sup>38</sup>. Even in this case the outside debtholders incur some agency costs mainly from the value reductions in the firm and monitoring costs caused by managements incentive to reallocate wealth from bondholders. When the amount of outside equity increases, the bondholders' agency costs drop and outside equityholders must bear the cost of monitoring and value changes. These agency costs then determine the optimal ratio of outside equity to debt. The ratio is optimal when the total agency costs are minimized :  $\min A(E) = A_{so}(E) + A_b(E)$ , where  $A(E)$  are the total agency costs,  $A_{so}(E)$  are

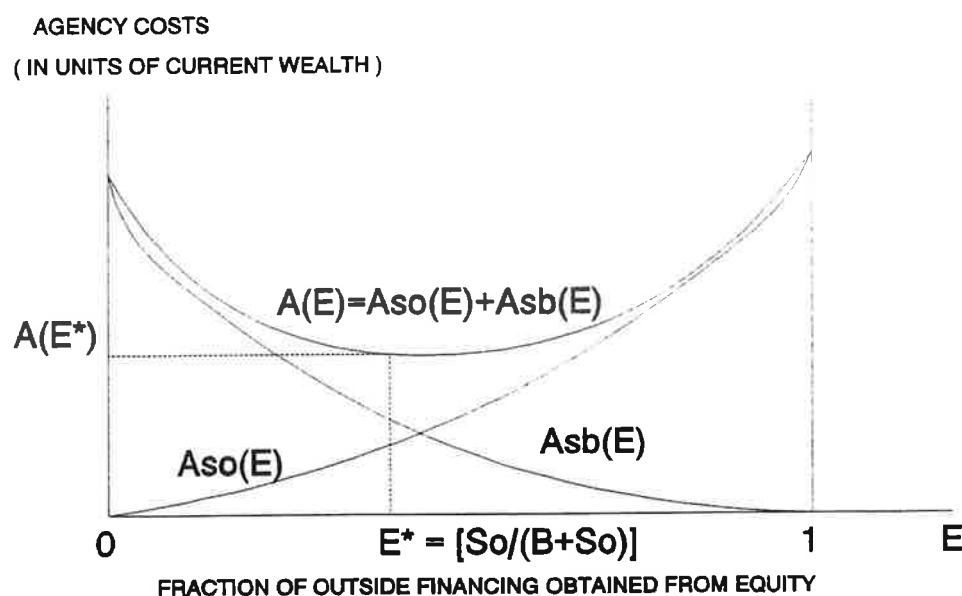
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<sup>37</sup> Jensen & Meckling, p. 343-351

<sup>38</sup> If the manager owns 100% of the firm, he must bear the whole decline in the firm's value if there is divergence from value maximization. But if the manager has only 10% ownership the punishment from the non-value-maximizing behavior is only one tenth of the decline in share prices.



outside equityholder's agency costs and  $A_b(E)$  are bondholder's agency costs, figure 4. One major advantage of leverage is that the debt commits the firm to pay out cash reducing the amount of free cash available to managers.



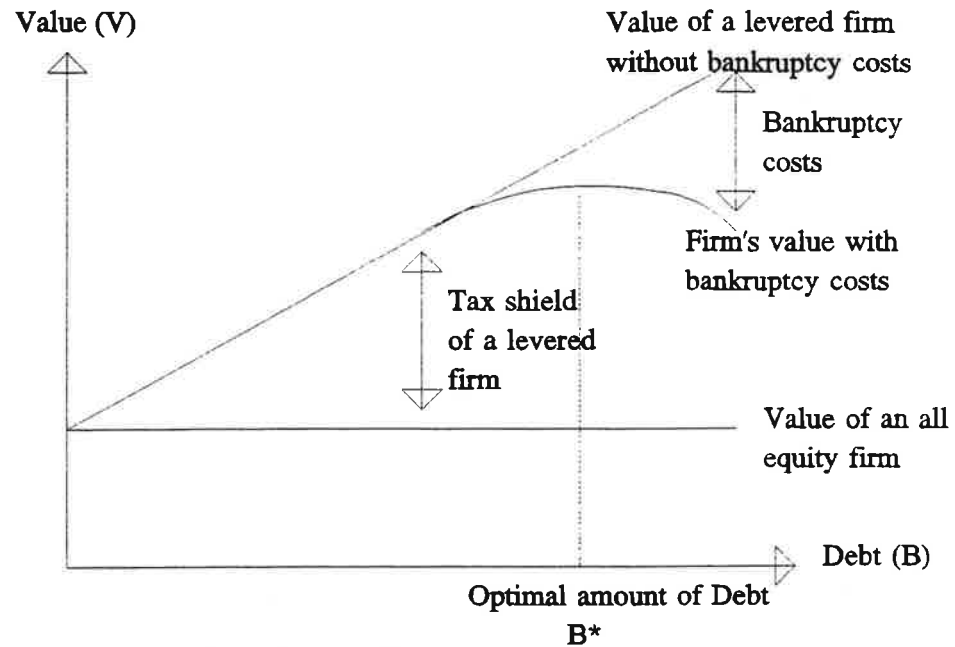
#### 4 Optimal ratio of outside equity to debt.

This elementary model helps to understand the way the capital structure is determined, but in reality it is still impossible to determine the optimal ratio  $E^*$ . Jensen and Meckling make many simplifying assumptions and the shape of the agency cost functions is an empirical one without clear evidence<sup>39</sup>. However, this model shows the important role of agency costs in a modern firm.

The original Modigliani-Miller proposition is based on an assumption that there are no corporate taxes or bankruptcy costs. In a world like this the relaxation of the non-tax assumption leads to a situation where the firm is financed totally with debt. Pure tax explanations are of little use to us, but if the bankruptcy costs are incorporated into this model, the picture changes dramatically. The optimal amount

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<sup>39</sup> However, Mello & Parsons (1992) have applied these theoretical models of the agency cost of debt to real life cases in order to develop a model which could help to estimate the actual optimal capital mix. Their calculations show that agency costs may be an important determinant in firm's capital structure.



of debt is then determined by the risk of bankruptcy which is an increasing function of debt as the probability of insolvency increases with the fixed payments to the debtor<sup>40</sup>. The value of a firm is then  $V = [\text{Value of an unlevered firm}] + [\text{Present value of the tax shield}] - [\text{Present value of the bankruptcy costs}]$ . This is graphically presented as follows in figure (5). The values are net present values. The firms capital structure affects the behavior of its managers, lenders and shareholders, as well as the probability of bankruptcy<sup>41</sup>. Consequently a badly run firm is more risky and the value is lower than attainable because of higher bankruptcy costs and agency costs. However, like the agency costs in the Jensen and Meckling's model, also the bankruptcy costs are difficult to measure<sup>42</sup>.

The theories driven by corporate control reasons are relatively new and the most

<sup>40</sup> Baxter (1967) and Kim (1978)

<sup>41</sup> Milgrom & Roberts, p. 504

<sup>42</sup> One way to proxy agency/bankruptcy costs is to use R&D costs; these costs are usually highest in firms where the share of human capital is significant. High level of intangible assets means greater welfare losses in default and bigger potential agency problems within the firm. For Finnish evidence see Virolainen.

influential works are from late 1980s. These models<sup>43</sup> are based on the assumption that capital structure affects the outcome of takeover contests through its impact on the distribution of votes, primarily the stake owned by the management. The managers' efficiency and the value of the firm are affected by the capital structure of the firm. Thus the capital structure affects the probability of takeover and the optimal structure is determined by the incumbent manager who balances his stake against the loss of any personal benefits originating from being in control. The major implication of these models is<sup>44</sup> that takeover targets will increase debt level on average. However, these theories should be viewed as models of short-term behavior rather than models of long-term capital structure decisions.

One important feature in the modern firm is that the ownership is widely dispersed among shareholders and there exists hardly any really dominant shareholder. This makes the shareholders weaker and the managers respectively more powerful. By making the assumption, that there are no connections between the shareholders, it is possible to measure power by various indices<sup>45</sup>. These models are based on game theory and provide often useful insight to the corporate control. One interesting result is, that big share of the stocks means more power than the formal share would seem to imply. This holds provided that the other shareholders are smaller. Furthermore, a relatively large shareholder can practically control the firm even if the share is under the majority<sup>46</sup>. In takeovers this causes the fact that the acquirer does not have to have majority, a large share and some allies from other shareholders are enough to replace the management.

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<sup>43</sup> especially Harris & Raviv (1988) and Stulz (1988)

<sup>44</sup> Harris & Raviv (1991) p. 325

<sup>45</sup> Banzhaf's index calculates all the possible groups that have the voting majority, and by taking all the possible cases the single shareholder can cause a "swing" from minority to majority it is possible to estimate the importance of each shareholder. Shapley and Shupik have developed a little more complex power index.

<sup>46</sup> see for Finnish evidence Pohjola, the average size of the controlling coalition was 2.5 in 1981 and 2.3 in 1986, p. 251

If the weakness of shareholders causes a decline in the firm's value, it is important to understand why the ownership is so dispersed. Big firms, like giant multinationals need so huge amount of capital, that it is impossible to finance it by small group of investors. Another important reason is that shareholders diversify their portfolios and invest into many firms in order to limit their risk<sup>47</sup>. Only in small and more entrepreneurial or family firms the shareholdings may be concentrated. Because size of the firms, the efficiency of capital markets and government regulations vary across orders, there are significant differences in shareholding structure between countries<sup>48</sup>. It was noticed already in 1930s, that shareholders may not have any incentive to monitor management if the shareholdings are dispersed<sup>49</sup>. The reason is, that the agency costs are high but the relative benefit of costly monitoring is small to a single shareholder and the concentration of ownership is beneficial from this viewpoint.

### **2.3 Mergers and Acquisitions**

In order to gain a more comprehensive view of the takeover phenomena, this passage introduces shortly a assortment of different theories and empirical topics. Takeover process is launched because at least the acquiring party expects to gain something of it. These gains can be either in the form of economic profit or in the form of power and respectability. The first class of these gains may benefit all parties in question and increase national welfare, but the second class refers mainly to the agency problem and so-called "empire building" by managers. Whatever the numerous reasons for these gains are, they give the motivation for m&a activity.

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<sup>47</sup> This comes from the portfolio theory originally modelled by Markowitz (1959). The riskiness of securities is measured by their return's variation, and this risk is minimized by diversifying the portfolio to many securities so that the individual risk of each security doesn't influence the portfolio return, only systematic or market risk matters.

<sup>48</sup> See part 4.2.2 about the capital market conditions in Europe

<sup>49</sup> Berle & Means

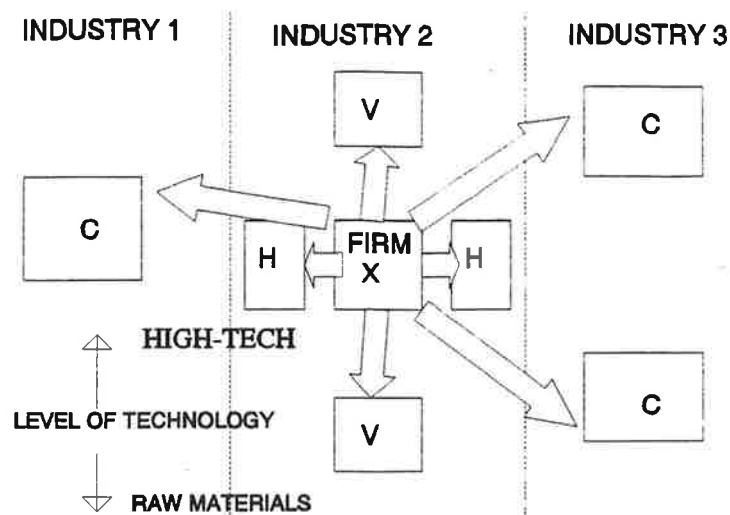
Free and workable markets for corporate control have been said to improve resource allocation by moving scarce resources to more desirable and efficient purposes. Furthermore, it has been argued that the proper functioning of the takeover market may correct the market failure in product and input markets by abolishing inefficient and non-profit maximizing firms through takeovers<sup>50</sup>. However, takeovers may be poor allocators of resources and they may fail at identifying poorly performing firms. The proper functioning of the market for corporate control also requires fairly efficient capital markets. In some cases mergers may be expensive and lead to unfavorable outcomes like monopoly. Besides, many economies do not have an active takeover market but they still seem to prosper.

Basically the firm can operate within one industry or market or it can diversify its operations. Diversification means that the firm starts to produce many different products and this can occur horizontally or vertically. The expansion can be internal growth or it can be external through mergers and acquisitions. Therefore we can divide takeovers to vertical, horizontal and conglomerate takeovers which covers multi-industry mergers and acquisitions. This separation has some importance for the study, different management groups can be thought to compete mainly within one industry where they have their special skills. Managers can contribute more to firms whose line of business is familiar to them than to totally new industries. Sometimes it is possible, that "corporate raiders" or investors who seek only quick profits can acquire firms from industries they do not know. But the theory of this paper is restricted to horizontal takeovers within one or few close industries, and it is generally noticed that acquisitions with strong "core" business are more successful. The next simplified figure (6) demonstrates the different merger possibilities that firm x in industry 2 has, H is a horizontal target company, V is a vertical target and C is a conglomerate merger partner.

The reasons for takeovers are multitude and it is not necessary to study all of them

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<sup>50</sup> see for example Scherer (1988) for some discussion



## 6 Merger Types

here. There are more than dozen separate powers which drive takeover activity<sup>51</sup>. One way to group and list these theories is the following<sup>52</sup>, the most relevant ones will be studied much more thoroughly later on.

1. Efficiency explanations: These theories are possibly the most optimistic ones about the potential gains of mergers for all parties. In principle, efficient managers take over below-average performers and use their know-how to run them more efficiently. This increased efficiency then creates value and we expect  $V_{A+B} > V_A + V_B$ , where  $V$  is the value of a firm. The potential for value creation may originate from differential managerial efficiency, economies of scale and scope and from other advantages of bigness in production and other operations. However, there cannot be continuous advantages from combinations because then all industries should be highly concentrated or even monopolized.

2. Information theories: Merger may signal new information to the markets during the merger process. This group of theories includes such hypotheses like *kick-in-the-pants* and *sitting-on-a-gold-mine* explanation. One possibility is that market expectations have been inaccurate and the acquirer has better private information

<sup>51</sup> Jensen (1989) p. 13

<sup>52</sup> Copeland & Weston p. 683

of the firm's "true" value.

3. Agency problems: These theories form the core of this paper. The starting point is that control and ownership are separated and consequently the managers may act against the shareholders' benefit by non-value maximizing behavior. Therefore, a takeover may lead to more efficient management and create value. Moreover, the managers maximizing their own utility may consider takeovers in order to increase their power and prestige.

4. Market power: Firms may seek profitability through market power, i.e. firms occasionally merge in order to seize monopoly profits. Firms may also try to achieve a advantageous marker leader position by expansion via takeovers. Takeovers due to these causes obviously may be detrimental for the national welfare as wealth is redistributed and surplus diminished, see also section 1.2.

5. Tax considerations: Institutional setting is often an important source for many economic phenomena. In mergers tax loopholes may give possibilities reducing and sometimes even avoiding some taxes. A highly profitable firm may acquire a loss-making firm in order to consolidate these results leading to lower taxable profits. Sometimes a merger may be the best way of distributing profits to shareholders if the firm has "trapped equity". In any case, these tax benefits are dependent on each country's legislation and policy.

It may also be that acquirers have no real underlying basis for their beliefs about the benefits of mergers. This is reflected also in the poor performance of so many mergers and takeovers. The reason could be described as acquirers dreams of "castles in the air" as investors seek quick profits by acquiring other firms or as a "hubris"<sup>53</sup> phenomena. The implication is that the takeover bid related price chances may be of little use<sup>54</sup> and the forecasting of merger activity or performance is really difficult if possible at all. All true reasons for value creation

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<sup>53</sup> Roll (1986), hubris means a "animal spirit" and it refers to managers making takeovers without realistic profit expectations.

<sup>54</sup> Lichtenberg, p. 4

originate fundamentally either from commodity markets (e.g. scale advantage, market power) or capital markets (e.g. inefficient markets, signalling) or institutional factors (e.g. tax benefits).

Conglomerate mergers are most difficult to analyze and they may originate from totally different reasons than inefficient management in the target firm or monopoly rent seeking<sup>55</sup>. Diversification, advantages of bigness or some synergy between industries could provide a reason, but this is outside the scope of this study. Incentives for vertical mergers may come from desire to control raw material supplies, attempt to decrease transaction costs or from efforts to increase the level of technology, but this kind of mergers are also ignored here.

Hostile takeovers are basically takeovers opposed by the target management. The incumbent managers often use various tactics in order to stop the takeover process and keep their positions. A "folkloristic" language has developed to describe these many phenomena connected to takeover battles. Antitakeover amendments are basically changes in corporate bylaws which make the acquisition more difficult or expensive. "Green mail" refers to a buyback from a substantial shareholder, possibly from the acquirer, at a premium above the market price. A standstill agreement is often linked to these premium buybacks, such agreement prevents the former shareholder making further investments in the company in future. Standstill agreement without green mail means that the major shareholder agrees not to increase his/her ownership. Proxy contests mean that a outsider or "dissident" group aims at power through collecting majority of proxies against the insiders' or incumbents' will. "Poison pill" provision gives the present shareholders a right to buy at substantial discount the shares of a successor firm formed by a takeover. "White knight" refers to a "friendly" firm which helps the target firm to defend by competing with the hostile acquirer in order to make a friendly acquisition. Divestiture of "crown jewels" means that the target management sells some of the firm's most valuable assets making the firm look less lucrative target. Nevertheless, these antitakeover measures make the acquisition more difficult and

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<sup>55</sup> Copeland & Weston, pp. 691 - 708



they may cause resource misallocation for all parties involved in the takeover. Consequently these costs may hinder the working of the markets for corporate control to some degree.

The free rider problem may also cause difficulties, as the shareholders realize that someone is trying to take over, they may attempt to sell at the highest price the acquirer is willing to pay. The high premium reduces the potential gains from the acquisition and the whole deal may prove to be unprofitable. If free riders are a real threat, takeover mechanism may be deteriorated. Consequently the acquirers (provided that they know the problem) strive to buy the shares secretly as long as possible in order to increase their potential gains.

There exists also other types of restructuring and some of those will be briefly described in the fourth chapter. Nevertheless, takeovers (even hostile) seem to be an integral part of a free market economy.

## **2.4 Framework for Analyzing Markets for Corporate Control**

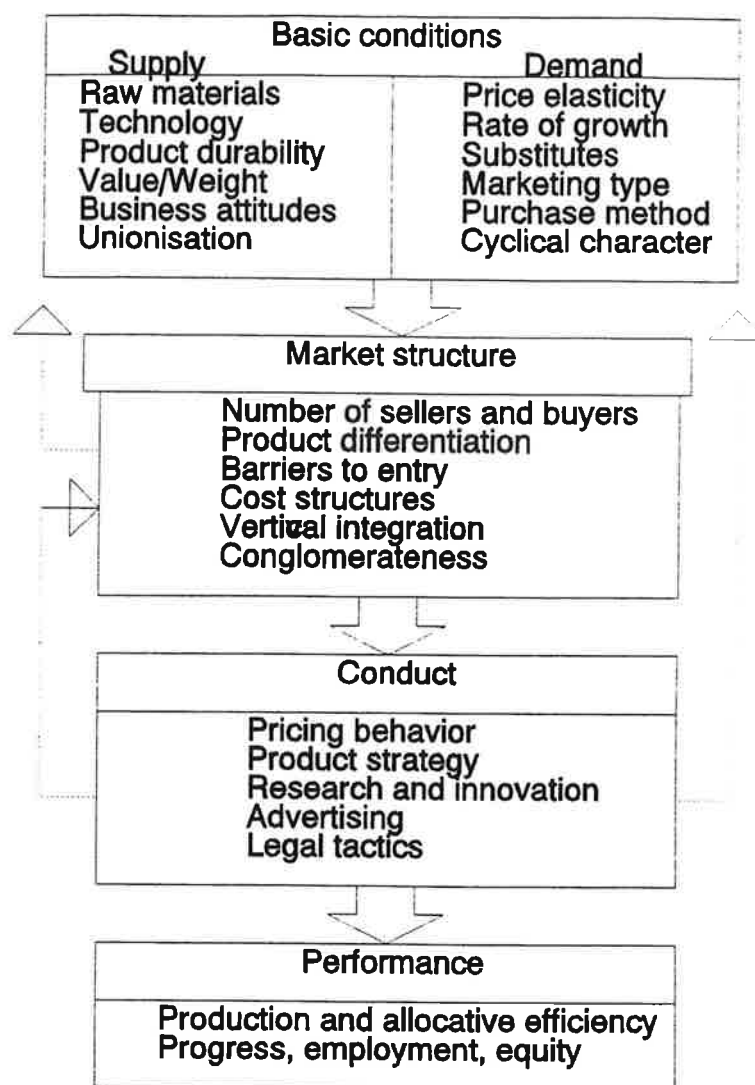
Next we will review the traditional model of industry and propose a new framework for takeover market analysis. The rest of this chapter then focuses on the details of the framework and compares it to the traditional model when seen beneficial.

### **2.4.1 Traditional Theory of Industrial Organization**

The theory of industrial organization includes a paradigm called Structure-Conduct-Performance (SCP), which is quite empirical by its nature. Simply put, it says that the market structure leads to some conduct (usually modelled as Nash-Cournot) which determines the performance. This paradigm was the leading theory in IO for many years<sup>56</sup>. The next figure (7) shows the basics of the traditional main stream theory. Sometimes government actions are included because public policy may have strong direct influence on structure and conduct.

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<sup>56</sup> For an in depth analysis, see Scherer (1980)



**7** Traditional Structure Conduct Performance Theory, reproduced from Scherer, p. 5

#### 2.4.2 Applied Structure Conduct Performance Framework

This SCP theory may also be useful way of thinking markets like the market for corporate control. Although it cannot be applied as such, it can be adapted to the specific needs of this analysis. SCP is quite loose theory, and this gives it the advantage of flexibility to apply it in various situations.

