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MERGERS AND ACQUISITIONS – REASONS AND RESULTS

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ABSTRACT: The report looks at mergers and acquisitions (M&As) as companies' investment strategy. The aim of this study is to benchmark Finnish M&A activity against other countries. Several comparisons suggest that Finnish companies are very active in the M&A market. In fact, after taking into account the size of the economy, Finland ranked first out of all EU member states during the 1990s. This high level of activity is not only due to domestic deals but also to a high number of outward and inward cross-border mergers and acquisitions. Our analysis indicates that most of the cross-sectional and time-series variation of the M&A activity in different countries can be explained by using GDP, market capitalisation and the number of listed firms as explanatory variables. However, many other factors also explain the high Finnish M&A activity. Moreover, in this paper an eclectic model of the causes of M&As is also proposed. This schematic model suggests that there are macro-level, industry-level and firm-level factors affecting M&A decisions.

KEY WORDS: Merger, acquisition, takeover, benchmarking, M&A, FDI

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TIIVISTELMÄ: Tässä raportissa tarkasteltiin yrityskauppoja yritysten investointistrategiana. Tutkimuksessa vertailtiin Suomen yrityskauppojen määrää muihin maihin. Useat vertailut osoittivat, että Suomessa tehdään poikkeuksellisen paljon yrityskauppoja. 1990-luvulla Suomessa tehtiin EU-maista eniten yrityskauppoja, kun huomioidaan talouden koko. Kotimaisten yrityskauppojen lisäksi suomalaiset yritykset ovat olleet mukana myös kansainvälisissä yritysjärjestelyissä. Maiden välistä eroa yrityskauppojen lukumäärässä voidaan selittää BKT:lla, pörssin markkina-arvolla sekä listattujen yritysten lukumäärällä. Nämä tekijät eivät kuitenkaan yksi riitä selittämään Suomen korkeaa yrityskauppa-aktiviteettia. Tässä raportissa esitellään lisäksi kehikko, jonka mukaan yrityskauppapäätösten takana on sekä makrotaloudellisia, toimialakohtaisia että yrityskohtaisia tekijöitä.

AVAINSANAT: Yrityskauppa, fuusio, vertailu, M&A, ulkomainen investointi

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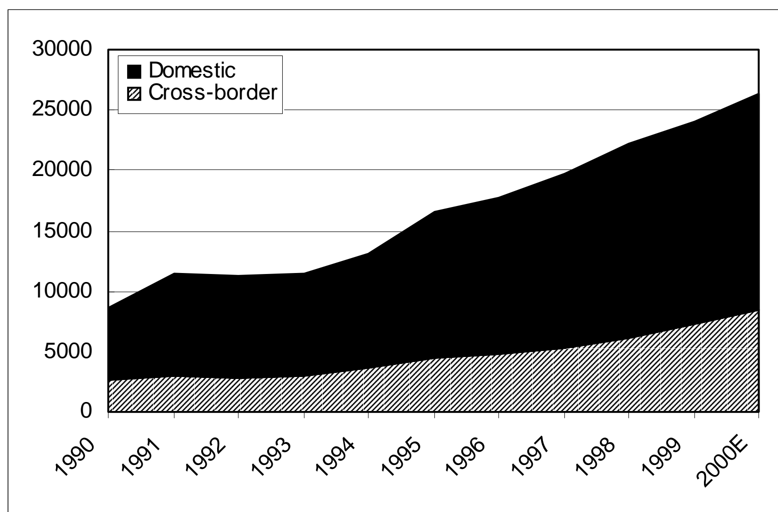
1 INTRODUCTION

Starting in the latter half of the 1990s, the latest merger and acquisition (M&A) wave has continued in the early 2000s. Both the value and the number of mergers and acquisitions have surged. While the biggest deals receive most of the attention in the headlines, a great number of smaller M&As have also been undertaken. However, current merger and acquisition activity is far from being a unique phenomenon. In fact, the current M&A surge is the fifth such wave occurring during the last hundred years.

The current wave (1994-present) can be termed "the wave of megadeals", reflecting the high number of very big M&As that have been carried out during this time. Most of the largest deals have been horizontal in nature, but also diversifying mergers have been undertaken in the financial industry where banks and insurance companies have been merged.

One of the driving forces behind the recent surge in M&As is globalisation. While domestic deals still dominate the M&A market, during the past ten years the number of cross-border deals has grown three-fold (Figure 1.1). Particularly in the U.S, the current wave can be characterised as the first international merger wave.