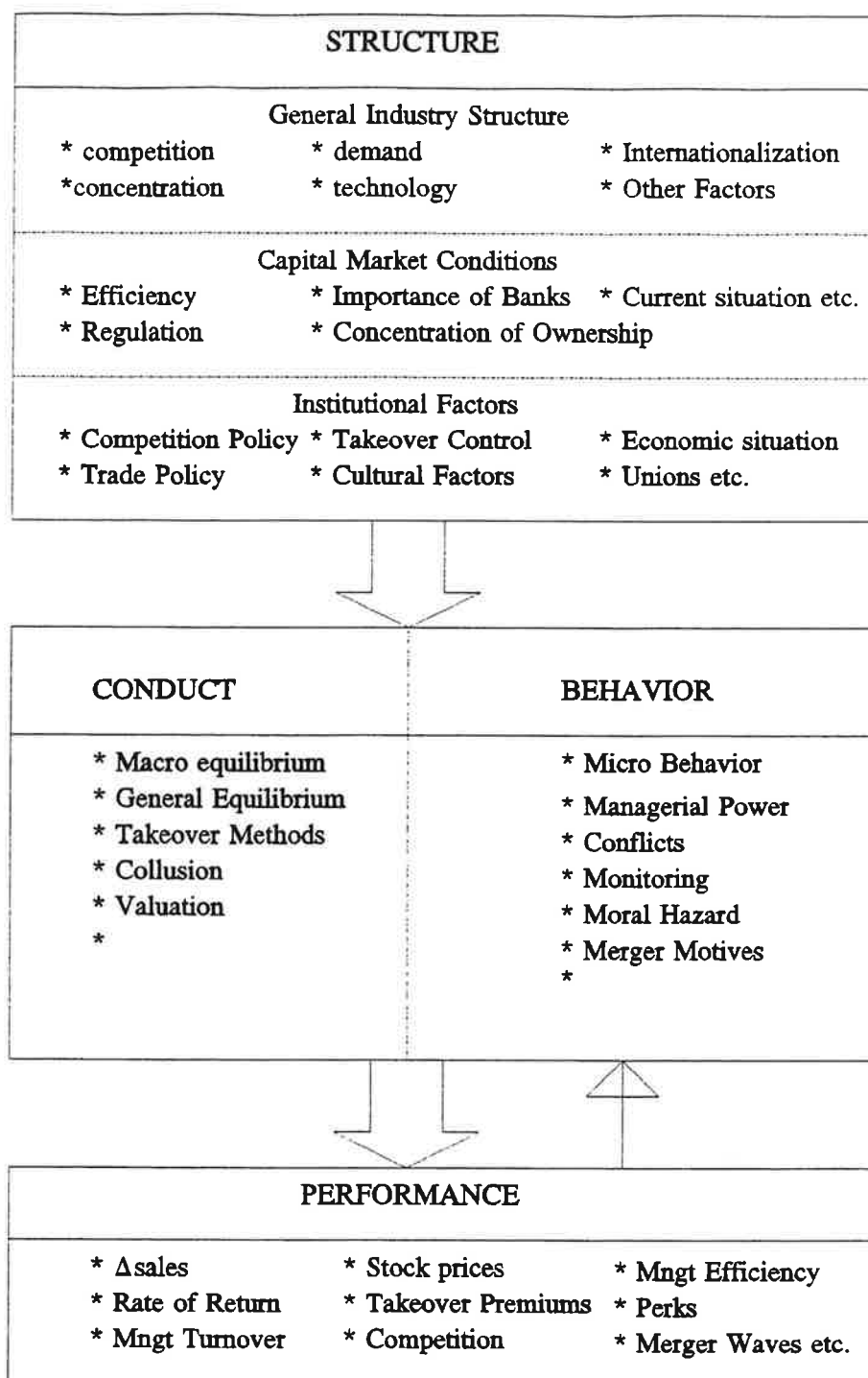
In the basic SCP model the conduct of an industry is affected by the macro structure and the firms operate within the frames set by the structure. The conduct plays often an important role in this setting especially as also the other agents' like investors' behavior may have an important function. Sometimes in the

"new-IO" behavior is modelled as an independent component as we will later see. Anyway, industry could be described as a "playfield" of various firms where they compete and consider takeovers; the structure and conduct then lead to the performance of the industry. The macro conditions give the motivation and restrictions for takeovers. However, behavior or conduct is so strongly influenced by the structural factors that it may be described as a result of the structure as in the traditional model. Nevertheless, what we observe in reality is not any separate explicitly observable behavior. We can see only the results of conduct as the external manifestations of managers' private aspirations.

According to the preceding consideration the best way to model the market for corporate control is to use the SCP framework as the cornerstone. The figure (8) shows the simple framework for analyzing markets for corporate control. The structure of the industry, capital markets and the institutional factors lead to macro conduct in stock markets and to managers micro behavior, which includes the managers' objectives like value maximization. Macro and micro activity lead to performance of the market, which shows if the shareholder wealth is maximized or how the management efficiency is affected by mergers. Furthermore, the performance will again influence the behavior. Next we will go through the framework and see how it fits to the analysis of takeovers, takeover barriers and especially managerial behavior. Due to the one industry nature of this model and the purpose of the study, this analysis concentrates to horizontal mergers. This simplification makes it easier to find the relevant factors that influence the managerial behavior and to see how this framework fits into the more general model of the whole economy. It would be beneficial to develop a general equilibrium model that includes the efficiency effects of corporate control in a global economy, but it is a large topic as such and it cannot be treated in this text.

## **2.5 Market Structure**

The structure of the market for corporate control consists of three parts, general structure, capital market conditions and institutional factors. Each of these will be briefly described in the following sections. These structural conditions provide the



## 8 Applied SCP Framework for Takeover Market Analysis

reasons for both friendly and hostile takeovers. All reasons for takeovers like the ones described in part 2.3 could be incorporated into these groups; for example market power is part of general structure, agency problems are part of capital markets and taxation arguments are part of institutional factors.

### 2.5.1 General Industry Structure

Industry is formed by firms, which produce competing products i.e. their products are close substitutes. In many cases it is difficult to define some specific market or the boundaries of an industry, but here we will abstract from this kind of problems. As a simplification we assume that firms in the market produce only one product, they all are joint stock companies of which the shares are traded at the stock market and that same rules are being applied to all firms.

The form of competition and industry concentration are probably the most important factors of market structure, at least when we think of product markets. But in order to expand the scope of this analysis to market for corporate control, we must consider other factors as well. The level of concentration can be measured at least by the market share of few biggest companies  $\sum s_i$ , the entropy index  $\sum s_i \ln s_i$  or by the Herfindahl index<sup>57</sup>.

$$(6) \quad H = \sum_{i=1}^n s_i^2, \quad i=1, \dots, n$$

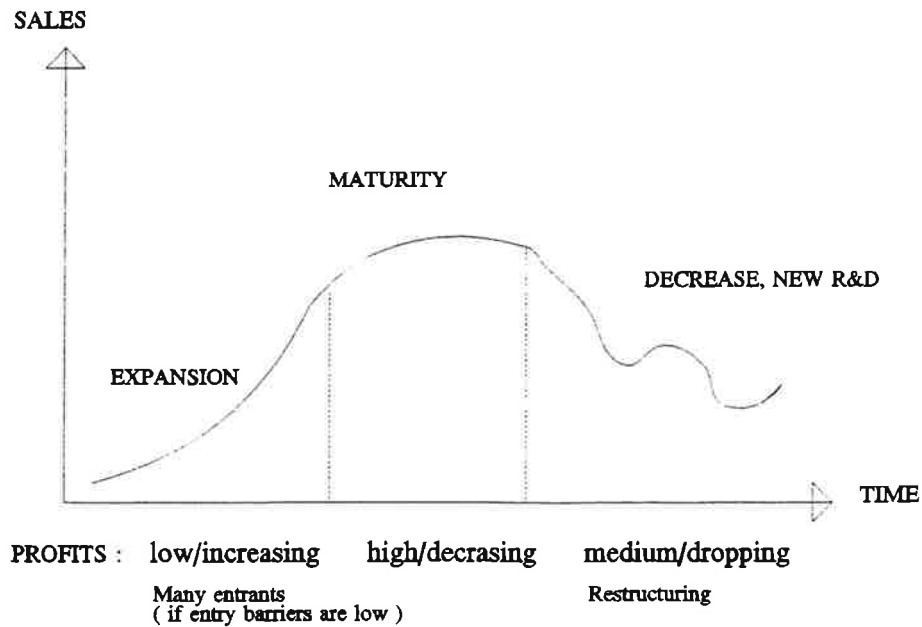
Where  $s_i$  is the market share of the  $i$ :s firm when  $i = 1, \dots, n$ .

The level of supply and therefore the number of firms is highly correlated with the demand conditions and especially expectations about future influence the determination of industry structure. In this analysis a product life cycle approach can give useful information of future prospects (see figure 9)<sup>58</sup>. When markets are expanding there probably are many entrants and firms are growing internally, but when the product market matures the competition may become harder and firms can think of takeover as a strategic option. Consequently the danger of reduction in competition is greater in mature or declining industries than in growing ones. The timing and importance of the strategic mergers vary naturally between industries, but this life cycle evaluation can help to diagnose also the market for corporate control.

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<sup>57</sup> Tirole, p. 221

<sup>58</sup> see for example Copeland et al., p. 8



## 9 Product Life Cycle

Technological level, variation between firms and new R&D may threaten some firms and this has also implications to the takeover situation. One reason for merger may be that a bigger "oldfashioned" firm acquires a smaller firm that holds new technology and especially intangible human capital which may be firm specific or of general purpose. One possibility for additional gains from combinations originates from the large R&D projects, it may be that only big firms have the resources to undertake some expensive and risky research programmes.

Assets like human capital are often specific to one industry or firm and this can also give reason to merge, if company holds a larger and diverse stock of specific assets than competitors it can seize more of Nature's opportunities<sup>59</sup>. These specific assets may provide a reason for international mergers; a firm planning to internationalize may also consider acquisition as the best way of entering a foreign market as they may get an access to a stock of valuable information<sup>60</sup>. Unfortunately these hypotheses are quite difficult to verify empirically.

Anyway, internationalization of some firms forces the others adapt to this. It may

<sup>59</sup> Caves (1991), p. 140

<sup>60</sup> Caves (1982) p. 82

well be that all firms have to internationalize or international competition leads to combinations in order to find more efficiency and market power. Therefore, the level of international competition is one of the major structural characteristics of the market for corporate control, as it is in the commodity markets. Increasing pressure from foreign competitors, especially if they are large and efficient ones, forces the domestic firms to adapt their strategies and to seek expansion, often through mergers. Trade policy may in this way have strong influence on markets for corporate control and this should be noticed while planning and implementing national or common market trade policies. Although it is questionable why firms should await for threat of more competition before merging if mergers increase their efficiency.

The other important general industry structure factors include mainly factors that influence takeover activity and therefore force managers consider the possibility of reorganization. Monopoly theory has identified scale advantage as one of the major reasons leading to concentration and even to natural monopoly. Thus, increasing scale provides one reason for mergers and acquisitions and these lead to increased efficiency by utilizing the scale advantage. If there are significant differences between industries it may explain some of the irregular nature of takeovers within the separate industries. Moreover, if scale advantage is diminished, it may be that conglomerates do not have any advantages over smaller firms and this makes them vulnerable to "bust up" takeovers, i.e. scale reasoning may cause takeovers in many ways<sup>61</sup>. In any case, significant efficiency variation between industrialized countries indicates need for some sort of restructuring and development, sometimes through mergers and acquisitions. Furthermore, a change in demand or cost conditions may expose all competitors to new payoffs attainable through international acquisition<sup>62</sup>.

### 2.5.2 Capital Markets

The second part of the market structure consists of the capital markets, many of

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<sup>61</sup> Copeland et al. pp. 14-17 discusses some diseconomies of scale implications

<sup>62</sup> Caves (1991), p. 137

the relevant features were already discussed in the earlier parts reviewing theories of firm's value and financial structure. As was shown, the financial structure of a firm may have far reaching consequences. Here we will briefly summarize some of the most important theories and empirical findings. Capital market conditions provide other reasons for takeovers as a comparison of investment possibilities can show a takeover to be preferable to internal expansion. A firm needing more assets may consider buying a cheaply valued firm which has the needed assets instead of buying the assets from their own market. If the firms market value is for example only 60% of the assets replacement value, the acquiring firm can pay even 50% takeover premium and still pay only 90% of the assets market value. The relation between the market value of the firm and the replacement cost of its tangible assets is called Tobin's q. It may also reflect the monopoly power and expectations about the future<sup>63</sup>.

$$(7) \quad \text{Tobin's } q = \frac{\text{Firms Market Value}}{\text{Replacement Value of the Assets}}$$

Furthermore, some studies<sup>64</sup> have noticed that the insider (managers) ownership influences the Tobin's q values and consequently the value of the firm. The relationship in the USA has generally been positive as the insider ownership rises to 40-50% and then it slopes slightly downwards, see figure (10).

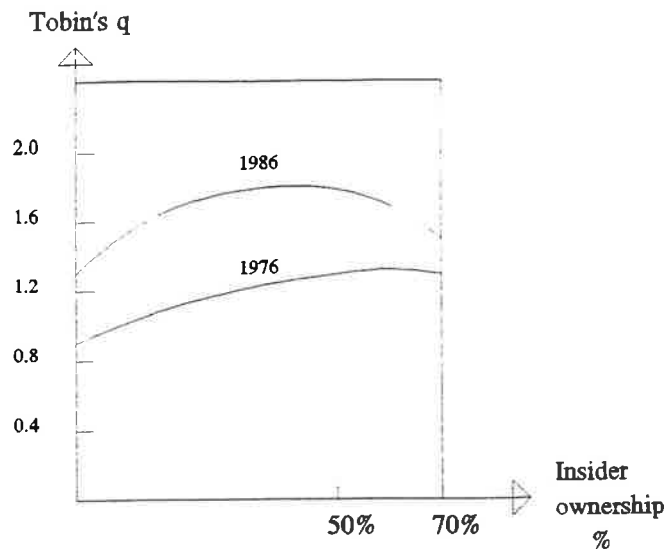
The relation between firm's value and the structure of the share ownership shows again that the financial structure of the firm is important and that managers' incentives to maximize value are better in firms where they have a big stake but there still is also an outside pressure. Perhaps the optimal situation is attained when the manager has a substantial share, but there still exists at least one active outsider shareholder with even higher share, although not too high. When the inside ownership exceeds 50% there is naturally no fear of hostile takeover, and the managers may more freely exploit the remaining outside shareholders. Interestingly this is the case in the USA where takeovers are thought to be fairly common, the control is still presumably failing and markets pay a premium on

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<sup>63</sup> Lindenberg & Ross (1981)

<sup>64</sup> see McConnell & Servaes (1990) for US evidence





10 Insider Ownership and Tobin's q, McConnell & Servaes, p. 604

strong ownership.

Furthermore, sometimes a founder of a firm who remains as the owner-manager with controlling ownership share may prove to be inflexible in the long run and even ruin the firm. For example the senior Ford, founder of the Ford Motor Company, has been said to been highly inefficient and he survived as the manager only because it was his company<sup>65</sup>. Thus it is possible that the owner-manager obtains much of the utility from managing the company with his/her own ways, which may be inefficient and harmful. Although the private utility of the owner-manager may be maximized, the public welfare is most certainly not maximized due to inefficiencies. The implications is same as from the above Tobin's q reasoning, too high concentration level of ownership may be detrimental and depress the value of the firm. The advantages of scattered ownership then again make the internal monitoring more difficult and may require more external control like hostile takeovers.

It has been argued, that sometimes markets may value the firm wrongly and this leads to takeover mania which can ruin long run planning and force managers to

<sup>65</sup> Demsetz, p. 383

concentrate on short term profits<sup>66</sup> and that takeovers may fail identifying poorly performing firms. But this is hardly a serious problem for well-run firms, because even if markets have difficulties estimating the future cash flows and value of some investments, the divergence from the true value is hardly large enough to cause a takeover mania. Firms that are making investments with clearly negative expected net present value are more likely to be acquired and the available resources are allocated in a more efficient way. However, asymmetric information between potential acquirer and the incumbent management of the firm's long term value maximizing strategy may sometimes lead to wrong conclusions about the firm's performance and correct management<sup>67</sup>. Problems can arise especially when the question is about smaller and less known firms in less efficient markets. Then there is a risk that market's estimate of the value is wrong, but here it is assumed for convenience that these deviations are insignificant. Furthermore, Jensen (1989) provided a survey of evidence against the theory of myopic markets in the USA. However, this is still an controversial issue and there are also studies that support the view that markets or/and investors are short-termed<sup>68</sup>. This leads to the discussion about market efficiency, which is an important ingredient to the capital market conditions. Big and efficient markets obviously give better foundations also for the market for corporate control as the concern of concentration and false pricing of equity diminish together with increasing liquidity.

Tobin argued<sup>69</sup> that  $q$  value could be used as a signal for future investment opportunities. High  $q$  value signals for high future investments and hence an upswing in the whole economy. In this way the rate of investment is a function of the  $q$  which converges towards unity and the value of marginal  $q$  is important for investment decisions. Problems arise because the value of marginal  $q$  is difficult to

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<sup>66</sup> Milgrom & Roberts, p. 471, this was already addressed in the part 2.2.1

<sup>67</sup> If raiders do not understand that a firm is using (for example) learning curve pricing, which requires higher production and lower prices than is optimal in the short-term, they may think that the firm is not maximizing profits.

<sup>68</sup> Scherer (1988) provides a short discussion

<sup>69</sup> This is discussed by Virkkunen, p. 82.

observe<sup>70</sup>. This investment view has some difficult implications, high investments and profit expectations can lead to increased merger activity, but low q value may also attract acquirers. This dilemma might be solved by assuming that it is the overall level of Tobin's q values that affects the future expectations and general merger activity and industry or firm specific q values that imply industry specific takeover activity. If the overall level of q values is low and flat, then there may not be any incentive for acquisitions. This reflects partly the view by Tobin and Brainard (1977), that q is a nexus between financial markets and markets for goods and services.

Uncertainties in the capital markets naturally affect the investment and takeover decisions of companies and other investors. Volatile interest rates make the capital budgeting more difficult and future contingencies unpredictable. Unpredictable exchange rates may reduce the lucrativity of international operations and therefore diminish the number of multinational acquisitions. Consequently the level of uncertainty may have tremendous impact also on the market for corporate control.

Mergers originating from the agency problem can obviously also be included under the group of capital market conditions. Activity of ownership and concentration of voting power are additional feature in the market for corporate control, this has already been discussed and will be further studied and it is only mentioned here to make the list complete. Finally the financial market regulation (public policy and self regulatory) has to be considered as a major element of the market structure, especially as it may contribute to the significant differences between nations.

### 2.5.3 Institutional Factors

The group of institutional factors could be described as containing all the other relevant factors mainly relating to different policies and history bound factors like culture. Governments have always had a strong say to takeovers and government influence together with other institutional factors are the third part of the market structure in this framework. Like entry and exit barriers in commodity market

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<sup>70</sup> Hayashi, p. 214

competition, the barriers in the takeover markets may have serious negative effects to the efficiency and resource allocation. These barriers include things that were already listed in the introductory chapter (table 1) and are to be studied more thoroughly in the following chapter of European markets. If the barriers are effective enough, there is no real takeover threat to be taken seriously and the pressure on inefficient managers is relieved. The next chapter deals with one potential barrier which has also other implications to the market for corporate control, namely EC and other major European competition and merger policies. The national and international tax policies have also strong influence on corporate takeovers and this effect has sometimes caused surprises for misinformed governments. Trade policy was already mentioned together with general structure as part of the internationalization process, it is also influential factor and it will be shortly commented in the fifth chapter.

Also culturally bound or psychological factors like importance of family firms have their implications, which often are hard to define more accurately. Other factors like the power of trade unions were listed in the introductory chapter and they are a matter of empirical study and it is impossible to make here a complete list of all these various factors.

#### 2.5.4 Industry Classification

When EC commission carried out a research about horizontal mergers<sup>71</sup>, they identified four main indicators for potential efficiency creation and for danger of reduction in competition in mergers. These indicators were demand growth, import penetration, economies of scale and technological content. This study from 1989 used then these factors to classify the industries by two characteristics, the first feature is the danger of reduction of competition through merger and the second is the possibility of efficiency gains in mergers. In this way industries can be classified into four groups as in figure (11). A noteworthy feature in this model is that efficiency gains are assumed to generate only from economies of scale, effects on managerial efficiency are neglected.

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<sup>71</sup> European economy

		POTENTIAL EFFICIENCY GAINS (high technology content and scale gains)	
		SLIGHT	CONSIDERABLE
DANGER OF REDUCTION IN COMPETITION (weak demand growth & import penetration )	CONSIDERABLE	<b>GROUP 1</b> Insignificant/no efficiency gains from mergers and danger of re- duction of competition ==> case for tight merger control	<b>GROUP 3</b> Mergers are likely to produce efficiency gains and present a danger of reduction in com- petition
	SLIGHT	<b>GROUP 2</b> Little/no prospects of efficiency gains but no danger of reduction of competition	<b>GROUP 4</b> Mergers can produce efficiency gains but there is no danger of reduction of competition --> mergers are beneficial

## 11 Industry classification ( European Economy pp. 24-27 )

From this viewpoint only the industries within group 1 should be under tight merger control. Mergers in the other groups may produce gains and takeovers especially in group 4 could be even promoted. Anyway, while implementing the competition policy one should take care of the workable control also in group 1. If takeovers are forbidden then there should be some other replacing disciplinary mechanisms like more active ownership supported by government.

## 2.6 Conduct and Behavior

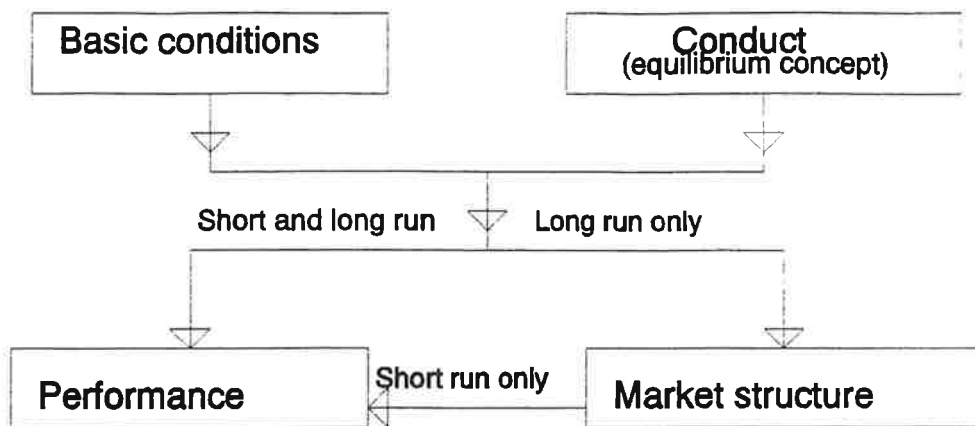
### 2.6.1 Traditional Model of Conduct

Traditional IO-theory did not have any formal model for business conduct and the research work was empirically oriented, but after the "mathematical revolution" the game theoretical models became popular<sup>72</sup>. Now it is customary to assume that the conduct in the oligopolistically competitive market leads to some equilibrium like Nash-Cournot or Stackelberg. Thus, in these models the conduct

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<sup>72</sup> Davies & Lyons, introductory chapter provides a short discussion on this development of mainstream industrial organization theory.

is seen as an equilibrium concept. This equilibrium then determines the structure, performance and the strategic reactions to competitors decisions, figure (12).



12 " New " Structure Conduct Performance Paradigm, from Davies & Lyons p.7

This model has many advantages, but it cannot be applied to the present study of markets for corporate control. These markets do not have a standard product and the volume and complexity of acquiring and selling firms is totally different from the commodity markets, even if the law of demand and supply works here too. Therefore, conduct has to be modelled with more loosely defined relations even if mathematical formulation concerning especially the macro conduct could provide more insight into this subject.

### 2.6.2 Conduct in Applied Model

The present applied model separates the (macro) conduct and (micro) behavior. Macro conduct reflects the industry wide conditions and the stock markets, changes in the structure lead to some conduct which is common to the whole industry. The objectives and managerial side are defined as micro behavior of the takeover market, where managers own utility and interests can have important implications. The line between these micro and macro sides is quite thin. Empirically this separation is reflected by the fact that macro variables can be measured with some accuracy but the micro side is more difficult to handle. No manager is likely to confess that he/she is trying to increase the firm's monopoly power and gain more fame and salary by takeovers. Another difference comes from the individual characteristics of each firm in the industry, since every firm has

its own culture but the market mechanism at the macro level treats all firms in the same way by putting them under competition and control by the markets, which then leads to some equilibrium.

### 2.6.3 Macro Conduct

The conduct consists mainly of stock market implications, although the long run effects from the more efficient management and control should be reflected in the commodity market. The volume of mergers and acquisitions divided by the corresponding total market variable gives a picture of the importance of the takeover market. The measurement can be conducted in many ways, three examples of different methods are ; i) the number of the acquired firms in relation to all firms in the industry; ii) the stock market value of the acquired firms in relation to the total value of all firms; iii) the production volume of the target firms in relation to the whole industry's production. The stock market index is probably the most correct one because it takes into account the size differences between the firms and it is presumably more reliably measurable than the others. This index

$$(8) \quad \text{Stock Market Index} = \frac{\text{Market Value of the Acquired Firms}_t}{\text{Total Industry Market Value}_t}$$

may reflect many market features like inefficient management, speculative attack, market inefficiencies or changes in antitrust policies. However, it is laborious to find reliable and continuous statistics about the takeovers in Europe and in the fourth chapter it is shown how a close version of this ratio has been calculated from UK data which is more easily obtainable.

The buyer cannot usually acquire the target firm at the normal market price, typically the acquirer has to pay a takeover premium. A simple explanation for this premium is that there is excess demand for the firm's share due to this acquisition. As the "true" value of the stock may not be known with accuracy, the price rises

$$(9) \quad 0 \leq \text{Premium} \leq \frac{\text{Expected Value} - \text{Market Value}}{\text{Market Value}} * 100$$

due to this excess demand. A more fundamental cause is that the firm is undervalued due to bad management or market inefficiencies, and the acquirer can increase this value. Therefore, the acquirer is willing to pay more than the market value and there are some sellers that realize this possibility to gain from this acquisition. In some cases this can be referred to the free rider problem. Markets and acquirers' expectations set the limits for the takeover premium. The lower bound for the premium is naturally zero, this is the case if the acquirer can purchase the firm's stocks at the market price without paying a premium. The upper bound varies with the acquirer's future expectations about the firm's profitability, high expectations imply that the acquirer is willing to pay a high premium. The ultimate premium depends on the negotiation positions of the acquirer and the sellers and it is affected by many factors like seller concentration and competing acquirers. Sometimes the premium seems to have been much higher than the potential gains would have ex post justified, which may be a result of "winners curse" as the winner of the bid pays the highest price due to erroneous expectations.

If markets were functioning efficiently and all parties had perfect information and same future expectations, this conduct could be described as an equilibrium. In equilibrium all possible profit opportunities by mergers would have been realized and takeover premiums would be as high as expectations allow, in other words inefficient management would always be replaced by more efficient one and the control mechanism would be "perfect". If a perfect control mechanism existed, managers would realize that a deviation from profit maximization would always lead to punishment, and consequently they would do their best not to diverge from the optimal strategy. But this is not what we observe in reality, information is far from perfect and markets in this respect do not seem always to be efficient. This can result simply from government regulation which makes the process much slower and costly, but government regulations are not the only things that matter. One influential factor is the valuation method which the agents utilize in the takeover process. Nevertheless, if the markets for corporate control functioned perfectly, the number of takeovers due to agency problems might be quite low because the takeover threat could have ex ante prevented deviations from value



maximization. Therefore, a high level of hostile takeovers may imply also that there exists a number of imperfections in the market for corporate control.

Takeovers are also costly projects to implement, launching a takeover bid is often expensive. Furthermore, lawyers and other advisors like banks etc. are valuable allies but they also incur high costs. The availability and use of various sources of finance may also have an impact on the performance. Moreover, these direct costs are not the only costs as there may exist some indirect costs from breach of trust etc. These costs imply that the takeover process must be carried out with clear picture of the costs and benefits of such operations; the failure of many mergers may imply that the expectations have been erroneous.

#### 2.6.4 Micro Behavior

At micro level managers behavior and conflicts between different stakeholder groups form the relevant basis for the analysis. Efficient allocation of resources requires that the firms act to their owners' benefit. The most important stakeholder groups in this respect are managers, shareholders and bondholders. Bondholders and other outside financiers may have strong influence on firm's decisions, in many European countries especially banks are very strong powers in decision making. This aspect will be considered in the chapter about European Markets for Corporate Control, but here we will concentrate mainly on managers, shareholders and conflicts between them<sup>73</sup>. Also the theory of managerial behavior is extended in the fifth chapter.

The genesis of the stockholder-manager conflicts lies in the value maximization. As it was demonstrated in the beginning of this chapter, managers should maximize the net present value of the firm's future cash flows and accept only those projects which have positive NPV. Because of moral hazard problems, different

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<sup>73</sup> One of the first studies on this subject, Berle & Means, p. 333, say that it is tradition that a corporation should be run for the benefits of its owners, but the separation of ownership and control change the situation.

time horizons and sometimes due to pressure<sup>74</sup> from environment this maximization is often only a distant objective or an approximation in economic theories<sup>75</sup>. Therefore, it is always important to see how managers serve the shareholders interests. Shareholders may have monitoring systems, but these incur agency costs as was discussed in the previous chapter. The unobservability of managers effort causes problems to shareholders who do not know how the management runs the firm, the only fairly reliable data is provided by the financial statements which have a very important information role. However, the art of "creative bookkeeping" may dampen the validity of these statements.

Managers are also prone to make manager-specific investments that make it expensive for shareholders to replace them<sup>76</sup>. By making such investments managers can obtain more freedom and extract higher wages and perks, although it is quite natural for managers to do what they know best. The obtainability of information of such operations is a real problem to the principals. Board members may obtain more information than an average shareholder, but their role is also often very restricted and they face the moral hazard too as they may gain perks. It is often forgotten that there may be nobody who controls the controllers. Board members may gain perquisites as well as the managers.

Shareholders can try to form groups to promote their interests, or an outsider can challenge the management to proxy contest<sup>77</sup>. Anyway, management attitudes, compensation system, monitoring, implicit contracts, disclosure regulation etc. have important influence on the strategies the management follows. Managers

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<sup>74</sup> This pressure may come from government wanting to restrict "socially undesirable" projects or natural resource exploitation, unions protecting the employee interest against the employer interests, civic movements against "morally dangerous" products (like violent movies or spirit) etc.

<sup>75</sup> There is also theoretical criticism, behavioral theory of the firm says that firms are not maximizers, but simply "satisfiers". For example Cyert & March

<sup>76</sup> Shleifer & Vishny (1989)

<sup>77</sup> Proxy contest means competition of the votes in shareholder meeting, this is discussed more thoroughly in the chapter of European corporate control.

may also have possibilities to make acquisition more difficult, unprofitable or even impossible. Antitakeover amendment like "Poison pills", divestiture of "crown jewels" and many other forms of defence<sup>78</sup> can weaken the takeover market based control, lead to unprofitable actions by the target firm's management and harm the reputation of hostile takeovers in the eyes of public and policy makers. Sometimes the "trustworthiness" of the firm may be seriously damaged and employees may become inefficient or even leave the firm. Furthermore, the breach of trust may diminish the incentive to make long-term investments if implicit contracts are not sustainable. Employees may refuse to invest in firm specific capital which may be worthless in other companies. In a way this may create a loose trade-off between the managerial discipline and investment incentive in addition to the effects on competition. Furthermore, if implicit contracts are not feasible, then the value of the firm's operating real options is lower due to diminished managerial flexibility and this may be reflected by the firm's market value.

Managerial behavior has important implications also from the takeover motive perspective. Those who decide of takeovers are often managers, although shareholders may have formally the decision right. Managers may only wish to increase their power and prestige by takeover without any real gains from it as often in the hubris phenomena. It is often easy to argue, that the firm needs to diversify or that there are some synergic benefits. As we will later see, acquisitions have failed often and there is little doubt that the projected benefits have not been realized, or the takeover price has been simply too high<sup>79</sup>.

If the takeover is not hostile, the managers of the acquirer and the target company may have deals concerning the merger and their future, compensation payments

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<sup>78</sup> see Copeland & Weston p. 736

<sup>79</sup> Too high price is often a result of the "winner's curse". In an auction situation the highest bidder wins but the price may be far too high in relation to the actual value of the target, other bidders may know this and therefore they stop bidding when the price exceeds their expectations.

etc , which can have serious effects on the performance of the takeover<sup>80</sup>. Another behavioral aspect about takeovers is that they might also force managers to be short-termed. A reason for this could be for example short-sighted markets (investors), see earlier discussion in 2.2.1. Takeovers are also sometimes accused of breaking the implicit contracts between shareholders and different stakeholders. The suspicion may lead to increased costs and some mergers especially in human capital intensive industries (e.g. high technology) may fail because the employees leave the company after the merger. This problem is probably most relevant in industries where intangible capital forms most of the firm's assets and less acute in other industries. However, Brown and Medoff (1988) found that employees do not generally loose so much in mergers of small and medium sized firms in the USA, although many former employees of acquired firms felt that they had lost their trust to firms and implicit contracts.

## 2.7 Performance

### 2.7.1 Traditional Model of Performance

In the traditional IO-theory the business conduct leads finally to industry's performance. The performance means the efficiency and profitability of the industry, but also the R&D investments and things like equality (see figure 4). It is possible to formalize some of the relations mathematically and this is useful in the further analysis of the corporate control. The next presentation is made fairly short but we can still draw some interesting conclusions from it.

The firm in question is assumed to be profit maximizing one with profit function

$$(10) \quad \text{Profits} = \Pi_i = P(Q) * q_i - c_i(q_i)$$

Where  $P(Q)$  is the inverse demand function, i.e. it is assumed that the firms compete in quantities and there is an auctioneer who sets the price so that

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<sup>80</sup> Although an recent study by Healy et al. (1992) shows that strategic (friendly) takeovers outperform financial (hostile) takeovers in the USA.

markets clear<sup>81</sup>. Firms revenues and costs are also functions of the firm's own production,  $q_i$ .

If the standard assumption of profit maximization is made, then we have the following equations where equation (11) shows the first order conditions for profit maximization.

$$\begin{aligned} \max \Pi_i &= P(Q)q_i - c(q_i) \Rightarrow \frac{\partial \Pi_i}{\partial q_i} = P(Q) + q_i P'(Q)(1 + \gamma_i) - c'(q_i) = 0 \\ (11) \quad (\text{where } 1 + \gamma_i &= \frac{dQ}{dq_i}) \Rightarrow P(Q)[1 + \frac{q_i P'(Q)Q}{P(Q)}(1 + \gamma_i)] - c'(q_i) = 0 \\ \text{define } s_i &= \frac{q_i}{Q}, \epsilon = -\frac{dQ * P}{dP * Q} \Rightarrow P[1 - \frac{s_i}{\epsilon}(1 + \gamma_i)] - c'_i = 0 \end{aligned}$$

Where  $\epsilon$  = price elasticity of demand and  $c'$  is the marginal cost.

One way to measure monopoly power is to use the so called Lerner index<sup>82</sup>, which can also be found within the last parenthesis in equation (11).

$$(12) \quad \text{Lerner index: } L_i = \frac{P - c'_i}{P} = \frac{s_i}{\epsilon}(1 + \gamma_i)$$

Lerner index for the whole industry can be calculated as market share weighted average as in equation (13)

$$\begin{aligned} (13) \quad L &= \sum_{i=1}^n s_i L_i = \frac{\sum s_i^2}{\epsilon} * (1 + \gamma_i), \text{ Cournot assumption: } \gamma_i = 0 \\ &\Rightarrow L = \sum_i s_i L_i = \frac{H}{\epsilon} \end{aligned}$$

Where H is the Herfindahl index  $\sum s_i^2$ .

Another more practical way to calculate the Lerner index for industry is equation

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<sup>81</sup> This auctioneer assumption is not very satisfying because we do not usually observe such an person. However, good alternatives are rare (price competition has problems too) and the assumption is a useful approximation of real world.

<sup>82</sup> Named after famous economist Abba P. Lerner

(14)

$$(14) \quad L = \sum_i s_i L_i = \sum_i \frac{q_i P - c'_i}{Q} = \frac{\sum_i q_i P - \sum_i q_i c'_i}{QP} = \frac{QP - \sum_i q_i c'_i}{QP} \\ = \frac{\text{Industry Revenues} - \sum \text{Costs}}{\text{Industry Revenues}} = \frac{\text{Profits}}{\text{Revenues}}, \text{ if } c' = c$$

The assumption that  $c' = c$  means that there exists constant returns to scale. This holds for example if there is a minimum efficient scale (MES) and all firms are operating beyond that point.

Then we have the relation between these variables, and by setting (13) and (14) equal we can see that concentration effects profits by increasing monopoly power.

$$(15) \quad \frac{\text{Total Profits}}{\text{Total Revenues}} = \frac{H}{\epsilon}$$

This means that profits are a function of concentration (H-index), but the causality is not that clear<sup>83</sup>. It may well be that there are some other factors that influence profits and concentration and these are determined simultaneously;  $H = f(X_1, \dots, X_n)$  and  $\text{Profits} = g(X_1, \dots, X_n)$ . The above model assumes also profit maximization, which may not be the case as we know. As this is an interesting and important subject in IO, there are several studies of this subject. Some of the studies have been conducted in the following form in the industry level<sup>84</sup> (equation 16), where  $C$  is industry concentration,  $S_i$  the firm's market share,  $\alpha$ ,  $\beta$  and  $\gamma$  are the coefficients and  $\epsilon$  is the error term.

$$(16) \quad \Pi_i = \alpha + \beta * C + \gamma * S_i + \epsilon_i$$

It has been found that  $\beta$  is often close to zero and  $\gamma$  is usually significant, i.e. it may be the market share that influences profitability more than the overall level of concentration. The other factors  $X_i$  may also be important but this is still a

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<sup>83</sup> de Jong & Shepherd (eds.), p. 24

<sup>84</sup> Davies & Lyons, p. 178

controversial issue. Anyway, these factors are often difficult to define and the relation between concentration and profits provides a satisfactory approximation. This implies that in some mergers the concentration or increased market share may lead to increased profitability and the created value comes from this and not from efficiency improvements. However, this does not generally apply to vertical or conglomerate mergers.

### 2.7.2 Performance in the Applied Model

In the applied SCP framework performance indicates profitability of the acquisition to both parties, value creation through the acquisition, succeeding objectives measured by indices like Profits/ $\Delta$ Turnover and golden parachutes<sup>85</sup>. The performance is a result of an ongoing game, structure gives the basis for play which follows the manuscript by managers and other stakeholders, and this leads to performance and new structure. In game theoretical terms the a priori structure or change in the structure leads to some posterior performance which forms the new basis for future a priori structure and a new game.

Probably the most important outcome from the perspective of this study is how managerial efficiency and objectives are affected by the structure and behavioral aspects of the takeover market. The structure of the markets for corporate control may be the most important factor determining if managers are as efficient as it is preferable from the welfare viewpoint. The implication of this is that there may be ways of improving the efficiency by altering some of the basic determinants of the takeover market structure. One way to study the effects is to see how the "management turnover" has developed and what have been the reasons for these dismissals. Obviously the policymakers have to consider these aspects from many viewpoints as they formulate competition or related policies.

This model could also be used to study the reasons of merger waves, which are discussed in the fourth chapter. One observation is that when firms are planning their corporate strategies, they have to consider also these takeover aspects, and

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<sup>85</sup> Golden parachute is the compensation that the manager gets when he/she is replaced by a new manager and has to look for a new job or retire.

the takeover market structure analysis may be inevitable. It seems that many firms have neglected the takeover market evaluation and this in part is reflected also in the literature concerning corporate strategy<sup>86</sup>.

The performance is also partly reflected in other things like employment and distribution of wealth and power between different stakeholders, but the connection is not that obvious. These other factors belong more to the general industry model like the traditional SCP, although these models then should consider also corporate control issues. However, one major implication of the performance is the impact on the feasibility of implicit contracts.

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<sup>86</sup> As an example M.E. Porter has almost totally disregarded takeovers in his well known book *Competitive Advantage* (1985). However, there are books like the one from Copeland et al. which have taken serious interest of these factors.



### 3 EUROPEAN COMMUNITY COMPETITION POLICY AND THE LEGAL FRAMEWORK

" This brings me to the matter of acquisitions and mergers. There is little point in the Commission's efforts to dismantle impediments to competition and trade if businesses built new ones. The 1992 programme is markedly pro-competitive but some mergers and acquisitions may be anti-competitive. In order to avoid having less choice, narrowed diversity and reduced competition, we have to be able to permit mergers that strengthen industry without damaging competition, but prevent mergers which diminish effective choice in a damaging way<sup>87</sup>. "

This chapter covers the EC competition law, regulations concerning tender offers and the competition policy in general. The enforcement system and political background are also introduced when it is seen important to this study. All EC member states have a competition policy of their own, but their scope and objectives are different. However, some of the major nations own regulations can have significant influence on mergers in Europe. Therefore most important ones of these national regulations are also studied. Lastly a short summary of the main characteristics and implications of the policies will be presented.

#### 3.1 Competition Policy of the European Communities

##### 3.1.1 Introduction to Competition Policy

Real world markets are usually far from perfect competition due to various reasons like increasing scale or entry barriers. The lack of competition may in some cases lead to inefficiencies and welfare losses. Therefore, many governments have seen it necessary to control and promote competition. Authorities' responsibility is to see that static competition within industries is workable, but that industry dynamics is not severely damaged by the diminished flexibility<sup>88</sup>. Formulation of a workable competition policy was also one of the major issues when the planning of the European Community was started. Subsequently the competition policy is one of the most important areas covered by EC treaties. The law is international by

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<sup>87</sup> Jacobs & Steward-Clark, foreword by Sir Leon Brittan, p. 9

<sup>88</sup> See for example Comanor et al. (Ordover), pp. 7 - 39

its nature and it is primarily based on articles 85 and 86 of the Treaty of Rome<sup>89</sup> 1957. These articles ensure that private firms do not take anti-competitive actions and do not restrict trade between member states. The main authority, Commission, is not in principle against mergers, they acknowledge that there may be some positive effects like corporate control<sup>90</sup>. However, it may well be that this view is not truly reflected in the real policy decisions.

The main principle of the EC Competition Law is the principle of prohibition, simply put, everything "anticompetitive" under the articles is prohibited if not specially approved. The other important principle, which has been used also in many Nordic countries like Finland, is the principle of abuse which typically approves everything if not specially prohibited. Furthermore, the EC Competition Law was originally founded on the principle of market dominance rather than market power<sup>91</sup>. Market dominance might be described as freedom from the restraints of competition or control over the business partners' operations.

Competition policy like trade policy is one of the areas of economic policy where pressure groups are important, political market and pressure from other countries and international organizations like GATT try to influence European Community's and national government's decision making. This makes the formulation of optimal and equal competition policy laborious.

Competition policy is concerned with a wide variety of economic activities and it has many goals to achieve. These goals can be roughly divided into two broad classes, namely preservation and improvement of dynamic and static competition. Static competition is classical competition without time-dimension and dynamic competition is concerned with the long-term economic progress (e.g. R&D etc.). These goals are pretty abstract and a more applicable set of goals is needed. Policymakers have to clearly define the goals that should be achieved by the policy

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<sup>89</sup> Boner & Krueger, 37

<sup>90</sup> Jacobs & Steward-Clark, foreword by Sir Leon Brittan, p. 10

<sup>91</sup> Boner & Krueger, p. 15

and the instruments are derived from these needs. The importance of these goals and the entire policy is changing with time, therefore it is hard to define an exact list of these objectives. One possible list of these goals is the following<sup>92</sup>.

- (1) The general interest criterion, very loose goal which emphasizes free entry
- (2) Diffusion of economic power
- (3) Promote consumer welfare
- (4) Making and keeping markets workable and competitive

In order to achieve these goals the authorities (EC Commission, governments etc.) can then employ many measures which include the following ones.

- the prevention of cartels and related activities
- the permission of cartels when they do not totally eliminate competition
- *promotion of concentration of weak and small firms to increase progress*
- dissolution of firms with dominant market positions which cannot be contested
- *an active merger policy, sometimes stimulating one*
- the promotion of factor mobility
- prevention of serious abusive behavior such as boycott or price discrimination
- *rationalization of industries with overcapacities*

This list is not an exhaustive one, but it shows some of the most important objectives including the ones that require effective markets for corporate control, which have been written in cursive. However, takeovers were not the original concerns of EC competition policy as it was legislated in the Treaty of Rome. The number of the objectives has expanded with the time, integration and economic progress. The most important articles concerning competition among the articles of Treaty of Rome were Articles 85 and 86.

### 3.1.2 Article 85 of the Treaty of Rome

Article 85 prohibits agreements and other practices affecting trade between

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<sup>92</sup> De Jong, Kilpailuviraston vuosikirja 1992, pp. 28 - 30

member states or other measures which restrict, prevent or distort competition within the common market. The article shows what is prohibited and what is specially approved. Undertaking is an interpretation from German term "unternehmen" and means a firm in general.