Figure 1.1. The number of mergers and acquisitions (world total)



Note: Data source: OECD, Author's calculations

Despite the fact that M&As have a long history, two main questions remain: How have M&As succeeded? What are the main determinants or motives behind mergers and acquisitions? The existing literature concerning these issues is inconclusive. One potential cause for the controversial results in post-merger performance studies concerns the post-merger time period because the post-merger performance can vary heavily depending on the time period chosen. Due to the long-run aspect of an M&A, it is difficult to define how long the appropriate consideration period should be. Another difficulty relates to the measurement of performance. Should financial performance be measured using stock market data or accounting data? Neither theory nor empirical evidence provide a clear answer to this question.

The question regarding the motives of M&As is also unclear. The existing literature often categorises motives into three classes, namely 1) the economic or efficiency motive, 2) the managerial motive and 3) the hybrid motive. However, it is possible that no single motive can be found, since many determinants potentially affect M&A decisions.

In this paper, we go through the relevant literature considering the motives and the success of mergers and acquisitions. In addition to the literature review, we describe the patterns of Finnish M&A activity. In order to obtain a comprehensive picture of Finnish deals, Finland is benchmarked against other countries. Moreover, in the end this paper, we sketch an eclectic model of the causes of M&As, which takes into account macro-level, industry-level as well as firm-level factors affecting M&A decisions.

The key questions addressed in this paper are as follows:

- What are the key motives behind mergers and acquisitions?
- Have mergers and acquisitions been successful?
- How many mergers and acquisitions have been undertaken in Finland?
- What kind of merger activity has Finland had compared to other countries?

In this study, the terms “acquisition”, “deal”, and “merger” are used as a synonym for both mergers and tender offers. Only in Sections 2.2.1 and 2.2.2, are mergers and tender offers considered separately.

The rest of this paper is organised as follows. In Chapter 2, the relevant literature concerning the outcomes of M&A is introduced. Chapter 3 consists of a survey of the literature concerning the motives of mergers and acquisitions. Chapter 4 gives a description of Finnish M&A activity compared to other countries. Finally, Chapter 5 concludes and discusses the implications of the study.

2 WHO ARE WINNERS IN THE MERGER GAME?

The increased number of M&As raises the question about the outcomes of corporate mergers and acquisitions. A number of studies both, in the economics and strategic management literature, have attempted to identify the impacts of M&As on the financial performance of firms.

2.1 Measuring the Outcome of Mergers and Acquisitions

Based on different indicators, the studies of post-acquisition performance can be categorised into three classes. In the first category, performance has been measured by share price, while in the second class accounting measures of profitability have been used. The third class includes studies in which other measures of merger success have been utilised.

Studies concentrating on the share price impacts often use the event study methodology (see Brown and Warner 1985). The aim is to measure the effect, i.e., the abnormal return on the stock value of an event (for example, an announcement of a tender offer). Hence, to quantify the effect of the event, one has to calculate the difference between the actual stock return and a benchmark of what would have been the expected return if the event had not happened.

The standard method to calculate the abnormal return (*AR)* is as follows:

$$AR_{it} = R_{it} - R_{Mt},$$

where AR_{it} is the abnormal return on stock *i* at time *t,* R_{it} is the return on stock *i* at time *t*, and R_{Mt} represents the predicted (or normal) return on the market at time *t*. There are basically three methods to calculate the normal return: the mean-adjusted return method, the market model method and the market-adjusted return method. *First*, in the mean-adjusted return method, a "clean" period, i.e., no information related to the event is released, is chosen and the average return of the firm is estimated for the period. *Second*, the market model takes explicit account of the risk associated with the market and mean returns. *Third*, in the market-adjusted return method, the predicted return for a firm at time *t* is assumed to be equal to the return on the market index for that same time period. Finally, in order to calculate the cumulated average abnormal return, the excess returns (AR_{it}) are averaged across the sample and they are cumulated over the decided period (Weston, Chung & Siu 1997).

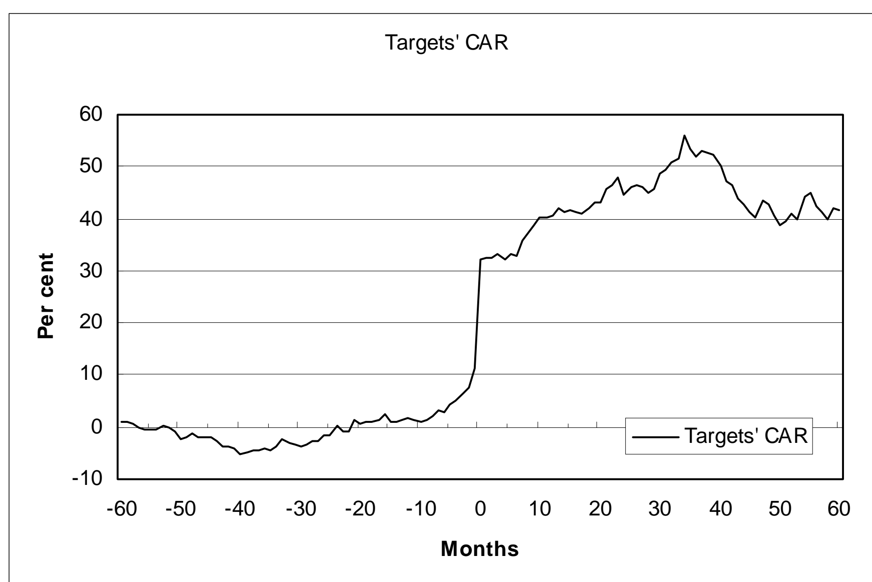
Now we turn to methods of measuring post-merger profitability. The impact of M&A on operating performance is measured by comparing accounting measures of profitability before and after the M&A and benchmarking these values to the industry average. Usually, profitability is measured as the profit related to sales or as the return on assets.

A mutual problem in both stock market and accounting data studies concerns the consideration period. In order to measure the outcomes of M&As, it is necessary to determine the length of the observation period. While some (stock market) studies have examined returns either surrounding announcement dates or in the long run, some studies have investigated outcomes of acquisitions both in the short and in the long run.

2.2 Returns to Target Companies

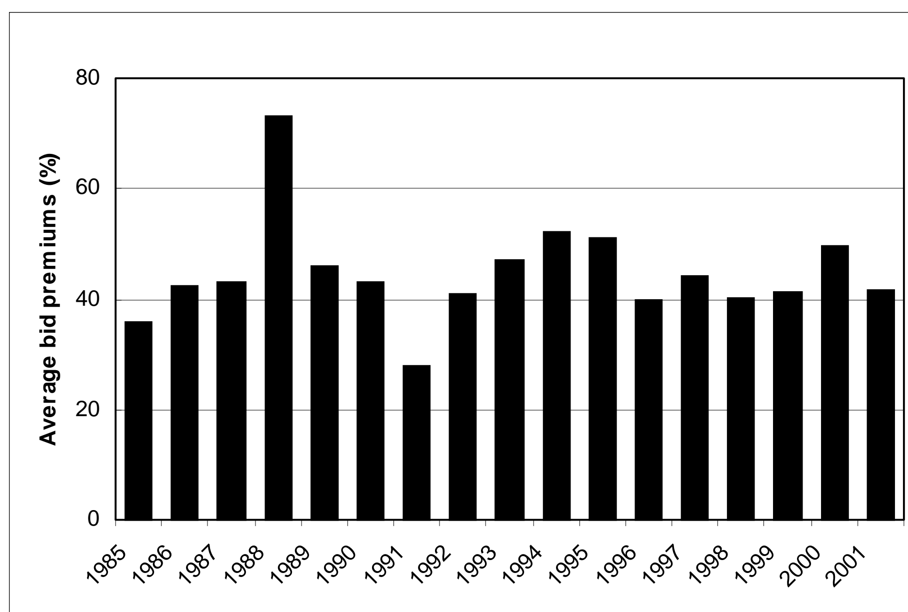
Based on a survey of 13 studies, Jensen & Ruback (1983) report an average target stock price gain of 30 per cent for tender offers and 20 per cent for merger offers. The periods covered by the studies in the survey vary within the 1956-1981 time period. Consistent with Jensen & Ruback's survey, also Dodd & Ruback (1977) report a large positive abnormal return earned by stockholders of target firms (Figure 2.1).

Figure 2.1. Cumulative average returns (CAR) of target companies for the 120 months surrounding the month of first public announcement of a tender offer (month zero).