#### Article 85<sup>93</sup>

1. The following shall be prohibited as incompatible with the common market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which:

- (a) directly or indirectly fix purchase or selling prices or any other trading conditions;
- (b) limit or control production, markets, technical development or investment;
- (c) share markets or sources of supply;
- (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (e) make any conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

2. Any agreements or decisions prohibited pursuant to this Article shall be automatically void.

3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of;

- any agreement or category of agreements between undertakings;
- any decision or category of decisions by associations of undertakings;
- any concerted practice or category of concerted practices;

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers<sup>94</sup> a fair share of the resulting benefit, and which does not:

- (a) impose on the undertaking concerned restrictions which are not indispensable to the attainment of these objectives;
- (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

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<sup>93</sup> From Jacobs & Stewart-Clark, p. 111

<sup>94</sup> Consumer in this case means all end users

### 3.1.3 Article 86 of the Treaty of Rome

Article 86 prohibits the abuse of a dominant position of one or more firms within the common market which may affect the trade between member states. As Article 85 concerns conduct of many firms, cases of only one firm are under Article 86.

#### ARTICLE 86

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

- (a) directly or indirectly imposing unfair purchase or selling prices or unfair trading conditions;
- (b) limiting production, markets or technical development to the prejudice of consumers;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

The applicability of Article 86 demand four conditions to be filled: the firm must have a dominant position, it must be abusing the position, trade must be distorted and this must happen between member states. Consequently all actions within one country fall outside the scope of Article 86. Both Articles give some examples to help the system to deal with actions that are clearly against the law, other cases must be dealt case by case.

### 3.1.4 Merger Regulation

Article 85 gives few examples of cases in which the conduct can be approved, this shows that Commission has acknowledged some of the possible positive effects that concentration and cooperation might have. Originally these Articles were not meant to cover mergers or other changes in ownership<sup>95</sup>, but eventually Commission had to apply these Articles to mergers, too<sup>96</sup>. Increasing concern

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<sup>95</sup> Boner & Krueger, p. 38

<sup>96</sup> Article 85 was applied first in Rothman's case, now it covers even minority shareholdings in a competing firm. Article 86 has also been applied to mergers like

about mergers and competition forced Commission to consider new means of competition policy. Many attempts to introduce a new merger control failed because consensus among member states was not created and they had to be unanimous in order to enact a law. After the era of "euroschlerosis" it was possible to speed up the legislation and the Commission began to plan the new merger regulation. The current merger control regulation became effective in september 1990.

The new regulation has adopted many features from US and German antitrust legislation and is intended to restrict especially large mergers. Mergers and cooperative agreements have to be notified to the Commission if 1) annual world sales of the parties exceed 5 billion ECU, and 2) at least two of the merging parties have, between them, annual sales in EC of at least 250 million ECU, 3) unless a single member state accounts for more than two-thirds of the sales of each party concerned. After the notification Commission has four weeks to decide if it opens an investigation and another four weeks to decide if the merger is legal. The waiting period during which the parties cannot merge is at least three weeks. Commission can extend this period up to five months without a court decision, which is contrary to the US law. Furthermore, Commission has very wide power of investigation, and the European Court has ruled that the Commission has almost unlimited power to investigate suspected collusion<sup>97</sup>. All this gives also time to the target firm's management to react and it may create serious friction to takeover process.

The number of notifications and cases grew fast since the enforcement of Articles 85 and 86. The Commission noticed that it was necessary to give exemptions to speed up the process. Therefore Commission enacted so-called block exemptions which list the cases that need not to be notified<sup>98</sup>. These exemptions cover many types of cooperative agreement, although not mergers and acquisitions, but there

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in Continental Can case 1973

<sup>97</sup> Jacobs & Steward-Clark, p. 43

<sup>98</sup> Jacobs & Steward-Clark, p. 51

is still the Notice of Agreements of Minor Importance<sup>99</sup>. It declares that agreements between firms, which do not have more than 5% market share and the aggregate annual turnover of the parties does not exceed 250 million ECU fall outside the regulation. This means that small company dominated industries fall outside the Article 85, and because these often are closer to perfect competition, both the competition and control through takeovers are possible, if natural takeover barriers are not too high. Nevertheless, the Competition Law is still narrowed only to consider effects on competition within the common market, not the global competition which might call for larger mergers and stimulation of restructuring to be allowed to keep the European Industries strong. However, there is always the risk that government interference grows too strong and the market mechanism is disturbed too often as the Commission would be tempted into using competition policy as industrial strategy in international competition<sup>100</sup>.

If the parties are not satisfied with the Commissions decision, they can appeal to the European Court or to the Court of First Instance<sup>101</sup>, which can annul the decision. When national courts are uncertain about the interpretation of the Articles, they can refer to the European Court under Article 177, which is to help secure uniformity in the interpretation of the legislation.

As sir Leon Brittan, the former leader of the Community's competition policy, noted at the beginning quotation of this chapter, mergers may have positive effects and the competition policy should allow mergers that strengthen the industries without creating monopoly and reducing the consumer surplus. The decision whether allow or prohibit a merger requires economic analysis and the Commission has to take into account a broad range of considerations which

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<sup>99</sup> Jacobs & Steward-Clark, p. 143

<sup>100</sup> in Comanor et al. (George & Jacquemin) , p. 241

<sup>101</sup> Jacobs & Steward-Clark, 46 . Originally the European court had to handle all these cases by itself and it became evident that a new court was needed, and the Court of First Instance was established.

include at least the following<sup>102</sup> :

- market structure
- actual and potential competition from firms located both within and outside the EC area
- the market position and economic and financial power of the firms
- the opportunities available to suppliers and users
- access to supplies and markets
- barriers to entry
- supply and demand trends for the relevant goods and services ( life cycle )
- the development of technical and economic progress to the consumer's benefit provided that it does not create a barrier to entry

These criteria include even the threat of foreign competition, but it is questionable how many of these yardsticks are actually measured or applied in courts or in the Commission. Anyway, the law gives the possibility to rigorous analysis and the regulation will enlarge the powers of the Commission. This has been described both unnecessary and undesirable because national authorities are already able to control mergers, the Commission is overcrowded with other cases and merger control is likely to be a target for political lobbying.

### 3.1.5 Competition Policies in France, Germany and UK

Despite of the harmonization process in Europe most member states still have also their own competition policies. The national authorities can naturally apply national laws to cases beyond the reach of the EC legislation and exercise stricter policy if they wish. However, as it is the representatives of the member states who decide about the policies, there are many similarities between the EC legislation and the national laws. One major resemblance is the use of the concept of dominant market position as a basis for decisions.

The French competition policy dates back centuries, but most of the current legislation has been enacted on the second half of the 20th century<sup>103</sup>.

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<sup>102</sup> in Comanor et al. , (George & Jacquemin), p. 239

<sup>103</sup> Boner & Krueger, p. 32



However, merger control was quite liberal before 1977 when French government significantly amended the competition law. Prior to 1977 French government encouraged mergers as means of establishing large and more efficient firms. Consequently the current merger control is also rather permissive and mergers are judged according to their contribution to social welfare.

The German competition policy (antitrust law) is based on the 1957 Act Against Restraints on Competition<sup>104</sup>. The Act prohibits agreements which restrain competition, production, or market conditions with respect to trade in goods or commercial services. The Act has also been amended several times. The main principle has been the prevention of monopolies or dominant position. Creation of dominant position is generally illegal and legality is not reached through balancing competition and efficiency.

The UK competition policy originates from 1948, although the British common law has had certain antitrust regulations for centuries<sup>105</sup>. The British competition law has also been amended number of times. According to the Fair Trading Act passed in 1973, the five conditions which are particularly relevant to judging the legality of mergers are

- maintaining and promoting effective competition
- promoting the interests of consumers and other purchasers with respect to price,
- quality and variety of goods
- fostering cost reduction, the development of new products and the entry of new firms
- maintaining and encouraging a balanced regional distribution of employment
- promoting commerce in overseas markets

The UK competition policy is not generally more liberal than the respective ones in the Continental Europe. Furthermore, UK has a sophisticated system for takeover bid regulation, which is to be discussed in the next section 3.2.

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<sup>104</sup> Boner & Krueger, p. 28

<sup>105</sup> Boner & Krueger, p. 34

The national competition and corporate laws in the member states are naturally subjects to harmonization. However, it may well be that total harmonization is not desirable, and in any case it will still take many years to implement new rules.

### 3.2 European Tender Offer Regulation

As the competition policy responds to the challenge of commodity markets, tender offer regulation is an attempt to answer to the regulatory demand created by financial markets. Tender offers or takeover bids in the EC have been largely regulated independently by the member states and this has led the countries to adopt a system corresponding to their markets for corporate control and the general competition policy. A good example of these systems is the British "self regulatory" City Code, which has been quite workable<sup>106</sup>. In some countries like Germany and the Netherlands the regulation is much stricter and takeovers are more difficult to accomplish than in the UK, some countries allow differences in voting power and this helps to concentrate the power to the hands of a small groups like one family.

The latest and most important of the EC regulations concerning takeover bids is the Thirteenth Directive on Company Takeovers<sup>107</sup>. This directive together with the Fifth Corporate Directive concerning the structure of public limited companies and the powers and obligations of their organs are the most relevant ones in takeover bids. According to de Jong (1991) these directives were proposed because the Commission recognized the importance of hostile takeovers, the main

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<sup>106</sup> The City Code on Takeovers and Mergers and the Rules Governing Substantial Acquisitions of Shares. The Panel on Takeovers and Mergers. Discussed by de Jong (1991)

<sup>107</sup> Sillanpää, p.19. Proposal for a thirteenth council directive on company law concerning takeover and other general bids, first draft was made in 1987 and the proposal in 1989. The planning of this article included also a study by the UK Department of Trade and Industry 1989, which was cited in the table (1). The 1989 version had to be revised mainly due to pressure from UK and the final proposal was made in september 1990.

points of these directives are the following<sup>108</sup>:

- (1) The 13th Directive is aimed to create a free takeover market in the EC for stock exchange quoted firms
- (2) A public takeover bid may not be countered by issuing new shares or certificates of shares without the approval of the Assembly of Shareholders
- (3) Restrictions of votes per shareholder are prohibited and the number of shares held will become determining.
- (4) The General Assembly of Shareholders will be able to appoint and discharge the Board of Directors and this right cannot be void.
- (5) An acquisition of shares in a company above certain threshold (10%, 20%, 1/3, 50% and 2/3) must be publicly notified to the company and a acquisition of 33% requires an equal bid to all shareholders<sup>109</sup>.
- (6) Such a bid (see above) necessitates a bid publication, containing detailed information and a statement relating to the goals of the bidder, especially with respect to the management and the employees of the target company.
- (7) Every member state must create an authority securing the execution of the rules

These directives are part of the EC wide harmonization process extending to most areas of economic activity. In many cases this harmonization is beneficial and inevitable, but it may be that too fast harmonization in some areas leads to mayhem as other policies are not being harmonized with the same speed and national economies and firms have not had enough time to adjust. The break-down of the European Monetary System is a warning example of such a failure in which the Commission attempted to achieve too much too hastily.

### **3.3 Summary of European Merger Regulation**

As this chapter differs by its nature from the rest of the text, a short summary may prove to be useful. European Community competition policy was shown to be

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<sup>108</sup> de Jong (1991), p. 17

<sup>109</sup> Also the directive on the information to be published when a major holding in a listed company is acquired or disposed of.

fairly flexible and up-to-date in recognizing the both sides of takeovers, but also capable of creating friction to the takeover process. Another drawback of such policy is that it may be vulnerable to political speculation and lobbying. The Community is also pursuing for harmonization of national competition policies, which currently differ in many respect. Furthermore, the Commission supports the creation of an integrated market for corporate control. The national UK policy is not much more liberal than the French or German counterparts, but it gives more room for economic investigation. On the other hand, German competition policy is somewhat rigid in cases concerning especially the large mergers and adds to the other takeover barriers in Germany. The harmonization has naturally many benefits, although it seems that it should not be made too swiftly and some national differences might call for preservation of some state independence in regard to regional takeovers.

## 4 MANAGERIAL BEHAVIOR AND EUROPEAN MARKETS FOR CORPORATE CONTROL

" Like the rest of us, corporate managers have many personal goal and ambitions, only one of which is to get rich. The way they try to run their companies reflects these personal goals. Shareholders, in contrast, deprived of the pleasures of running company, only care about getting rich from the stock they own. Hence, when managers ignore profits to keep up traditional lines of business, conflicts are bound to arise. While many academic papers teach us that shareholders and market pressure will force managers to maximize value, the newspapers remind us that this is not always the case. Much corporate behavior seems best understood in terms of managers running the show largely as they please<sup>110</sup>. "

This chapter covers the relevant issues of agency theory, restructuring, reasons for mergers and acquisitions, empirical evidence of mergers especially in Europe and as the most relevant subject for the current study, theories about the effects of the markets for corporate control. The applied SCP-framework will be utilized to the study of the European takeover market and its influences. Much of the research work in this field is quite new. The phenomenon, market for corporate control, reached significant interest only in the 1970s, and due to "merger wave" in the 1980s it became more important to analyze the many effects mergers have.

The integration of Western Europe and the birth of Common Market strengthens the need for studies like this, it is hard to believe that the common market could function efficiently without proper competition policy which takes into account of the many aspects of the fragmented European takeover market. This chapter is intended to review more closely the managerial behavior and to give a picture of the current situation, the next chapter will then cover the more normative policy implications and the future of EC takeover market after the most probable enlargement of the Common Market<sup>111</sup>.

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<sup>110</sup> Shleifer & Vishny (1988), p. 7

<sup>111</sup> Enlargement means at the first stage the probable membership of the Nordic Countries and Austria. These countries have different regulations concerning mergers and acquisitions, and we will cover in the next chapter some of the influences that the membership may have especially in Finland.

## 4.1 Agency Theory, Separation of Control and Ownership

Although the theory of managerial behavior and takeovers have already been discussed in the previous chapters, the subject deserves even more detailed illustration. Therefore, this part of the paper goes deeper into the micro level of the behavior before the empirical evidence is presented.

### 4.1.1 Managerial Behavior

Throughout the history before the industrial revolution private firms were relatively small and the entrepreneur was directly responsible for the management<sup>112</sup>. Even now most of the firms are quite small, but in many industries the production happens substantially in giant corporations where hired managers run the daily operations and often even decide of the long run strategic planning. The control and ownership are separated and shareholders are merely residual claimants without much power to say how to run the business. This has led some economists and politicians describe this as the era of managerial capitalism where managers are the most powerful stakeholder group in a firm and often in the society as whole<sup>113</sup>.

Usually firms are assumed to maximize profits or shareholder wealth, but managers have other goals too. Like Shleifer and Vishny noted, managers are only human beings with their own desires and they will maximize their own utility instead of shareholder wealth. Managers get more power and prestige as the company grows, and they will try to get extra perks<sup>114</sup> if there is inadequate control. This may result as expansion to new businesses, high cost, herd behavior and

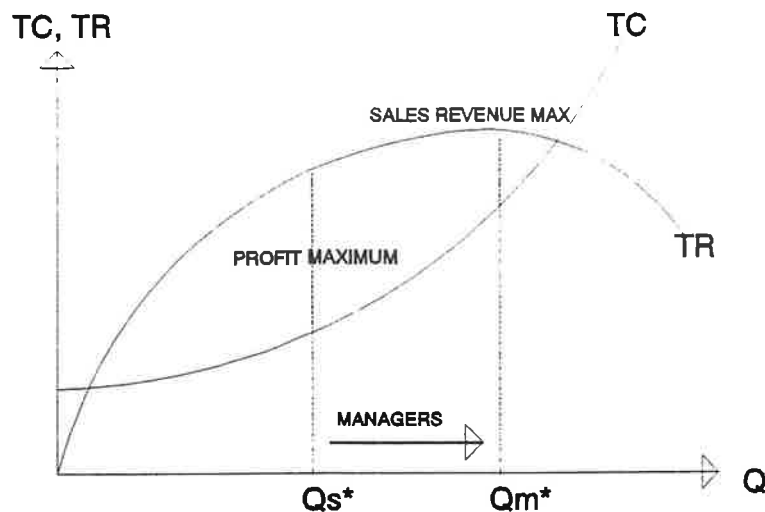
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<sup>112</sup> Berle & Means chapter I describes the evolution of modern corporation, see also Chandler for more recent study.

<sup>113</sup> Francis (1980) has conducted a study of managerial objectives which shows that managers are mainly interested in the firm's performance. On this ground he criticizes the concept of managerial capitalism. Interestingly, this study was conducted mainly in the UK where the conditions differ from the Continent or Japan. See also Chandler (1990)

<sup>114</sup> Perks means perquisites like better air conditioning, luxury cars and monumental head offices.

investment to unprofitable areas. In classical microtheory this means in many cases that instead of profit maximization managers are moving towards sales revenue maximization with higher costs than necessary. These different goals are presented in figure (13), where  $Q_m^*$  is managers production objective if they want

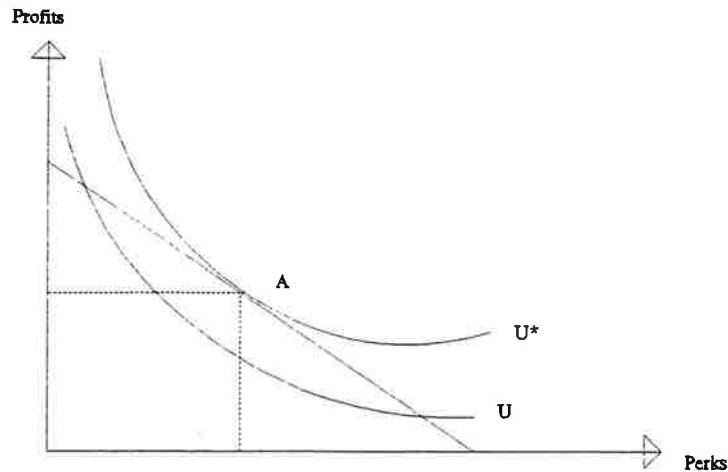


13 Profit vs. sales revenue maximization

to maximize sales revenues and  $Q_s^*$  is shareholders objective which maximizes the profits and  $Q_m^* > Q_s^*$ .

Agency theory tries to explain this conduct among many other things and provide methods to ease the problem. If the moral hazard problem is not properly dealt with, it leads to wrong resource allocation, welfare loss and difficult restructuring problems. One way to present the problem has been introduced by Williamson (1967), he assumes that managers maximize their own utility ( $U$ ) and that they can obtain perks without other punishment than the parallel decline in the firm's profits. Managers' utility function is a function of profits and perks with diminishing marginal utility, profits may influence managers' salary or the manager may simply get more status by higher profits. The "budget" line is a straight line and assumes that *total profits = distributable profits + perks*. The manager's utility is maximized at point A where the budget line is a tangent to the indifference curve in figure (14)<sup>115</sup>.

<sup>115</sup> Greer, p. 214, Jensen & Meckling have similar models



#### 14 Manager's utility, profits vs. perks

However, it may be that perks are not always wasteful but it may benefit shareholders to let managers seize some perks<sup>116</sup>. The reason may be a tax advantage of perks or manager's large diminishing marginal utility for perks. However, these cases are likely to be unusual.

Obviously, shareholders are not totally separated from decision making process in a joint stock company, the main way they have influence is the board of governors. Board can hire or fire managers, but practice in it usually cannot force managers to maximize value effectively, or the board members get also perks and power. Besides, there exist convincing examples of problems with shareholder and board control like the US oil industry in the 1980s. The lack of control on controllers causes other serious problems, too.

The core of the problem is shareholder activism, if there is no active owner and shareholders give their proxies to management, managers are given almost unrestricted powers to make decisions. Differences in managers and shareholders objectives are generated also from different time horizons. In addition to the previously in the part 2.2.1 mentioned reasons for short-termism, managers are interested in their often fairly short employment periods as managers, whereas

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<sup>116</sup> Brown et al. (1990)



shareholders' time horizon is not so well defined. Therefore, managers may have a tendency to overemphasize short term profits and concentrate on short-term performance which the investors often follow. Risk sharing provides another reason for non-value maximizing behavior, shareholders' compensation and wealth may depend mostly of the firm he/she manages, but shareholders have diversified portfolios and they are less sensitive to the variance of the firm's results. The implication is that managers may avoid risky investment with high expected return.

#### 4.1.2 Corporate Control and Restructuring

Berle and Means noticed already in the 1930s that shareholders may lack the incentive to monitor managers if their stake is relatively small and it would require considerable efforts to control the managers efficiently<sup>117</sup>. Some observers claim, that shareholders have become more aware of these problems. Managerial literature has also begun to put more emphasis on shareholder value maximization<sup>118</sup>. However, combinations are not the only way firms can reorganize and there are also other types of restructuring than mergers. One way to list those is presented in the next table (3).

Table 3 : Corporate Restructuring and Control<sup>119</sup>

##### I. EXPANSION

- mergers and acquisitions : horizontal, vertical, conglomerate
- tender offers : direct offer to the shareholders
- joint ventures

##### II. SELL-OFFS

- spinoffs : creates a separate entity, splitoffs and splitups
- divestitures : a sale of a portion of the firm, equity carve-outs  
( divestiture via an equity offering )

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<sup>117</sup> Berle & Means, p. 4

<sup>118</sup> Copeland & Koller & Murrin's book is a good example of a book, which stresses value maximization. They also call for shareholder activism.

<sup>119</sup> Copeland & Weston, p. 677

### III. CORPORATE CONTROL

- premium buybacks : a repurchase of a substantial owners shares at a premium
- standstill agreements : ex-shareholder promises not to invest again in the firm
- antitakeover amendments : a change in the corporate bylaw which makes acquisition of the firm more difficult or expensive
- proxy contests : an outsider seeks a representation on the board of directors

### IV. CHANGES IN OWNERSHIP STRUCTURE

- exchange offers : exchange of debt for stock etc.
- share repurchases
- going private : a public is purchased by a group of investors
- leveraged buyouts (LBOs) : going private with outside investors and financed mainly with debt

As we know, only hostile takeovers (tender offers) and proxy contests can represent a real threat to the management of the target company. Many other of the forms of restructuring and control changes listed above are supported or planned by management. Therefore, there is no management incentive to change previous behavior towards value maximization. Corporate takeovers may force managers to think of their position and converge towards value maximization. One way to study the influence of takeovers is to study the reasons that lead to takeovers and the structure of the market for corporate control as part of the applied SCP framework. Takeover threat forces resource allocation to converge towards market equilibrium by influencing management behavior and diminishing the need for ex post major reorganizations when the lack of control has led to bad investments. Nevertheless, other types of restructuring have also their reasons and allocative consequences. These other types are here ignored but they may often be as important as merger in our economy.

#### 4.1.3 Different Control Mechanisms

Hostile takeovers are not the only solution to monitoring, in many countries like Germany takeovers are so rare that they do not present a real control mechanism. Market mechanism may have other ways to influence managerial behavior or some

institutional system takes care of the control. The obvious purpose of the control is to either ex ante prevent the managerial failure or ex post change the inefficient manager to more efficient one. Consequently the effectiveness of different systems depends of their capability to monitor and create an effective threat of dismissal.

Basically the control systems have been divided into exit control and voting control but there exist many subgroups and supplementary control mechanisms. Consequently there are at least seven different control mechanisms and we will discuss each of them shortly in order to gain a more comprehensive view of the subject<sup>120</sup>. Types (1), (2) and also (3) are types of internal control, the rest being different types of external control originating from labor, capital and commodity markets.

(1) Hierarchial control by shareholders, board and auditors and managers' compensation plans<sup>121</sup>. This is the most common form of control often supported by legislation and formal procedures. The other forms of control are necessary because this form of control is inadequate and sometimes costly. The structure of the firm and financing are the main factors contributing to the internal control, Aghion & Bolton (1992) have developed a stylized model which shows that it is always best to start with entrepreneur (manager) control if it is feasible. If it is not sufficient to protect the investor (shareholders) one should go for contingent control and eventually give the full control to the investor.

(2) Organizational control and peer pressure by other employees and managers. Bad managers loose their reputation among other managers and employees, in Chinese culture this may be one of the most important forms of control as the managers (and practically everyone) are afraid of "loosing their face". This kind of approach is more common to sociology than economics. The disadvantage of this type of control is that it is wholly based on psychological behavior and there is no

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<sup>120</sup> see for example Holmström & Tirole for some discussion, appended from other sources mentioned here or discussed elsewhere in the text

<sup>121</sup> e.g. use of advanced financial instruments in compensation

formal enforcement system, i.e. the incompetent manager can stay as long he/she is willing to resist the pressure.

(3) Institutional control by banks, insurance corporations, governmental authorities etc. primarily in many highly regulated countries where these institutions are the main source of capital and an "insider" system is the prevailing one. Germany has a financial system that is based on banks rather than stock and bond markets and this has led banks to act as "godfathers" to industry, often through supervisory boards or personal contacts. Japanese "zaibatsu" etc. organization form is another example of this kind of collective control system. In countries where government ownership is commonplace the institutional control may be even more important but not always so transparent.

(4) Debtor control especially in financial distress situations when they have strong interests. As the firm approaches this kind of situation they increase their monitoring and increase consultation with shareholders. A common solution to the conflicts between bondholders and the firm in the USA is the use of various bond covenants<sup>122</sup>. The use of bond covenants is quite common also in the more developed European markets, and the level of sophistication has been constantly increasing.

(5) Market for managerial talent. There are always other possibilities than the current manager and if managers run the firm badly their reputation suffers. Because managers' human capital comprises a large proportion of their wealth, the future earnings can diminish by bad reputation and this may force managers to be efficient<sup>123</sup>. The drawback is that the managers may become too risk averse and mimic others' decisions ignoring valuable private information<sup>124</sup>.

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<sup>122</sup> See for example Smith & Warner (1979)

<sup>123</sup> Fama (1980)

<sup>124</sup> Scharfstein & Stein, p. 465

(6) Control via competitive pressure. Competition spurs a firm to be more efficient by forcing it to reduce its agency problems. In an evolutionary sense only the strong and efficient firms survive. This is the case on which much of the neo-classical microtheory has built on. However, the competition pressure on executives is not so clear cut and the effects are somewhat indefinite<sup>125</sup>.

(7) Market for Corporate Control which is discussed elsewhere in this paper.

It is impossible and needless to say which one of the above mentioned mechanisms is the most efficient, all these mechanisms coexist in some form and the market conditions determine which is/are the most efficient. However, the cost differences of different systems imply that the control through financial markets (takeovers) may not be the initial one. Instead the takeovers complement the other mechanisms and function in the case that the others fail. Therefore, takeover markets provide only one (though powerful) possibility. There may be situations where the discipline fails or is too powerful and leads to negative effects like monopoly or it reduces R&D if markets undervalue these expenditures. However, these cases are normally exceptions because markets hardly make continuous mistakes in large scale and governments will in any case control collusion and concentration when seen necessary. Merger control is still an important part of economic policy though takeovers have these beneficial control effects. Evidently the importance of policy depends on the workability of market mechanisms; if the markets are seen efficient there may be no reason to control takeovers, instead we should let the markets themselves choose between the different control systems.

#### **4.2 Structure of the European Takeover Market**

Now we are ready to undertake short empirical overview of the European conditions. General industry structure, financial market structure and institutional conditions are each briefly addressed mainly based on previous researches. We will now see how the applied SCP model described earlier in the third chapter can be

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<sup>125</sup> Hermalin (1992)

employed, unfortunately some of the major factors described cannot be treated due to narrow information and limits of this study.

#### 4.2.1 General Industry Structure Influencing Takeovers

The structure of the takeover market is divided into three separate parts of which the general industry structure is the most fundamental (see figure 8 p. 31). The general structure provides the potential for value creation through takeovers and supplies the basic reasons for takeovers including divergence from optimal structure and production. However, the general structure has been extensively studied for other purposes (e.g. many traditional IO-researches) and only a short overlook will be done here. Anyway, one possible reason for takeovers is the search for efficiency. In this respect it seems that many European countries (and industries) are behind the other major industrial countries, USA and Japan. One could perceive from the table (4) that there may be lot of room for efficiency improvements in Europe, possibly through mergers leading to better exploitation of economics of scale.

As represented in the table (4), productivity growth slumped in the 1970s largely because of the oil crisis and labor markets inability to adjust<sup>126</sup>. Eventually the response seems to have been the discarding of millions of workers, which helped the productivity growth accelerate again after 1979. Despite of these efforts Europe has not reached the productivity level of USA or Japan, and further reductions of labor force are hardly feasible or efficiency enhancing. Hence, it may be that the only "quick fix" for productivity problem is through corporate reorganizations. Furthermore, the differences in educational levels and input endowments across European borders suggest that there are different gains to be achieved in different countries and restructuring may occur in differing areas and speed between member-states.

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<sup>126</sup> Mullaney, p. 40

Table 4 : Level of Productivity in Major Industrial Countries - 1985 (USA = 100)

	UK	France	Germany	Japan	USA
<b>Strong demand sectors:</b>					
Electrical and electronic goods	28	47	43	236	100
Office and data processing mach.	37	43	45	94	100
Chemical and pharmaceutical prod.	54	79	75	119	100
<b>Moderate demand sectors:</b>					
Transportation equipment	23	54	60	95	100
Foods, beverages, tobacco	56	73	47	37	100
Paper and printing products	43	67	76	89	100
Industrial and agricultural mach.	20	49	46	103	100
<b>Weak demand sectors:</b>					
Metal products	38	60	54	143	100
Ferrous and nonfe. ores and metals	66	72	92	149	100
Textiles, leather, clothing	59	62	71	53	100
Nonmetallic minerals	40	64	71	43	100
<b>Total manufacturing:</b>	<b>42</b>	<b>65</b>	<b>65</b>	<b>100</b>	<b>100</b>
<b>Percent Change in Manufacturing productivity:</b>					
1960 to 1973	4.2	6.4	5.7	10.3	3.3
1973 to 1979	1.2	4.6	4.2	5.5	1.6
1979 to 1989	4.8	3.4	2.0	5.5	3.2

Source: European Commission and U.S. Department of Labor

Adopted from Mullaney p. 40

However, this view cannot be faced without some criticism, one might argue that takeovers have failed improving the productivity and further combinations do not offer any gains. If the level of current productivity is seen as part of performance rather than structure, then the criticism may have a sound of truth. However, the table shows that the highest productivity improvements in Europe during the 1980s have taken place in the UK, the only place where takeovers are relatively common. Furthermore, much of the national differences may be explained by different macro policies rather than micro behavior. There seems to be a need for more detailed micro level statistics as these figures above fail to give a really satisfactory view of the European conditions.

The nature of competition as such is often difficult to study and it is much more easier to measure concentration which indicates also the competition conditions and industry performance as was shown in section 2.7.1 (traditional model of performance). The concentration can be measured by Herfindahl index (equation

5) or by market share of biggest firms  $\sum s_i$ . Some industries in Europe are already concentrated and increasing scale presumably provides no further advantages, office equipment industry is example of this kind of industry in the table (5). Although the efficiency differences described earlier may imply that the economies of scale are not totally seized in any industry. Consequently the desirability of concentration from the viewpoint of competition is determined by the possible utilization of increasing scale as was already suggested in the part 2.5.4.

Effects of strong demand growth are difficult to anticipate because of different industry structures. Firms in some industries may grow internally but in others it may be profitable to acquire new plants by takeovers and sometimes increase market power by acquisitions if there are strong entry barriers. Technological aspects are also so industry specific that it requires much more studying before any conclusions can be drawn; according to the available data there seems to be no transparent empirical connection between technology and takeovers. Nevertheless, international competition is more easily measurable if we define it as import penetration as percentage of total domestic demand. Without the pressure of international competition, collusion and inefficient performance are more easily sustainable. If the import penetration percentage is high it requires the domestic rivalries also to be efficient and there may not be any further benefits from concentration after initial adjustment to the increased competition. But if an expansion of international competition is anticipated in a previously sheltered sector, domestic firms may try to improve their positions by takeovers. The number of firms and the homogeneity of their products are quite crucial as the international competition may move the industry from oligopoly towards more perfect competition or the oligopoly structure is altered and there is some pressure to combinations as a strategic alternative. In Europe food and drinks is an example of sheltered industry where international competition is increasing due to more liberal trade policy and this has led to many mergers (see table 8), this shows again how competition and trade policies are tied together.

Empirical study conducted by the EC Commission shows the structure in main industries to be the following in the next table (5).



Table 5 : Economic conditions in European industries<sup>127</sup>

	Demand <sup>a</sup> growth	Openess of Market <sup>b</sup> Import penetration			Concentration <sup>c</sup> $\Sigma s_i, i = 1, \dots, 5$
		EC	non-EC	total	
-Mining and extractive industr.	W	54,8	18,4	73,2	-
-Manufacture and primary processing of metals	W	12,5	17,8	30,3	18,0
-Construction materials	W	4,3	12,5	16,8	22,3
-Chemicals, fibers, glass, ceramics, rubber	S	10,0	24,5	34,5	21,0
-Machine tools & precision instr.	M	19,0	27,6	46,6	12,5
-Office equipment	S	33,7	34,1	67,8	65,3
-Electrical equipment and electronics	S	16,6	18,2	34,8	40,4
-Motor vehicles and other transport equipment	M	11,2	24,5	35,7	51,0
-Food and drink	M	5,7	11,9	17,6	12,6
-Textiles, leather, clothing	W	22,1	27,2	49,3	3,7
-Wood, furniture, paper	M	15,0	11,9	26,9	4,3

a) Percentage of total sales of industry

S = strong demand growth

M = moderate

W = weak

b) Proportion of total domestic demand supplied by intra-Community and non-EC imports (import penetration)

c) Market share of five largest firm, percentage of total sales of industry

Source : EC, Reports on competition and other Commission departments

#### 4.2.2 Capital Market Conditions

The second major part of the takeover market structure consists of the capital markets: efficiency, regulation, banks, concentration of ownership and current market condition as major elements (unfortunately we cannot present any Tobin's q calculations, but many factors influencing it are treated). In this respect the European countries differ a lot, countries like UK have relatively efficient capital markets where banks do not have a dominant position and regulation is more liberal than generally, but smaller countries have inefficient and highly regulated capital markets. One major issue in EC harmonization of capital market regulations and integration is that if an extension of the takeover process and codes from the UK to Continental Europe should be welcomed.

Due to this fragmented state of capital markets in Europe, these markets should be handled one by one. However, as the purpose of this paper is not to study these

<sup>127</sup> European Economy, p. 65

conditions thoroughly, only some characteristics of the most important markets are discussed. UK represents so-called Anglo-Saxon group where takeovers are a common form of corporate control, Germany belongs to a Germanic country group where takeovers are restricted and banks have a dominant position as financiers<sup>128</sup>. France is taken as an example of Latinist country which falls between the two previous groups, stockholder sovereignty is usually respected but there are many factors that restrict it. Furthermore, state ownership is often considerable in Latinist countries and smaller countries have fairly underdeveloped financial markets<sup>129</sup>.

The power of shareholders and freedom of takeovers in the Anglo-Saxon countries are notably distinct from that of the continental Europe or the Nordic Countries<sup>130</sup>. The basis for this difference may be that the concept of corporation is viewed differently, firm is not seen as balance of diverse interests managed by a small, "oligarchic" group of managers and institutions or investors but as a coalition of resources and managerial directors working to the benefit of shareholders. The apparent reason must be that the Anglo-Saxon control is somewhat more effective, partly due to freer market for corporate control. Regulation in the UK is based mainly on the City Code on Takeovers and Mergers, the Company Act (1985, revised 1989) and Rules governing substantial acquisitions of shares. According to de Jong (1991) the most relevant of the rules in above mentioned regulations are:

- a 5% stake of shares of a company must be published
- no measures may be taken by the management of the target company without the permission of shareholders
- no shares of the target may be sold by the bidder during the process and in any case not under the bid price
- a higher purchase price after the bid has been launched obliges the bidder to

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<sup>128</sup> Banks have steadily provided over 90 percent of German firm's external financing, Milgrom & Roberts p. 490

<sup>129</sup> This classification is presented by Henry W. de Jong (1991)

<sup>130</sup> de Jong 1991, p. 5

raise the latter

- deals of important shareholders, that is over 1%, in the companies concerned must be publicized or made known to the Panel on Takeovers and Mergers

The UK (and US) system could be described as "outsider system" in contrast to "insider system" in Continental Europe (and Japan)<sup>131</sup>. Among the 200 largest German companies almost 90 per cent have at least one shareholder with a stake of at least 25 per cent of issued equity. In contrast, in two thirds of the largest 200 companies in the UK there is no single shareholder with a stake over 10 per cent of issued equity. Moreover, even if more than 60 per cent of issued equity is held by financial and non-financial corporations in UK, in general no single institution holds a large fraction of shares in any one company.

The structure of financial markets in Germanic countries is far from the UK structure, there has never really existed a free takeover market among the Germanic group<sup>132</sup>. In fact, there is no expression for corporate control in German<sup>133</sup>. However, financial markets in general are functioning fairly efficiently, take for example Germany where the financial system is well developed and stock exchanges like Frankfurt are large and well functioning. One main difference to Anglo-Saxon system is that banks and insurance companies have held substantial shares in major industrial and commercial firms (see Annexed table A1 for the structure of share ownership in Germany). As was shown in part 2.2 it is not necessary to have the majority of stocks in order to have control and this means that these financial institutions may often have a really strong say in companies if they want. Furthermore, it is not so uncommon that one or two financial investors own majority of shares. This fact together with the proxy voting system and the "insider system" imply that shareholder power is often very

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<sup>131</sup> Franks and Mayer 1992, also Jenkinson and Mayer p. 6

<sup>132</sup> de Jong 1991 p. 1, he includes Germany, the Netherlands, Switzerland, Austria and Scandinavian countries to this group.

<sup>133</sup> Schneider-Lenné, p. 11

concentrated in Germanic countries<sup>134</sup>.

The financial regulation provides also possibilities for concentration of power, proxy voting and differences in voting power between different shares are common. The proxy voting system enables the active shareholders to represent other shareholders and consequently gain more votes and power in decision making. Furthermore, the Netherlands has a regulation<sup>135</sup> which can prevent the acquirer from exercising full power even if the stake is over half and most Germanic countries have regulations which provide workers the possibility to influence restricting the power of the acquirer. Moreover, the managers in German companies are more protected from dismissals than managers generally in other countries. However, as takeovers have been fairly uncommon phenomena, Germany's takeover rules and related disclosure regulations are less stringent and less developed than those in the UK<sup>136</sup>. Therefore, it has to be mainly the other reasons than the tender offer regulation that have caused the lack of takeovers. Nevertheless, the concentrated ownership and financing structure facilitates hierarchial and institutional control which are probably somewhat more effective than in the UK. However, these control mechanisms are not effective alone and they give a strong say to the other stakeholders.

The third and last group in de Jong's (1991) classification is the Latinist countries of the EC of which France, Italy and Spain are the most significant ones. Although the Napoleonic Law<sup>137</sup> in principle provides sovereignty to the shareholder, there

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<sup>134</sup> For example Deutsche Bank has significant shares in number of German firms and it organized resistance against takeover bid by Italian Pirelli for German Continental's shares, Milgrom & Roberts p. 490.

<sup>135</sup> de Jong 1991 p. 2, a legal provision in Dutch company law which gives a company of over 100 employees or capital of Dfl 22.5 million a possibility to adopt the status of a "structuurvennootschap" where it is possible to limit the power of the General Assembly of Shareholders by using non-tradable priority shares.

<sup>136</sup> Schneider-Lenné, p. 22

<sup>137</sup> Origins of the French and generally all Latinist (corporate) laws date back to the French revolution, therefore the system is often called code Napoleon

are many factors that in financial markets restrict the independence of the shareholder<sup>138</sup>. Families have strong control even in major corporations, state-ownership is widespread, bank and cross-shareholdings are important in Spain and France and obtainability of information to public leaves much to be desired. These features have led to more bureaucratic control by institutions than in other European countries. Like Germany also France allows differences in voting rights<sup>139</sup>. The efficiency of financial markets is probably weakest in Latinist countries, take for example the largest stock exchange, Milan, which de Jong describes to be beset by problems of settlement, insider trading, price manipulation and lack of liquidity. Furthermore, the table (1) at the beginning of this paper shows that the market structure based takeover barriers (cross-holdings, protectionism etc.) are more important in Latinist countries than in Germanic, whereas "institutional" barriers (employee rights etc.) are more important in Germanic countries.

European capital markets must also confront the fact that the currency system is still in a state of flux. These exchange rate uncertainties together with volatile interest rates cause difficulties for investors (except currency speculators) and this may dampen or curb the integration of European markets for corporate control.

#### 4.2.3 Institutional Factors

The third and last part of the structure in this classification is the group of various institutional factors like competition policy, trade policy and cultural factors including many forms of takeover barriers. Policies and regulations are to be harmonized by the Commission with time, but many of these more culturally bound factors are deeply rooted in national heritage and may have influences longer than it takes to change laws. Anyway, the most important of these institutional factors is the competition policy which was already discussed in previous chapter. Some other institutional factors like the legal framework have been discussed together with related topics in earlier parts.

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<sup>138</sup> de Jong (1991), p. 4

<sup>139</sup> Milgrom & Roberts, p. 490

Trade policy is one of the most important topics of European integration and it has also many implications for takeovers. As trade barriers within the common market have been evaporating and the barriers against the rest of the world (hereafter ROW) are still significant, the merger motives of firms in different countries have changed. Firms in the member states act more like within one national market and their takeover gains results mainly from economies of scale, market power and better management in poorly run firms. Although the table (1) of the takeover barriers shows that protectionism is still an important obstacle against takeovers especially in France and Spain.

The firms in the ROW have often entered the EC area via direct investment and they will probably continue their efforts to overcome the trade barriers by means of investments like acquisitions<sup>140</sup>. 1992 programme may have brought some cross-border takeovers as non-EC countries have entered the important emerging European common-market. Anyway, acquisition is often cheaper than a "green field" operation especially in low Tobin's q industries. Therefore, it may well be that the EC trade policy enforces the German market for corporate control and leads to increased takeover activity by the ROW firms in some low Tobin's q countries. These countries do not have to be current members, due to the likely enlargement of the common market, the EC trade policy might have spill-over effects in countries like Finland where investments may be cheaper than in the current EC area. Though there is no vigorous way we could say how the trade policy is going to affect in the long run, these aspects should be carefully considered when implementing new rules. Some of the European countries may have been fairly protected from foreign acquisitions and protectionism has been seen as one of the major takeover barriers especially in Latinist countries.

Many of the institutional factors are determined by the long run history of the nations and their industries. History can explain many differences between countries industrial characteristics and development. Alfred Chandler, historian of business, describes the British industry to be committed to "personal capitalism".

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<sup>140</sup> Caves (1982) p. 40, trade barriers are one of the major reasons for DI

The British entrepreneurs failed to make new investments, recruit competent managers and to develop their firms to correspond the changing business environment. This development has still influence on the British industry, though the UK industries have improved their competitiveness in many ways. The German business culture is in Chandlers terminology characterized by "cooperative managerial capitalism" in contrast to the American "competitive capitalism". The main feature in the German cooperative or organized system was that German managers often preferred cooperative behavior. This cooperative model is sustainable only if the managers can trust to each others, and this may be one of the reasons to the lack of hostile takeovers in Germany. One additional barrier to takeovers seems to be the family attitude in some countries, especially in Germany and Italy. Also the accounting rules and tax disclosure have hindered the takeover process in some cases, but the harmonization of these rules is likely to diminish their strength as barriers.

#### **4.3 Conduct and Behavior in the European Markets for Corporate Control**

As the different parts of the model are somewhat interdependent, the above discussion of market structure included also material about conduct and behavior in different countries. The following part of the paper will then extend and clarify some of the major points concerning the conduct and behavior in Europe.

##### **4.3.1 Conduct**

The empirical evidence relating to conduct is somewhat problematic and here we will present only some practical aspects relating to normal business practices in takeovers. Some evidence like takeover activity is presented together with the information of performance. Nevertheless, takeover markets are very different from any other markets because the "merchandise" is so complex and heterogenous with highly regulated markets, every merger is a unique event. Therefore, there is no conclusively specified market equilibrium and takeovers are hard to fit into any model. It is still possible to say that takeovers influence general equilibrium and welfare by improving the asset allocation, although they have also negative effects as has been shown.

Takeover methods can be divided into two broad classes, hostile and friendly. In Europe, UK is the country where hostile takeovers are dominant and Germany is a good example of a large country where hostile takeovers and mergers in general are quite rare. Nearly all mergers in Germany are carried out cooperatively.