Source: Dodd & Ruback (1977)

Figure 2.2. Final bid premium for tender offers, %



Sources: 1985-1997 Yago et. al. (2000), 1998-2001 Mergerstat

More recent studies have obtained similar results. Bradley, Desai & Kim (1988) find an average target gain following tender offers of 32 per cent over the period 1963 to 1984. Using U.S. data from 1975-91, Schwert (1996) reports the mean target gain of 36 per cent for tender offers and 17 per cent for merger offers. Focusing on Finnish mergers during 1985-1996, Lyyra (1999) reports a 7% abnormal return for target company shareholders. Danbolt (1996) suggests that over the four months period, target company shareholders gain from 6 to 11 percentage points more in cross-border than in domestic acquisitions.

In sum, there is strong evidence that M&As have raised the wealth of target company shareholders. A great majority of the studies concludes that the stock market reaction of M&As on a target company has been positive. Due to the fact that bidders often pay rather high premiums, the result is not surprising (Figure 2.2).

According to Yago et al. (2000), the premiums paid by bidders have regularly been at roughly 40 per cent of the pre-offer target value. The premium level has been rather stabile. In 1985-89 the final premium paid averaged 49 per cent above the trading price of the target, in 1990-92 the premium was 37 per cent and during 1993-97 it was 46 per cent. The latest figures (1998-2001) indicate that premiums in these years do not significantly differ from earlier observations.

2.3 Returns to Bidder Companies

2.3.1 M&As and stock performance

Most of the studies focused on stock market performance of M&As have used US or UK data. Although the majority of empirical evidence is concentrated on Anglo-Saxon countries, it is likely that studies from other countries would provide similar results since financial markets are fully global.

A number of studies have categorised M&As into mergers and tender offers and some studies have focused either on mergers or on tenders. However, distinguishing a merger from a tender offers is not straightforward, and, hence, a number of different kinds of measurements have been used. For example, Jensen & Ruback (1983) define merger and tender as follows: "*Mergers are negotiated directly with target's managers and approved by the target's board of directors before going to a vote of target shareholders for approval. Tender offers are offers to buy shares made directly to target shareholders who decide individually whether to tender their shares for sale to the bidding firm*".

Using U.S. data from 1958-76, Dodd & Ruback (1977) report a positive pre-tender and a negative post-tender abnormal return for the five years following tender offers and conclude that the overall impact is positive for stockholders of bidding firms. However, Mueller (1987) has criticised Dodd's & Ruback's conclusion. Mueller argues that the writers ignore or misinterpret the long run up in returns that precede the tender offer (Figure 2.3).

Before the announcements there has been on average a long rise of returns of bidding firms (from point A to 0 in Figure 2.3). Mueller claims that this increase might be the cause, not consequence, of mergers and acquisitions. Due to the long rise of returns, the company's market value is high, which, in turn, gives a good position to undertake mergers and acquisitions. After the announcement there is a short period with a positive gain to the shareholders of the acquiring firm but after that a steady decline in returns occurs. In other words, if some investor decides to invest in the bidder firm the day be-

fore the announcement (just before point 0), on average he or she will experience a negative shareholder return during the next 60 months.

Figure 2.3. Plots of cumulative average returns (CAR) for the 120 months surrounding the month of first public announcement of a tender offer (month zero)

Source: Dodd & Ruback (1977).

According to Loderer & Martin's study (1992) covering the period 1966-86, the five-year abnormal performance for tenders does not significantly deviate from zero. Neither Agrawal, Jaffe & Mandelker (1992) nor Jarrell, Brickley and Netter (1994) find statistically significant abnormal returns for tender offers. However, Rau & Vermelen (1998) report a statistically significant three-year positive abnormal return of 8 per cent. Also Karppinen (2001) documents similar results. Employing Finnish data, the author finds a cumulative excess return of 5.4% for bidders. In contrast, using US data over the period 1981-1999, Kale, Kini & Ryan (2000) find a negative abnormal return, but they note that in 51 per cent of the transactions bidders experience positive abnormal wealth gains.

Now we switch our focus to mergers. The study by Borg & Leeth (1989) concentrates on mergers during the second merger wave of the 1920s. The results suggest that prior to the merger acquiring firm shareholders do better than other shareholders while after the merger they do significantly worse. Bradley, Desai & Kim (1988) find that in the 1960s the excess return of bidders was 4 per cent but in the 1970s the return fell to 1.3 per cent. By examining mergers during 1962-1976, Asquith (1983) reports a cumulative negative excess return of 7 per cent over the 240 days following the deal. Also studies focusing on the 1980s suggest that post-merger abnormal returns are negative (see Kennedy & Limmack 1996, Rau & Vermaelen 1997). However, focusing on the period 1966-1986, Loderer & Martin (1992) conclude that, overall, the five-year post-merger performance does not statistically significantly deviate from zero.