It is hard to find evidence of collusion in the commodity markets as it has been criminalized in many cases and the exposure could harm the reputation. The commodity markets and deterrence of entry by incumbents may have reflections to takeovers. There may be collusion in the takeover market when competitors have decided to keep entrants outside by acquiring them according to some plan.

There exists a large number of different valuation models in practice, of which some are not wholly correct in the light of the theory of finance. For example, some methods are static and do not give any value to the expectations about future. Valuation methods in mergers are naturally important because they influence the premiums paid and the general lucrativity of takeovers. Acquirers in well developed markets use often advanced techniques like discounted cash flow methods which are also theoretically correct. However, asset value based and valuation models build on balance sheets are still common in many countries. When a tender offer is made, it is often standard procedure to ask one investment bank to calculate if the price is "fair", i.e. is it realistic or acceptable. The valuation methods used by American investment bankers can be divided into four broad classes which are the following<sup>141</sup>:

- (a) comparable firms approach which develops an average relation between market prices and accounting variables;
- (b) comparable acquisitions approaches which demonstrates an average relation between earlier acquisitions, market prices and accounting information;
- (c) discounted cash flow method;
- (d) asset-based techniques that develop an evaluation of the firm's value based on the value of its assets, e.g. liquidation value.

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<sup>141</sup> DeAngelo, p. 100



The above methods are most likely used also in Europe, even though more advanced methods like DCF are probably not so common, or they are not used alone. Some of the highly advanced techniques like option-theory based methods are still very rare in practice or they are not being utilized. Nevertheless, as these highly advanced methods develop to the stage of practical applications they are likely to quite quickly gain relevance also in the business world.

Takeovers can be financed by many ways, the most important means are equity bids, cash bids and the mixed form. There is no comprehensive study of the European situation, but the mixed bids are more common in the UK than in the USA<sup>142</sup>. Furthermore, larger premiums are being paid in cash than in equity acquisitions. Taxation is probably one of the most significant elements which determines the means of payment. This is partly explained by the trapped equity view, acquisitions may be the most tax-efficient method of distributing profits to shareholders. There is at least some circumstantial evidence of takeovers due to taxation reasons<sup>143</sup>, but a comprehensive study has not yet been made.

#### 4.3.2 Behavior

Structure of the takeover market lays down the guidelines for managerial behavior, powerless control gives the manager freedom to steer the firm towards his/her own objectives. Managerial motives and objectives are difficult to investigate directly, because the only way to do this is ask them, and nobody ever knows if they tell the truth. The objectives are more easily studied by researching the outcome of the operations and comparing them between countries as will be shown when we examine the performance.

However, questionnaires can be and they have been used to study the managerial capitalism. One study conducted in the UK and partly in Germany<sup>144</sup>, showed that managers in the UK were very concerned about maximizing growth in total

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<sup>142</sup> Franks et al. (1988)

<sup>143</sup> de Jong: The Economics of Mergers and Takeovers, p. 5

<sup>144</sup> Francis (1980)

profits and maximizing rate of return on capital, results are shown in the next table (6). This raises the question what might have the results been in the Continent or in the Nordic countries. Especially the German more cooperative environment might produce very different results.

**Table 6 : Managerial Objectives**

Question : How important to your company in the long run is objective<sup>145</sup>

	Mean	s.d.	n
Maximizing growth in total profits	1.62	0.877	136
Maximizing rate of return on capital	1.78	0.956	136
Maximizing the level of rewards and benefits for employees	3.07	1.337	136
Maximizing growth in sales (volume)	3.10	1.491	134
Maximizing growth of the firm (net assets)	3.16	1.597	136
Maximizing growth in dividends paid to shareholders	3.17	1.318	125
Maximizing price of company's shares	3.17	1.431	127
Maximizing company's prestige	3.65	1.701	136
Maximizing the provision of a service to the community at large	3.68	1.515	134
Minimizing the risk of being taken over/sold off	4.23	2.069	137

Lower number indicates greater importance

German firms seem to have also other important objectives than just the value of the firm. The philosophy and corporate culture of German firms is based on the concept of the company as a whole<sup>146</sup>. The firm is seen as a combination of various interest groups whose goals have to be co-ordinated. Implicit contracts are apparently more important than in the UK and management pursues to keep the firm trustworthy. The prevailing German system makes this possible as there is no fear of breach of trust between shareholders and stakeholders<sup>147</sup>. However, as the integration process in Europe continues these differences in corporate cultures have to be re-evaluated and it may lead to serious mistrust between various agents. Even "friendly" mergers may cause friction in the organization, therefore it is often difficult to clearly distinguish between friendly and hostile takeovers in the organization level as there may be some group in the firm that opposes the combination against the manager's plans.

<sup>145</sup> Francis, p. 354

<sup>146</sup> Schneider-Lenné, p. 15, also Chandler's historical view

<sup>147</sup> According to Schleifer & Summers the breach of trust may be one of the major drawbacks of hostile takeovers.

Nevertheless, it is difficult to say without an in-depth study, what are the main motives for takeovers in the different European countries. However, as hostile takeovers are most common in the UK and most uncommon in Germany, we could conclude that the British managers are more concerned with the value maximization arguments than the German ones. Furthermore, the German form of corporate objectives proposed by Chandler and Schneider-Lenné seems to imply that German mergers are more likely to be a result of cooperative behavior<sup>148</sup>.

Like in the model by Caves (1991), a sudden change in the basic market conditions or in the structure of the takeover market can lead to increased takeover activity. These changes include better future investment prospects indicated by high Tobin's q ratio and liberal changes in trade barriers leading to increased foreign competition<sup>149</sup>. These reasons may also contribute to the European takeover activity, but the connection is far from obvious. However, the European integration might be such an environmental change that opens new payoffs attainable through mergers and this is likely to explain some of the takeover activity at the end of the 1980s. Whatever the reason for takeover is, it should create value through increased efficiency, synergy or some other reason. The evidence shows that the target firm's shareholders earn a significant positive premium, but the acquiring company's shareholders premium is on average only slightly positive and sometimes even negative<sup>150</sup>.

As was noted before (see the 2.2.1) there are many reasons why investors or managers may be myopic. This raises the concern that takeovers might add to the short-termism and damage the national long-run industrial development by reducing long-term projects like R&D investments. This fear has not been conclusively

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<sup>148</sup> Germanic-Japanese and Anglo-Saxon types of corporate model have sometimes been identified as the two main versions of capitalism, see for example The Economist July 3rd - 9th 1993. This discussion relates also to the field of comparative economic systems.

<sup>149</sup> de Jong says in "the Economics of Mergers and Takeovers" (p. 7) that good economic prospects serve as a "carrot" and foreign competition as a "stick" for combination movements in certain industries.

<sup>150</sup> See the part about performance and annexes.

empirically verified, but some studies have shown that R&D investment growth rates in the USA were lower in 1986 and 1987 and the reason to this was partly seen in the profit-raising efforts provoked by takeover fears<sup>151</sup>.

As empirical studies of the managerial behavior are rare and difficult to handle, a useful supplant is to see how much and what kind of perks the managers take. Even an layman can observe the most noticeable perks, namely monumental head offices which many firms have build during the last decade without real economic foundations. These firms include even many SMEs and these construction projects have driven many ambitious firms into serious financial trouble in some countries like Finland. Another apparent feature is that managers who have been fired receive often a substantial golden parachute compensation (though reliable and worthwhile statistics is hard to find). Although these golden parachutes are often costly, they have also a positive side from the control perspective, managers are more willing to accept takeovers if they get compensation. The obvious conclusion is that European managers have a moral hazard problem, although it may have been exaggerated in public discussion in some countries.

#### **4.4 Performance in the European Takeover Market**

The final and most important part of the model is performance. Performance shows in reality how different objectives are fulfilled and how efficiently scarce resources are allocated. The model can also be used to draw implications to the future competition policy. Although it as an experimental paradigm is not so well structured, it helps to formalize the study of takeovers and the empirical evidence can be seen in clearer light.

What then are the expectations of the results from the theoretical perspective as we know approximately the structural factors? The firms in Anglo-Saxon countries should be more profitable and their market values are likely to be higher in comparison to their continental counterparts. The value maximization implies that

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<sup>151</sup> Scherer (1988), p. 79

the growth of sales may have been sacrificed. Germanic firms are likely to be quite efficient but the growth of sales may be more important objective than the value of the firm, at least in relation to the Anglo-Saxon group. Mergers are likely to be an uncommon phenomena and shareholders are not deemed to be much above the stakeholders in the contractual hierarchy. The Latinist system seems to fall between the two previous group, but because of the inefficiencies in capital markets and the emphasis on other values including cultural factors like family ownership may hinder the profitability from rising much above the Germanic level.

Furthermore, there may exist merger waves due to some structural changes. These waves may be located in different industries in different times as the merger motives like changing scale advantage due to changing technology varies across industries. A reasonable expectation is that efficiency and profitability should on the average be improved by the takeovers, at least in horizontal mergers which we have studied. However, as we already saw during the discussion about general structure, the currently available efficiency calculations tell us quite little. We would need much more additional information of the firm level efficiency developments, before any specific conclusions could be drawn. Moreover, as the firms may seek improved profitability through concentration or high market share some takeovers are likely to lead to dominant positions.

#### 4.4.1 Empirical Characteristics of Mergers and Acquisitions

Reliable statistics about mergers and takeovers is hard to find and only limited data is published by authorities like German Federal Cartel Office, UK Department of Trade and Industry and the EC Commission. However, it is possible to distinguish six different empirical characteristics of mergers, which have some general validity<sup>152</sup>.

(1) Since the birth of a modern form of corporation with transferable shares and

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<sup>152</sup> Basic frame for these findings is from De Jong, H.W. : The Economics of Mergers and Takeovers, p. 2 - 5

limited liability in industrialized world<sup>153</sup> it has been noticed that historically mergers and takeovers *proceed in waves*. A more popular name used by the press during these periods is the merger mania, which has the echo of some irrational or unexplained characteristics of the business. These waves are often a result of some major structural change, industrial conditions, capital markets or/and institutional factors may change so that takeovers offer new payoffs. Changes merely in fundamental managerial behavior are hardly large enough to cause any waves. According to de Jong the four significant merger waves are the following:

- the first wave between 1880 and 1904/7 with peaks in the years between 1898 and 1903 in most countries
- the second wave from 1918 to 1920/21 and even more active wave between 1924 and 1929 with the peak in the late twenties, simultaneously with the start of the worldwide depression
- the third wave from the late fifties to 1973/74 , with high activity during the second half of the sixties in the Anglo-Saxon countries, Europe and slightly surprisingly, in Japan. German peak occurred later in the seventies. This wave ended in most countries when the oil crisis began
- the fourth merger wave started earlier in the "liberal" countries like the USA and the UK than in most of the continental countries where it started in the Netherlands in 1983. This wave was more transnational than ever before and it peaked in many smaller countries like Australia in the late eighties, but this wave seems to have ended by the end of 1991. One difference in comparison to the earlier waves was that the takeovers were larger on average and more likely to be made by "blue Chip" corporations than traditional "raider" types<sup>154</sup>. Moreover,

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<sup>153</sup> Ibid. : This form of corporation is essential for merger activity and occurs only in the last quarter of 19th century on larger extent. Though, there were some separate mergers much earlier, like the merger of several competing corporations into the Dutch East India Company in 1602.

<sup>154</sup> Scherer (1988), p. 76

many of these acquisitions were "bust up" takeovers, i.e. the acquisition was followed by a sell-off of several target firm divisions. As was described earlier in the structure part this wave probably resulted mainly from the efforts to increase efficiency due to increased international competition and European integration as major structural changes.

An interesting feature is that these waves started during/before economy boomed and the takeover activity dropped when economies run into difficulties. The third wave ended to the oil crisis and the fourth wave levelled down with the economic slump of early 1990s. Many industrialized countries went in the 1980s through a high merger wave and this was in many cases accompanied by booming economy, liberalization of capital markets and trend towards free international trade at least in the regional basis. Consequently the analysis of takeovers has to be a balanced view of micro and macro conditions.

(2) The second feature is the *lopsided distribution* of the merger and takeover activity over the sectors and industries of the economy. In all countries during all of the periods for which there is evidence a limited number of industries account for a dominant share of the mergers. During the wave of eighties only five industries of the fifteen which were defined accounted for 57% of the transactions. These sectors were chemicals, banking, foods, trade and distribution and mechanical industry and machine tools. It seems that the most active sectors were not the same during the successive merger waves and that there are some industries like computer manufacturing that have avoided most of the merger mania.

(3) The third characteristics is the *high merger intensity of the largest companies* in the economy. This has also been a general phenomena during all the merger waves. The US Federal Trade Commission noted that between 1948 and 1968 the companies with assets of \$ 250 million or more acquired 37% of the total number of the total companies and 56% of the acquired assets. A similar phenomena has been noticed in Germany, where merger intensity declined with the size of the acquiring firms. This can be seen from the following data (table 7).

**Table 7 : Merger Intensity of the 100 Largest W.German Firms 1973-1987**

Firm size class	Number of Mergers	Percentages	Average per firm per annum
1- 25	1,840	51.8	4.9
26- 50	703	19.8	1.9
51- 75	646	18.2	1.7
76-100	362	10.2	1.0
	3,551	100.0	2.4

Source : Monopolkommission, Hauptgutachten I-VII

Similar evidence can be found from France, the Netherlands, Sweden etc. It does not mean that all large firms acquire heavily but it shows that this game is dominated by big companies.

(4) Fourthly, *takeover premiums are paid* over the pre-merger market value especially during the merger waves. The premium varies with time and between industries, but for most cases it is quite remarkable ranging from only 10% to 80% or even higher<sup>155</sup>. Anyway, there is a general agreement that shareholders of acquired firms benefit more than the shareholders of acquiring firms. This might imply that the target was managed ineffectively and this gave the potential for value creation, but this conclusion cannot be verified or even supported in many cases by the empirical evidence. However, there are many studies about the shareholder gains from tender offers in the USA<sup>156</sup>. These studies<sup>157</sup> show that the gain for bidders rises with the Tobin's q value and in general shareholders of low q targets benefit more than those of high q value targets.

(5) As a fifth characteristics it has been noticed that *a fairly large proportion of the targets or merged firms do not benefit* from the reorganization or value creation is insignificant. IO economists have estimated that generally 10 to 20 percent of the mergers and acquisitions do not create value and the rest is split between

<sup>155</sup> For US evidence see Jensen & Ruback, some evidence annexed (table A2)

<sup>156</sup> Ibid, Jensen's many other articles etc.

<sup>157</sup> Lang, Larry H. P. et al. (1989), this result has been confirmed by Servaes, Henri (1991). They found that total returns are higher when targets have low q ratios and bidders have high q.



successful deals and failures. The reason for bad performance reflects the high risk, difficulty of valuation, problems in integration and high takeover bid prices possibly implying the existence of a winners curse. Furthermore, the results seem to be better in horizontal and vertical mergers, just as theory predicts because the management of the acquiring firm is familiar with the business. Financial economists have found evidence of better performance, but they concentrate mainly on the short run financial performance.

(6) Lastly, many horizontal mergers increase concentration and some *lead to dominant position* in their relevant markets. Some mergers between large competitors have created conflicts between private and social interests often leading to government interference. To state the obvious, this gives the justification for restrictive competition policy which tries to maintain the competition.

#### 4.4.2 European Takeover Activity

Although mergers and acquisition are an old phenomenon, only the last decades have shown the increasing importance they have in modern market economy. The birth of the common market has increased the number of European cross-border mergers and this will probably lead in the long run to single European market for corporate control<sup>158</sup>. Although the number of takeovers has dropped since the most active years in the late 1980s, the venture will most likely continue when the uncertainties of the slumping economy are alleviated and the difficulties related to the integration are feasibly overcome. A skeptical view is that these problems related to the integration due to differences between nations are so immense that the harmonization will fail.

As international competition, demand growth and concentration are so important to this subject, the next table (8) presents these factors in European industries together with the takeover activity.

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<sup>158</sup> More discussion in the fifth chapter.

Table 8 : Merger activity and economic conditions in European industries<sup>159</sup>

	Demand <sup>A</sup> growth	Openess of Market <sup>B</sup> Import penetration			Concentration <sup>C</sup> $\Sigma s_i, i = 1, \dots, 5$	M&A involving top 1000 firms	
		EC	non-EC	total		82-87	86-87
-Mining and extractive industries	W	54,8	18,4	73,2	-	43	9
-Manufacture and primary processing of metals	W	12,5	17,8	30,3	18,0	72	19
-Construction materials	W	4,3	12,5	16,8	22,3	75	19
-Chemicals, fibers glass, ceramics, rubber	S	10,3	24,5	34,5	21,0	252	71
-Machine tools and precision instr.	M	19,0	27,6	46,6	12,5	133	31
-Office equipment	S	33,7	34,1	67,8	65,3	6	2
-Electrical equipment and electronics	S	16,6	18,2	34,8	40,4	104	41
-Motor vehicles and other transport equipment	M	11,2	24,5	35,7	51,0	54	21
-Food and drink	M	5,7	11,9	17,6	12,6	122	52
-Textiles, leather, clothing	W	22,1	27,2	49,3	3,7	36	6
-Wood, furniture, paper	M	15,0	11,9	26,9	4,3	92	25

A Percentage of total sales of industry

S = strong demand growth

M = moderate

W = weak

B Proportion of total domestic demand supplied by intra-Community and non-EC imports (import penetration)

C Market share of five largest firm, percentage of total sales of industry

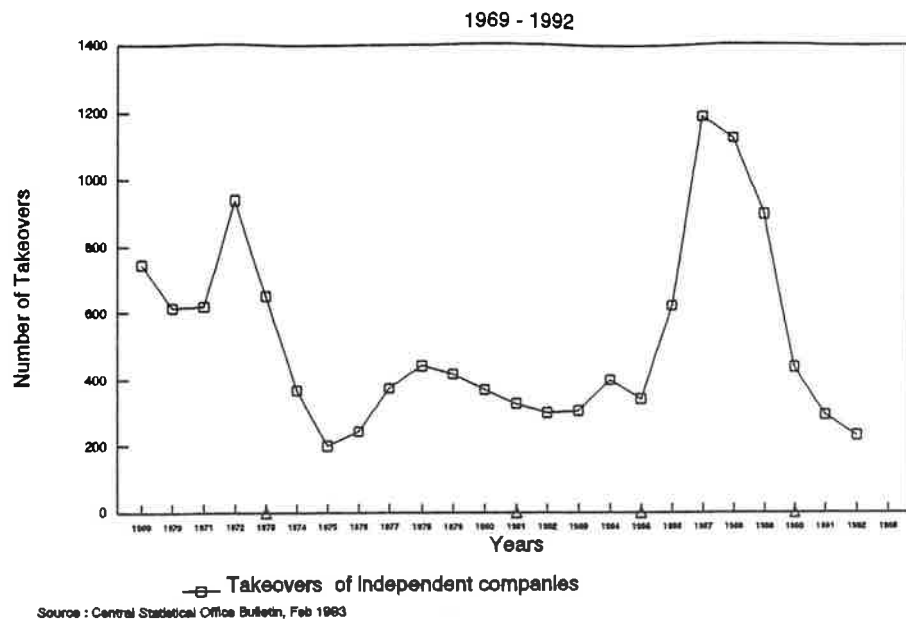
Source : EC, Reports on competition and other Commission departments

The merger activity is distributed lopsidedly between industries, but the reasons for this behavior are numerous as was discussed before in the theoretical and empirical parts of the general industry structure. According to this study the most takeover active businesses seem to have been the chemical, machine tool, electrical equipment and food industries.

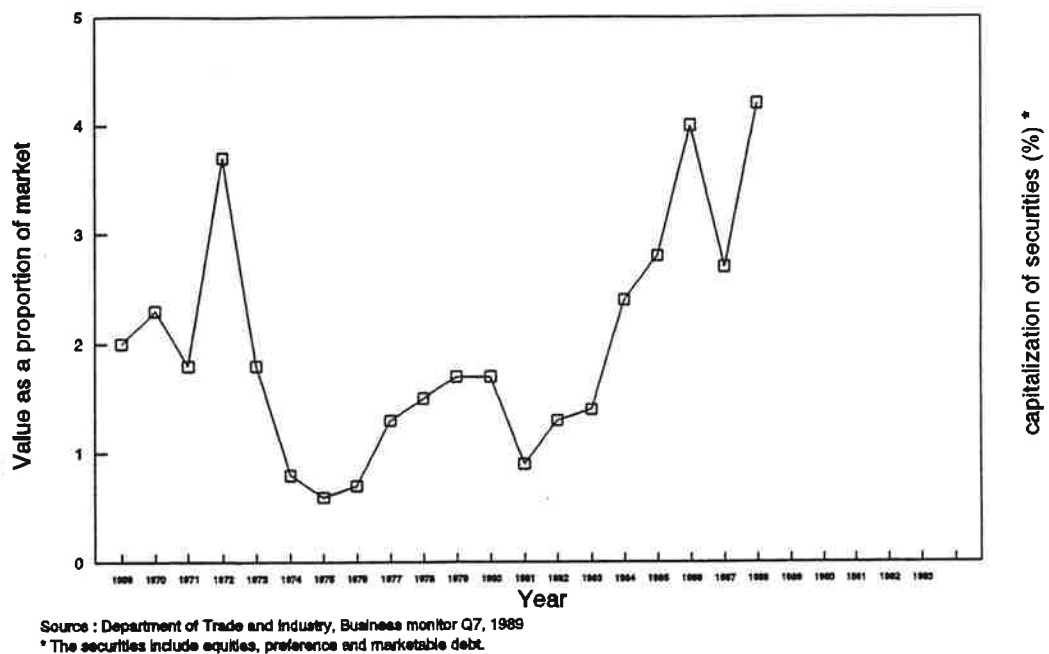
As it has been noted, UK is the most takeover active place in Europe and virtually the only country where reliable and continuous takeover statistics is available. The number of takeovers of UK firms in figure (15) shows the merger waves since late 1960s. Evidence from Germany and France is given in the annexes (table A6).

Another way to look at these figures is to use value of mergers as proportion of market capitalization of securities which resembles the equation (7) in section 2.6.3. This ratio shows the relative importance of takeovers in the capital markets,

<sup>159</sup> European Economy



### 15 Takeovers in the UK, 1969 - 1992



### 16 Mergers and capital markets in the UK

see figure (16)<sup>160</sup>.

It would be possible to compare the attractiveness of different countries as

<sup>160</sup> Franks & Mayer, p. 195. These numbers are slightly older than in figure (15) which were obtained from newer source.

takeover targets by comparing the Tobin's q value in these countries if reliable statistics was available. Although this method cannot give precise predictions, the harmonization and integration process leads to free movement of capital, and this means that investments within the integrated Europe are most likely to flow to places where the assets and production are cheapest until a equilibrium is reached<sup>161</sup>. Unfortunately there is a lack of proper Tobin's q statistics concerning European countries and industries. Firms from the rest of the world may also be active acquirers when they attempt to bypass the trade barrier and adapt to local environments demand conditions. The best way to do that may be an acquisition of an existing local company which has the required tangible and intangible assets.

#### 4.4.3 Evidence of Performance

The successive statistics of firm level performance consists of profitability, growth and equity value figures which have been gathered mainly from few publicly available sources like major financial publications. Most of it could be called casual empiricism and the evidence may not always be statistically representative. The information value of these figures is that we can see some of the major tendencies and consequences of the takeover market. Theory predicts that countries with free takeover market have companies that maximize the firm's value. This should be empirically reflected by higher market value in relation to sales. Financial Times<sup>162</sup> has listed the largest European firms according to their market value, sales and ROCE<sup>163</sup> exceeding 25 per cent, table (9).

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<sup>161</sup> There are many studies about international investments. In a simple model with very restricting assumptions, capital will flow where ever production is cheapest. Although this is not so robust, it gives some idea of the capital movements. In any case the location decisions of the firms determine the capital flows and it may be influenced by many factors like tariffs and taxation. For an analysis of a profit maximizing MNE, international investments and tariffs see for example Horst (1971).

<sup>162</sup> Financial Times List 500 Largest European Firms (1989), original calculations by de Jong (1991).

<sup>163</sup> ROCE = Return On Capital Employed

$$ROCE = \frac{\text{Profits} + \text{Interests}}{\text{Capital at the Beginning of the Year}}$$

**Table 9 : The 100 largest European firms according to :**

Countries	Market Value	Sales	ROCE > 25%
UK	43	28	64*
W.Germany	14	27	1
France	13	17	18
Switzerland	8	4.5*	0
Italy	2	6	0
Netherlands	4	4	3*
Sweden	7	3.5*	4
Spain	6	2	4
Belgium	2	3	2
Norway	1	2	1
Austria	0	1	0
Finland	0	2	0
Ireland	0	0	2
Denmark	0	0	1
	100	100	100

\* Asea Brown Boveri (ABB) is divided between Switzerland and Sweden, also Shell and Unilever split

Anglo-Saxon	44	29	67
Germanic	33	43	9
Latinist	23	28	24
	100	100	100

We can see that firms with high market value are concentrated to the UK, just as theory predicts. Firms that have high sales value are more dispersed and UK is no more so dominant. Furthermore, over half of the high yield firms (ROCE > 25%) among these 100 largest are located in the UK and only one in Germany. This example shows that there is a trade-off between the value of the firms and the growth of sales in these countries. As shareholders are concerned mostly with the value and managers desire growth at the cost of the value, it seems that shareholders in the UK have more say in the firms' decision making. The reason for this behavior, provided that the Anglo-Saxon and Continental managers are quite similar in their preferences, must be that there exists some mechanism to force managers maximize the value, namely takeover market. Differences in managers

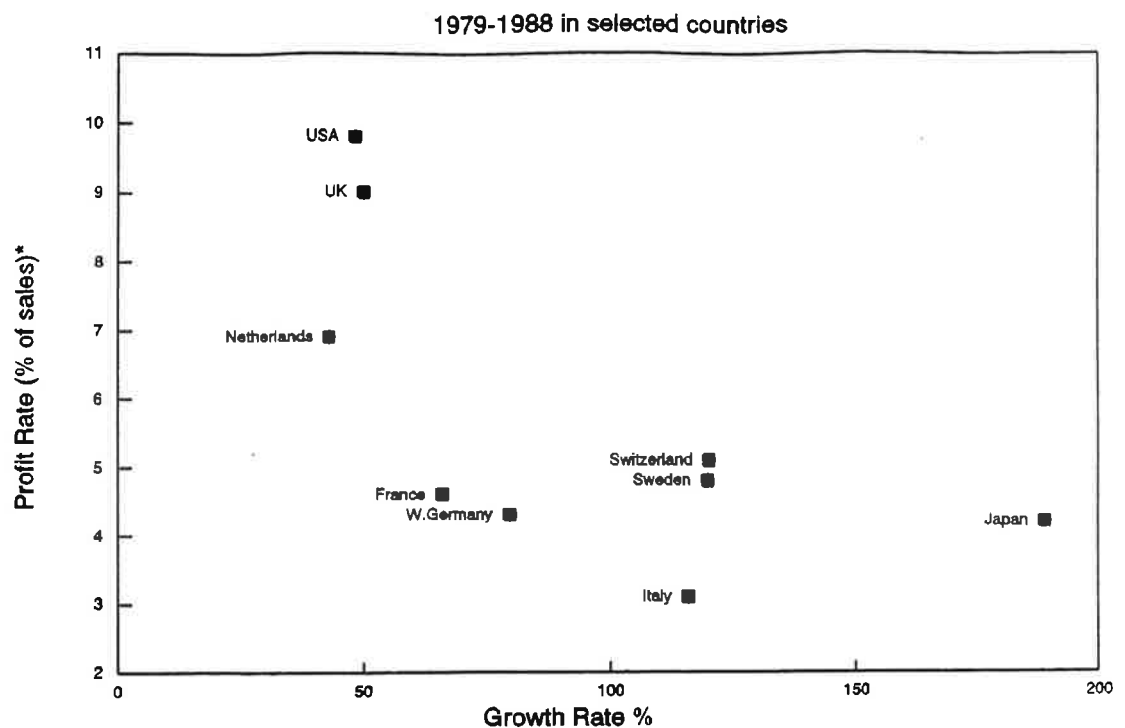
preferences may further enhance this tendency.

The results were quite rough and they could be explained by other things, like by concentration of firms or by the location decision of large firms which often are multinationals. But there is another more elegant way to do comparisons between countries. This method has already been employed in the introductory chapter and it is done by comparing sales growth rates and profit rates on sales, the table is annexed (A3) and some countries are added to it. The net profit rate was corrected for corporate tax differences between the countries.

The next graph (figure 17) shows how the countries are located in this space, USA and Japan are the two extremes and Europe is located between them with UK closest to USA and Germanic countries closest to Japan. Linear OLS estimation gives the  $R^2$  value of ca. 0.43. It seems to be quite clear that Anglo-Saxon firms are closer to profit and value maximization, and Germanic firms closer to growth and sales maximization.

These results should, however, be interpreted cautiously. Many other reasons may explain the differences and as has been noted these numbers are obtained from diverse accounting data. Anyway, the objectives of the firms have most certainly affected these figures and takeover threat as a major element contributes to these numbers. We can therefore conclude that the freedom of takeovers really is a important factor and competition policy may have some adverse effects if it restricts mergers too prudently. Nevertheless, it seems that the EC competition policy is quite up-to-date and flexible, which subsequently shows that the economic reality has had an important impact on the EC legislation. Apparently the trade-off between control and competition deserves even more attention from the policymakers and academics.

The takeovers seem to have managed also in the disciplinary task from the dismissal viewpoint, management turnover in UK is much higher than in the Germany or France, although many of the UK dismissals are not associated with



**17 Growth and profit rates.** \* net profit rate after correction for corporate taxation. Shell and Unilever equally divided between home countries.  
Source of Data : Fortune 500 Lists, 1979-1988

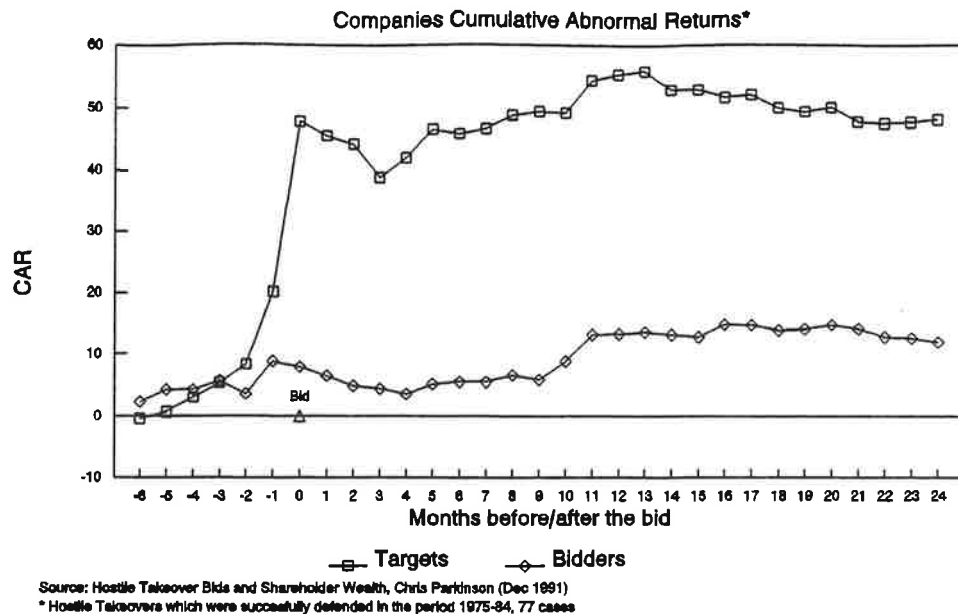
takeovers<sup>164</sup>. This implies that the threat of dismissal is higher among the UK managers and consequently they are working more to the benefit of the shareholders, even if high management turnover as such is not a healthy phenomena.

If takeovers are thought to improve the managerial efficiency, then the market reaction to hostile takeovers should be positive. The evidence is not conclusive and the European statistics is scarce. The results of one recent study of the cumulative abnormal returns in 77 UK hostile takeovers which were successfully defended are displayed in the figure (18)<sup>165</sup>. It seems that the information of the bid "leaked

<sup>164</sup> Franks & Mayer, p. 203

<sup>165</sup> Parkinson (1991)

out" before the initial takeover bid. The abnormal returns did not vanish when the



## 18 Cumulative Abnormal Returns in Hostile Takeovers in the UK

bid failed and these results were t-statistic significant at the 1 % level. The bidder firm showed significant (t 5% level) returns only one month before the bid. This indicates that the gains are smaller to bidders and even if there are gains around the bidding time these gains are not sustainable. Anyway, it seems that the shareholders of the target company gain from takeover bids, even if they fail.

Another thing is then how the national income is distributed and what is socially desirable. Markets for corporate control allow the shareholders (capitalists) to "reap" more of the firms and employees than they otherwise could. In this way shareholders get a free lunch compared to a situation without effective takeover threat; managers and other employees may suffer economically from this as their bargaining power is diminished. This may be reflected in the fact that German workers are among the most highly paid ones in the world, whereas the British workers are paid less despite of the activities of unions. In political sense takeovers almost inevitably lead to redistribution of power between different stakeholders, not just between managers and shareholders. However, these aspects fall outside the original scope of this study.

Yet another thing is that if the efficient takeover market leads to high level of



concentration the welfare may be reduced. However, at least internationally this may not be true as many studies have shown a negative relation between the level of foreign investment and change in concentration<sup>166</sup>. It was also noted already at the beginning of this paper that the fear of monopolization is hardly justified in large extent. Besides the concentration is not the major subject here and it would require another paper to deal with that topic. One notion based on the table (4) in the discussion of general economic conditions is that productivity in Europe is generally much lower than in the USA or Japan. That would seem to imply that takeovers do not have major part determining the level of productivity, but that evidence is not very conclusive. The opposite argument is that Japanese firms have some capabilities that others do not have, and the only way to reach the Japanese level is through restructuring including mergers. Anyway, the current state of Europe as an inefficient trade block between USA and Japan is hardly a fixed condition.

Eventually it seems that takeovers have been a powerful disciplinary force but somewhat costly one. Countries may benefit from having other strong controlling mechanisms, but hostile takeovers are unavoidable in a market economy and one should not underestimate their positive effects. Hostile takeovers are an integral part of a market economy, even if they have drawbacks.

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<sup>166</sup> Caves (1982), p. 101

## 5 CURRENT TRENDS AND IMPLICATIONS FOR FUTURE COMPETITION POLICY DEVELOPMENT

"The observation that one form of restructuring may lead to more of another has important implications for the extension of hostile acquisitions from the UK to the Continent. Not only will continental Europe be subject to an unfamiliar (and apparently unwelcome) form of restructuring but also , in the process, the stable relations that have existed between investors and the firm may be extinguished. Takeovers could, therefore, be a catalyst for much greater change in European corporate arrangements."<sup>167</sup>

This last chapter discusses the possibilities of competition policy in effective merger control and how the market for corporate control may help restructuring European industries. First we will see how some important structural factors like global trade policy are developing. In addition, this chapter covers the importance of these aspects when EC accepts new members from the relatively small applicant states point of view. Austria, Finland, Norway and Sweden are all small and open economies, but their takeover markets have been relatively unimportant until 1980s. Finland will be presented as a short case of a near-Germanic country with thin and relatively inefficient capital markets, corporate and competition law changing due to European integration and low Tobin's q values in some industries.

### 5.1 Global Competition, Integration and Restructuring

The world trade arrangements are changing in an important way, Europe is moving towards integrated markets, although not without problems. North America and East Asia's Newly Industrialized Countries are forming competing trade blocks and GATT negotiations have been continuing slowly. Anyway, the golden time of old protectionism seems to be behind and world trade has liberalized much, even though there is a form of new protectionism which still causes friction to trade flows<sup>168</sup>. This liberalization puts many firms into a new competitive situation,

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<sup>167</sup> Franks & Mayer, p. 216

<sup>168</sup> " Old protectionism " means usually trade barriers like tariffs and quotas, whereas " new protectionism " refers to obstacles like voluntary export restrictions (VER). See for example Williamson & Millner.

even purely domestic firms face the pressure from foreign competitors and they have to cope with this exposure. All this makes the integration in Europe more difficult and compels firms to increase efficiency and enlarge business possibilities, sometimes through mergers.

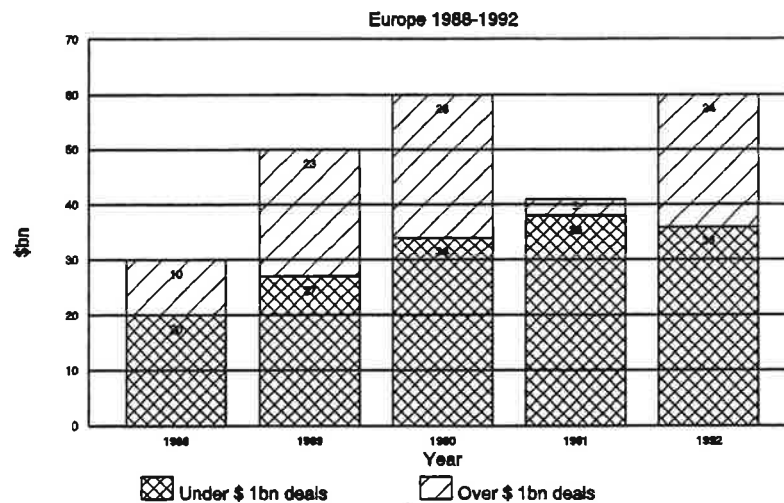
Integration of world capital and commodity markets brings about new payoffs, opportunities and risks to MNEs and domestic firms. Many firms may find takeovers as an attractive way to seize more of these Natures opportunities, especially when takeovers are relatively economical way of investing compared to green field investments. European markets for corporate control may encounter a boom as active acquirers in Europe start to utilize these possibilities and non-European firms continue circumventing the trade barriers via direct investments.

Larger market for corporate control is likely to increase the pressure on management and therefore enhance the corporate efficiency. The weakness of hostile takeovers inside the firm is the fact that they often ruin long term implicit contracts and therefore lead to increase in costs. The future development may consequently lead to more efficient firms with more explicit and costly contracting. However, takeovers are only one factor in this future development of corporate world and much depends on the other factors like the intensity of competition in the worldwide markets.

As it has been noted previously, there is growing trend towards reshaping many European industries. This is the case especially in countries which have had highly closed markets for corporate control and where there are good prospects for direct investment via takeovers reflected by upswing in the economy simultaneously with low Tobin's q values in some industries. If the UK system of fairly liberal takeover environment is brought to Continental Europe, the impact on the industry structures may be immense as the insider systems are so vulnerable. For example, when so far fairly protected German firms suddenly are potential targets, the number of takeovers and reorganizations may grow very rapidly and the whole

corporate model of Germany may have to be revised<sup>169</sup> <sup>170</sup>. The question whether this is good or bad is so important that the future research should try to provide some answers to this puzzle.

The cross-border takeover activity seems to have retrieved its strength after short period of weakness. The number of mergers dropped in 1991 but the activity rose despite of the recession in 1992 to the same level where it was in 1990, figure (19). This supports the view that the integrated European market for corporate control is eventually emerging despite of many misadventures and opposition.



### 19 European Cross-border Mergers

Source: EIU 1st Quarter 1993 European Trends

## 5.2 Future takeover control and the Enlargement of the EC

The future challenges for European Community's competition policy come from liberalized capital markets, integration of common market and from the pressure from other areas like NAFTA or East Asia. Competition policy has to adjust to the global developments and be in line with the trade policy, since liberal trade policy may require more liberal competition policy and vice versa. One of the major

<sup>169</sup> Schneider-Lenné says that the philosophies of the German and UK firms are moving towards each other, p. 22

<sup>170</sup> It seems that Japanese shareholders have also increased their activity, see for example The Economist 4 - 11 September 1993 for short article

questions in this context is that if the UK system should be "imported" to other EC countries, too.

Even if the corporate control within the EC is not totally harmonized to resemble the UK model, major changes in the takeover markets are likely to take place in many European countries as the common market for firms arises. Germanic countries can hardly totally stop the investors in the market for corporate control from attacking the non-value maximizing firms and cross-border M&A activity is likely to continue and even expand to new countries and industries. Therefore, takeovers are strengthening their position in Europe as a control mechanism. Furthermore, other control mechanisms described in the previous chapter are still available, and as the consciousness of shareholders and other stakeholders increases due to better information and public discussion it may well be that institutional control etc. make the lives of managers even more controlled.

When European Community accepts new members, these countries have to adopt the rules of the community, *Acquis Communautaire*, and they also have to exterminate all relevant barriers between them and the old member states. All this fully exposes the industries of these countries to the competition and takeover threat by other firms in the common market. Many Nordic countries have had special regulations concerning foreign ownership<sup>171</sup>, but these regulations are soon to be history. This development takes place even before the first stage enlargement is carried out, the latest applicants from the EFTA will be members in the European Economic Area (EEA), which already adopts much of the community legislation. One aspect to which the legislators, managers and policy makers apparently should give more attention, is the improvement of internal control mechanisms prior to the discipline from external sources.

The closed nature of these countries takeover market, smallness of the capital markets and the managerial capitalism of these countries may lead to considerable

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<sup>171</sup> For example Finland allowed foreigners to own only 20 per cent of any firm's shares, in some cases government could permit 40 per cent share. Foreign subsidiaries were naturally a different case.

changes in the industrial structure when the reorganization process begins. Even if this evolutionary view of future developments fails to give accurate picture of the future, it most probably will carry some weight as the battle between the slightly different forms of capitalism continues. Next we will take one Germanic country which went through the expansion of takeover market, namely Finland.

### 5.3 The Finnish Case

Finland makes an excellent case for studying the possible effects that the enlargement and birth of a liberal European takeover market might have. The country has small capital markets which were highly regulated until recently, bank dominated finance structure and very low Tobin's q ratios<sup>172</sup> in industries like forest industry.

The structure of the Finnish markets for corporate control is a structure of a small open economy which has had quite regulated capital markets; especially international capital movements were restricted in many ways. General industry factors are quite similar to many other small European countries where industries have to be concentrated in order to gain from the scale and internationalization is seen important. Many of the mergers during the period of "casino economy" in the second half of 1980s were explained to be necessary in order to reach some advantages of bigness or synergies between businesses.

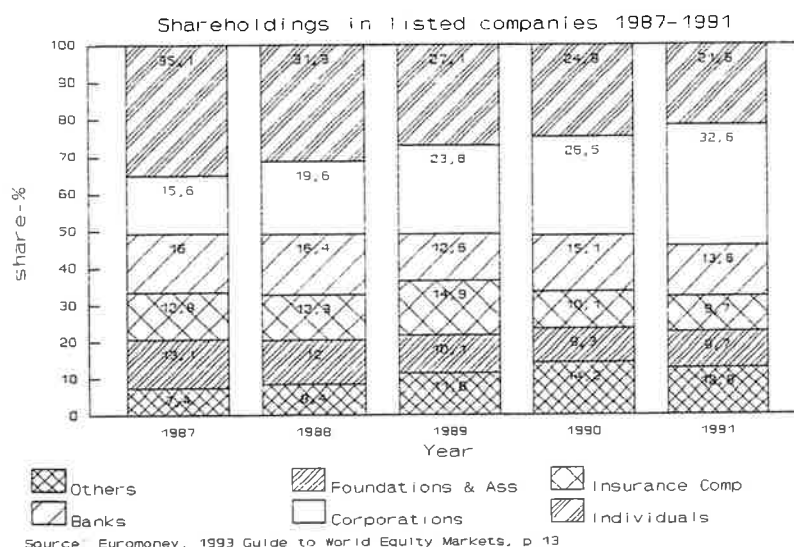
The Finnish capital market is relatively thin and it was fairly regulated and bank dominated until the mid 1980s. Government has protected many domestic industries like agriculture and only a year ago the Corporate Law restricted the foreign ownership in Finnish corporations. Competition policy is being revised according to the *Acquis Communautaire* and the Finnish competition authorities have intensified their activities. Hence, Finland could be classified as a Germanic

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<sup>172</sup> Virkkunen (1992) has estimated Tobin's q ratios for Finnish forest industry firms for years 1970-85 and the estimates are usually only slightly over 0.3, p. 104, but one should be cautious to draw any solid conclusions of this kind of estimates. However, this means that the assets are deeply undervalued and they could be cheap targets for multinational enterprises.

country in the European scene like all the Nordic countries. The Finnish stock markets are quite thin and not so efficient, in Fama's classification they have been only barely weakly efficient<sup>173</sup>. However, the stock market reactions to takeover bids seem to have been generally positive at least in the short run. Difficulties arise again as the evidence is so limited and this paper excludes the takeover premium and the abnormal return calculations.

The structure of Finnish share ownership has changed during the last decade, corporations have increased their ownership stake sharply and the ownership share of individuals (households) has decreased. Also the ownership of institutional investors has dropped but it still represents a substantial part of the market. The shares of the different parties are represented in the figure (20). Thus the Finnish markets have traditionally been highly institutionalized and this propensity seems to continue and possibly even strengthen. This supports the view that the Finnish insider system is closer to Germanic group (or Japan) than the Anglo-Saxon group. One current trend seems to be the increasing ownership share of the foreign investors, although their share is still generally low, they may become a major factor in the future as they start exercising their voting rights.



## 20 Distribution of Finnish Share Ownership

<sup>173</sup> See for example Yli-Olli and Suomen rahoitusmarkkinat (Bank of Finland publication) for short discussions and data of the Finnish markets in the 1980s

The attitude of Finnish managers and investors towards hostile takeovers seems to be somewhat surprising according to few newspaper articles. Current managers claim that they do not fear hostile takeovers by foreign investors, managers seem to believe that they are the optimal choice also for the new owners. Instead of creating a threat foreign investors offer better possibilities for making investments and profit<sup>174</sup>. There has also been opposite opinions, but majority of the reasons given not to let foreigners to invest freely into Finland seem to be non-economic arguments. For example, some fear that much of the Finnish national independence and cultural heritage might be lost if we let foreigners invest freely into Finland. Furthermore, Finnish shareholder protect their investments against foreign acquirers who might make too cheap bargains and dilute the power of Finnish shareholders. This feature is perhaps most apparent in some fairly big Finnish corporations where one or few families have had major ownership and authority. One insightful example is the Amer corporation, which has preferential shares with 100 to 1 voting power difference of which the most powerful shares are in the hands of the original founders (four institutions) who are not going to sell them easily. However, one party could "deceive" and sell and this has been dealt with additional clauses; the company or other investors have the priority right to purchase the stocks if one party wants to sell them; the parties have made an agreement to sell the shares to outsiders only if all parties can sell them with the same price and conditions<sup>175</sup>. A problem is that there is no scientific study of the general attitudes of the Finnish managers and investors and the picture given in popular press and discussion may be erroneous.

Anyway, these attitudes are somewhat opposite to what one usually expects from managers and investors. It is understandable that managers say that they do not fear takeovers, otherwise they would reveal that they are inefficient and there is a reason for efficiency improving takeover. Finland is also so small country that managers within one industry know each others. The attitude of the investors is much more difficult to understand from the pure financial perspective, they would

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<sup>174</sup> Talouselämä Journal 41/1992

<sup>175</sup> Talouselämä 14/1993



most probably gain from the takeover at least in the short term. However, these features are hardly dominant in Finland and the late 1980s witnessed the coming of "merger mania" to Finland; but also various antitakeover defenses like cross-holdings became popular. Some of these antitakeover amendments and related features like differences in voting power are likely to be relatively significant in Finland. On the other hand, these reactions show that takeovers have influenced managerial behavior.

There is no previous study of Finnish takeover barriers and their importance. Therefore, a narrow survey was conducted among the Finnish merger experts in the biggest commercial banks (four answers). The questions were formulated on the basis of the similar EC study results (see table 1). The respondents were also asked to give their opinion of the future corporate control developments in Finland and all answers were given in written form. The results were enlightening but did not contain any surprises, although it seems that Finland's barriers are closer to France than Germany. The results of the survey are shown in the next table (10).

Employee rights appear to be relatively weak barriers and it seems that unions do not have any interest in takeovers or they consider takeovers harmless<sup>176</sup>. One explanation is that employees have much less power in corporate decision making in Finland than for example in Germany where employees have representatives in the supervisory board<sup>177</sup>. Shareholders decision making power was seen as a barrier and this might imply that shareholders are sometimes against hostile takeovers (as was already discussed before), probably because they fear breach of trust, loss of power and respectability or too low prices due to market

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<sup>176</sup> However, Unions have occasionally expressed their concern about the future of the employees in mergers. The legislative worker protection is weaker in takeovers than during "normal" times against dismissals and/or wage cuts.

<sup>177</sup> Schneider-Lenné, p. 15, employees are most powerful in companies with more than 2000 employees. There is an equal representation of the shareholders and the employees on the supervisory board. Two thirds of the employee representatives are company staff while one third are external trade union delegates

Table (10) : Takeover Barriers in Finland

+ indicates a strong barrier  
 0 barrier exists but not usually strong  
 - indicates that this is not a barrier

	Final results:	Answers + barrier	Answers 0 barrier	Answers - barrier
<b>Employee rights</b>				
Co-operation council	0	0	2	2
Union power	0	1	2	1
General worker resistance	0	1	2	1
<b>Shareholder rights</b>				
Decision power	+	3	1	0
Electing management	0	1	2	1
<b>Company barriers</b>				
Entrenchment powers	0	0	2	2
Investment possibilities	0	0	2	2
Antitakeover amendments	0	1	2	1
<b>Market Structure</b>				
Market efficiency	0	2	1	1
Cross-holdings	+	3	1	0
Family attitude	0	1	3	0
Registration	-	0	1	3
Tax policy	0	0	3	1
Variation in voting power	+	3	1	0
Competition policy	0	0	4	0
Accounting	0	0	3	1
Financial information	0	0	3	1

inefficiencies<sup>178</sup>. Another reason for this result could be that the opinions of those shareholders who are against managers' plans, can be ignored as powerless outsiders. The only slightly influential company barrier according to the survey was the behavior of the target management and use of antitakeover amendments. Nevertheless, market structure provided several barriers of which the most influential were inefficient markets (somewhat ambiguous answers), cross-holdings and differences in voting power<sup>179</sup>. Registration was not considered to be a

<sup>178</sup> If markets currently undervalue the shares and Finnish investors expect significant price changes in the long term, it may be profitable not to sell the shares now cheaply and also prevent the others from doing so; the investors await "better times" before they sell. This is possible only if the markets reflect inefficiently the expectations of the future.

<sup>179</sup> Finnish company law allows 20 to 1 voting power differences, old firms may have even larger differences (e.g. Amer corporation has 100 to 1 difference). However, the government is now planning to amend the law so that some

barrier, unlike in all other European countries shown in the table (1). Nevertheless, the answers were not alike and this together with the empirical evidence indicates that no barrier is overwhelming and takeovers are not oppressively difficult to undertake. Nevertheless, the general opinion was that the takeovers are beneficial to the economy as they improve the resource allocation, although the industrial managers might challenge this view. All respondents supported the view that takeover pressure has disciplined Finnish managers, an opinion which is contrary to the view commonly expressed in public.

Some important Finnish industries, like the forest industry, seem to have very low Tobin's q values<sup>180</sup>. It may be lucrative for foreign competitors and other investors to acquire Finnish firms if they are expanding. One additional reason for direct investments to Finland could result from the spill-overs of the outsider investments to the EC area. As it is plausible to assume that Finland is joining the EC it might be cheaper to invest to Finland but still gain the advantages being within the common market, though this spill-over is hardly really significant. Finland has often been seen as an more risky country than many other Nordic or European countries<sup>181</sup>; the Finnish country risk is probably diminished by the EC-membership and adjustment of the Finnish legislation and policies according to the EC model.

In addition to the earlier mentioned features in the behavior of Finnish managers it is good to acknowledge that they are not among the most highly compensated in the world. Somehow it seems that the managers have sometimes tried to remedy this by taking notable perks. Many projects like building of some head offices which were started during the boom when there was high cash flow resulted as financial catastrophes. The Finnish banking crisis is also partly due to lack of corporate control in some groups like the Savings Bank group where the ownership and control was somewhat weakly organized. Management had a high cash flow

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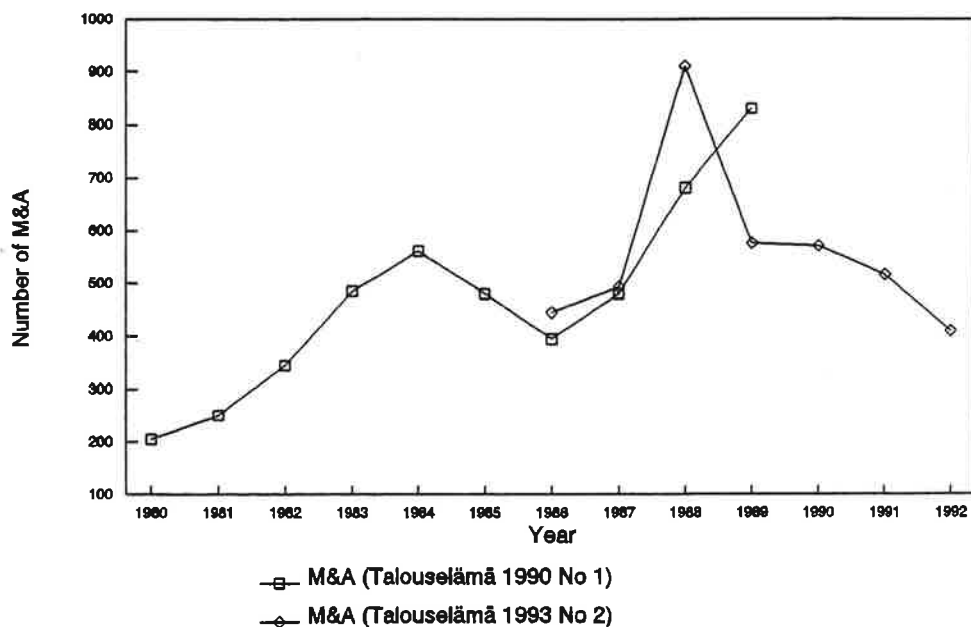
important decisions would require the one vote per share rule.

<sup>180</sup> Virkkunen (1992)

<sup>181</sup> Euromoney, World equity markets

available and they seem to have invested it even into many negative NPV projects.

There is no comprehensive source for Finnish M&A statistics and one has to rely on data from various sources, mainly on few business journals. Finnish takeover activity transformed rapidly in the 1980s. According to Talouselämä journal (weekly updated records of published acquisitions) there were only 204 mergers in 1980 but 568 in 1984, see figure (21). The increase was partly due to changing tax laws which forced investors to realize gains via mergers<sup>182</sup>. 1980s witnessed also the liberalization of capital markets. The activity decreased slightly from 1984 to 1986, but then it boosted again and the top was reached in 1988/1989, one reason seems to have been again the fear of increasing taxation. Then there was approximately over 800 mergers and acquisitions per year (the accurate number is unknown and different sources give different figures, the newer 1993 No1 numbers are more accurate according to the Talouselämä's office). Since 1988/89 the number of mergers has dropped to much lower level, but there are still more acquisitions than in the beginning of 1980s.



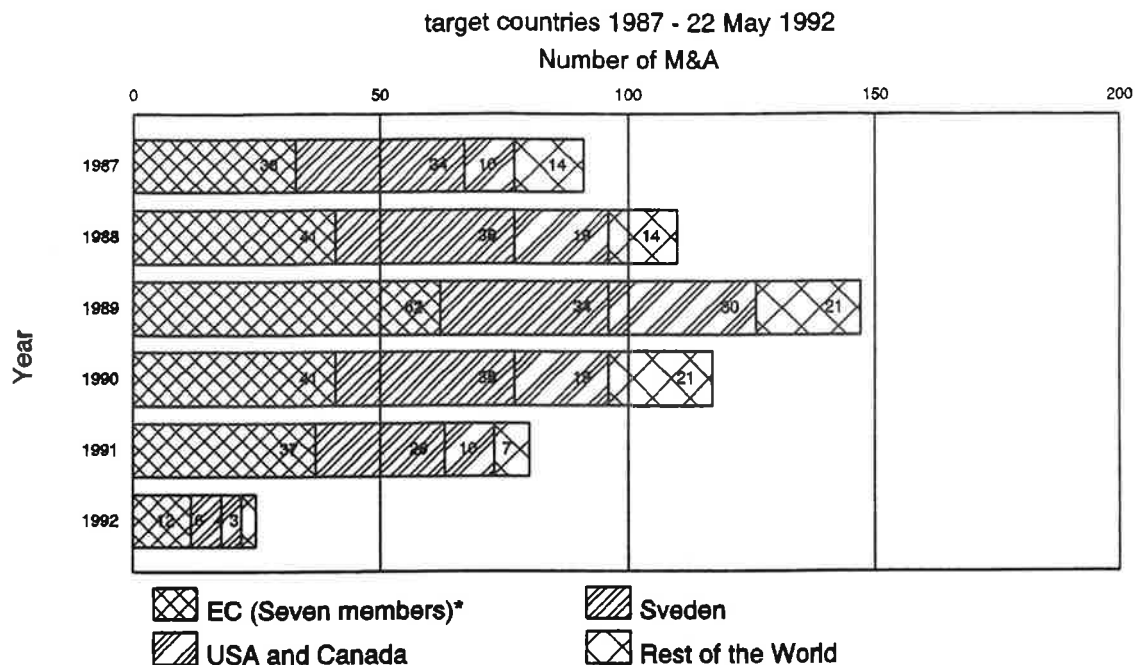
## 21 M&A activity in Finland

The Finnish foreign acquisitions rose according to the same pattern as the

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<sup>182</sup> Talouselämä (1989) No 1, the fear of increasing capital income taxation seems to have pushed some shareholders into mergers

domestic ones, the number rose until 1989 when it started to fall. The figure (22) shows the development, the 1992 figures extend only to 22 May. An interesting feature is the decreasing importance of Sweden, although it is still the most



\* UK, Germany, Denmark, France, NL, Italy and Belgium

Source: Talouselämä 1992 No 21

## 22 Finnish foreign M&A activity 1987 - 1992

important target country, and the rising importance of the EC. It is really difficult to draw any precise conclusions of these figures, especially as they do not separate between hostile and friendly takeovers. What can be seen is that the activity correlates with the macroeconomic conditions and the liberalization of capital markets as major structural changes; the takeovers seem to have become a part of Finnish business culture.

In some of these hostile takeovers agency problems or conflicts between shareholders provided the basis for expected gains; some traditionally not-so-profit-oriented firms were perfect targets for formerly unknown "corporate raiders". These takeovers were not welcomed in every case, and it may be somewhat questionable if there was any real efficiency gains. However, large scale voluntary combinations in some areas like forest industry may imply that there was gains to be realized. Nevertheless, these hostile takeovers at least forced the managers to take the value of the firm and shareholders more seriously. Even if many in Finland

view the hostile takeover phenomena as part of "casino economy" not belonging to normal business practices, these takeovers make the lives of inefficient managers more uncomfortable and efficiency may be enhanced by the increased takeover threat. One additional reason for boosted search for efficiency among Finnish managers may come from the increased activity of some Finnish shareholders during the last decade, i.e. the institutional control may be improving. The survey answers suggested that takeovers have affected the behavior of Finnish managers and that the activity is most likely to increase in the future, much of this increase was associated with the coming enlargement of the EC. Furthermore, a recent study presents some evidence that the agency/bankruptcy costs have a role in the financial decision making of some Finnish firms<sup>183</sup>. It might be wise to improve the internal and debtor control mechanisms before a new merger wave arrives, otherwise the restructuring may be harder than necessary.

#### **5.4 Concluding Remarks**

This study shows the complexity and importance of hostile takeovers in the modern industrialized world. Takeovers can help to discipline management and allocate resources to more efficient and socially desirable uses. However, takeovers may sometimes cause a breach of trust in a firm, increase contracting costs and force managers to be short-termed. Takeovers may also increase the level of concentration in industries and diminish consumer surplus if there is inadequate competition or collusion can be sustained more easily<sup>184</sup>. However, takeovers are an essential part of free market economy, and if resources are to be allocated efficiently takeovers have to have enough latitude to improve the allocation mechanism.

As the topic is so complex and the consequences of takeovers so far reaching, the

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<sup>183</sup> Virolainen, p. 86. The level of firms' agency/bankruptcy costs was proxied by the R&D expenditure. High R&D expenses generally indicate high level of intangible capital which in turn implies greater welfare losses in default and increase moral hazard problems within the firm, p. 73

<sup>184</sup> As the number of firms in an industry diminishes collusion becomes more easily sustainable. See for example Tirole for this kind of analysis.

applied structure conduct performance (ASCP) framework provided a helpful tool to study the subject. The main advantages of the model are that it helps to organize the field of study and look at takeovers from many viewpoints. The structure of the takeover market was divided into general market, financial and institutional parts. The major drawback of the model as it is presented in this paper is that the causality between various factors and the importance of each factor are still in a confused state and the overwhelming number of theories and data may provide no easy way to research the subject.

European markets for corporate control were divided into three distinct groups of countries: the Anglo-Saxon group where takeovers are a normal form of control, cooperative Germanic group where hostile takeovers are rare and implicit contracts are more easily sustained, and the Latinist group falling approximately between the two previous clusters form the basis for three different versions of European corporate control. Each system has some advantages and drawbacks; the Anglo-Saxon system has the advantage of being more dynamic and the profit maximization objective is obeyed more keenly, but implicit contracts may be broken; the Germanic system has the advantage of being capable of creating valuable contractual relationships and cooperation, but the system is somewhat rigid, and the lack of external control may cause inefficiencies. However, one major difference comes from the ability to withstand merger waves and hostile takeovers in the future. So far the Continent has been relatively free of the hostile takeovers but a new wave of acquisitions in an integrated Europe may bring about major changes. The UK system is prepared to cope with the hostile takeovers, but Germanic countries may suffer from sudden expansion in M&A activity. Therefore, it may be inevitable to adjust the Germanic system closer to the new system now prevailing in the UK, even if it has some disadvantages. The alternative is that the Germanic countries should have other truly efficient control mechanisms, a case which may not be possible at least in the light of this study.

As an answer to the prime objective of this study (how do takeovers influence managerial behavior and how does this effect EC competition policy?) I could say that there is no apparent solution; hostile takeovers clearly force managers to

converge towards value maximization, but there is much more to it as we have seen. What comes to EC competition policy, it seemed that the EC rules are quite up-to-date, but that the Commission may have overlooked the risks (other than the creation of market power) which relate to the implementation of the harmonized policy throughout Europe. Furthermore, it seems that the trade-off between various factors relating to mergers has been overlooked in many cases.

The future interests, both research and policy oriented, should seek the answer to the question whether the implementation of harmonized competition policy based on the UK experience is advantageous. Further, the formalization of the takeover market analysis might be worth researching. Future competition policy formulation could also benefit from further research. Moreover, a more general macroeconomic perspective might help us to abandon the somewhat biased partial equilibrium type of analysis. Nevertheless, Manne (1965) concluded his paper by saying that "*the study of the economics of the market for corporate control is still in its infancy*". Now it seems that the situation has changed dramatically after Manne's research, takeover studies have found their place within the field of economics.



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## APPENDICES

TABLE A1

Structure of Share Ownership in Germany ( Shares in % )

	1969	1970	1980	1990
Private households	27	28	19	17
Enterprises	44	41	45	42
Public Sector	14	11	10	5
Foreigners	6	8	11	14
Banks	6	7	9	10
Insurance companies	3	4	6	12

Source : Deutsche Bundesbank, Monthly Report, October 1991

TABLE A2

Abnormal percentage stock price changes associated with:

	successful corporate takeovers		unsuccessful corporate takeover bids	
Takeover Technique	Target (%)	Bidder (%)	Target (%)	Bidder (%)
Tender offers	30	4	-3	-1
Mergers	20	0	-3	-5
Proxy contests	8	n.a.	8	n.a.

Jensen & Ruback pp. 7 - 8

TABLE A3

Profit and Sales Growth Rates in Selected Countries in Largest Firms

Country	Number of firms	Growth rate 1979-1988	Profit rate (% of sales)
USA	40	48.5	9.8
UK	40	50.1	9.0
W.Germany	40	79.8	4.3
Japan	40	188.9	4.2
France	36	66.1	4.6
Sweden	20	120.0	4.8
Netherlands	11	43.1	6.9
Switzerland	10	120.2	5.1
Italy	6	116.0	3.1

By making a simple linear OLS estimation of these country average values without weights we obtain the following results.  $R^2$  is ca. 0.43 which means that there is



a relation although not so clear. Difficulties arise also with the comparison between different countries, each has different accounting rules and this makes the results somewhat questionable. Regardless of these problems this statistics gives useful approximate insight into the real world situation.

Constant	8.671142
Std Err of Y Est	1.858935
R Squared	0.430329
No. of Observations	9
Degrees of Freedom	7

**TABLE A4**  
**Takeovers in UK 1969 - 1988 ( Data used by Franks & Mayer )**

Year	Number	Value £bn	Value as a proportion of replacement cost of capital stock	Value as proportion of market capitali- zation of securities
1969	744	0.97	2.8	2
1970	614	1	2.9	2.3
1971	620	0.74	1.7	1.8
1972	938	2.35	4.5	3.7
1973	651	1.06	1.6	1.8
1974	367	0.46	0.6	0.8
1975	200	0.22	0.2	0.6
1976	242	0.35	0.3	0.7
1977	372	0.73	0.6	1.3
1978	441	0.98	0.7	1.5
1979	417	1.47	0.8	1.7
1980	368	1.26	0.6	1.7
1981	327	0.88	0.4	0.9
1982	299	1.4	0.6	1.3
1983	305	1.91	0.8	1.4
1984	398	4.35	1.7	2.4
1985	340	6.3	2.2	2.8
1986	537	12.13	3.9	4
1987	905	11.28	3.4	2.7
1988	937	16.87		4.2

This Data was obtained from Business Monitor MQ7 which is not published any more. However, Franks and Mayer used this as basis for the calculations of the value as proportion of replacement cost and the value as a proportion of market capitalization the data is presented here too.

TABLE A5

Takeovers in UK 1969 - 1992 \*

Year	Number Payments	Value of initial £bn
1969	744	0.97
1970	614	1.00
1971	620	0.74
1972	938	2.35
1973	651	1.06
1974	367	0.46
1975	200	0.22
1976	242	0.35
1977	372	0.73
1978	441	0.98
1979	417	1.47
1980	368	1.26
1981	327	0.88
1982	299	1.40
1983	305	1.91
1984	398	4.35
1985	340	6.30
1986	621	12.27
1987	1188	11.82
1988	1123	17.21
1989	896	21.44
1990	437	5.19
1991	292	7.41
1992	230	3.93
1993		

Source : Central Statistical Office Bulletin, Acquisitions and Mergers within the UK  
( Quarter 4 1992 ), February 1993

Table A6: Partial and full acquisitions of German and French companies

Year	Germany	France
1980	287	-
1981	325	-
1982	261	-
1983	217	161
1984	279	155
1985	372	234
1986	430	249
1987	481	719
1988	616	825

Source: Franks & Mayer pp. 196 - 197

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