It seems that the returns to mergers in the 1990s do not significantly deviate from the results of earlier decades. According to the results of a study on the 30-day post-merger

abnormal return, DeLong (2001) reports negative abnormal returns, focusing on bank mergers between 1988 and 1995. Moreover, the recent study by Fuller, Netter & Stegemuller (2001) focuses on the period 1990-1999 and distinguishes between private and public target companies. Analysing companies that acquired more than five targets, Fuller et al. report a negative abnormal return of 1.6 per cent for bids for public target firms and a positive 2 per cent for bids for private firms.

Agrawal & Jaffe (1999) summarised 22 different studies examining long-run post-acquisition performance measured by the cumulative average abnormal return (CAR). In these papers, the examination periods varied from 12 to 60 months. Agrawal and Jaffe concluded that based on their survey there is strong evidence of abnormal underperformance following mergers. However, no similar evidence exists following tender offers.

One weakness of stock market performance measures is their inability to distinguish between real economic gains and the impacts of capital market inefficiencies. Moreover, the data are limited to companies with publicly traded securities although a great number of M&As are not undertaken by listed companies. Hence, we next turn to studies that have used accounting data instead of stock market data.

2.3.2 M&As and operating performance

Profitability comparisons have been used to assess whether M&As create real economic gains.

Mueller (1980) reports a large-scale project covering M&As and profitability studies from several countries focusing on the period 1962-1972. Two indicators of profitability are used, namely the return of profit on equity and the rate of profit on total assets. The profits of merging firms are compared to a control group and the industry average during the five years comprising the post-merger period. The results indicate that in France, the Netherlands and Sweden the profitability of merging firms deteriorated, but in the UK the merging firms outperformed the control group.

Healy, Palepu and Ruback (1992) study the operating performance of the largest fifty mergers in the U.S for the period 1979-1984. The results of the study suggest that due to increases in asset productivity, mergers have improved operating cash flow returns. Moreover, profitability improvements are not achieved at the expense of long-run performance, since capital expenditure and R&D rates remained at the industry average level. However, several other studies report negative impacts of mergers on financial performance. Ravenscraft and Scherer (1987, chapter 4) consider a sample of 3,900 lines of business observations and find that merger intensity has a negative effect on profitability. In another study, Ravenscraft and Scherer (1989) report a decline in the financial performance of acquired units seven or eight years following a merger compared to pre-merger levels. Dickerson et al (1997) use a large database including more than 2,900 firms with a minimum of a 10-year time series during the period 1948-1977. Approximately 30 per cent of the companies have data spanning 30 years. The results suggest that acquisitions have a detrimental impact on company performance. Also Harford (1998) finds negative abnormal return over the four-year post-acquisition period. Moreover, there are also other studies which indicate that post-merger profitability decreased (see Meeks 1977, Cosh, Hughes, Lee and Singh 1989).

The results of most studies in this literature suggest that, on average, the post-merger operating performance weakens. However, accounting data provides an imperfect

measure of economic performance because managers can affect accounting numbers. On the other hand, accounting data help identify the sources of real economic gains.

2.3.3 Other aspects of M&As and financial performance

A number of studies have attempted to identify factors which have influenced on the financial performance of M&As. While some researches have categorised M&As as diversifying and focusing deals, some others have focused on the role of method of payment or cross-border M&As.

Results of studies focused on the impacts of diversifying or focusing on M&A performance are mixed. While some studies have reported better post-merger performance for conglomerates and diversifying M&As (e.g. Agrawal, Jaffe and Mandelker 1992), some others have documented controversial results (Healy et. al. 1992, Megginson et. al. 2000, Maquieira, Megginson & Nail 1998).

M&As are important entry modes of foreign direct investment. In terms of both the value and the number of deals the share of cross-border M&As of all deals has remained at about one-quarter during 1990s, although the years 1990 and 1999 saw peaks of above 30 per cent in terms of the value (UNCTAD 2000). Focusing on U.S. firms that acquired foreign businesses, Markides & Ittner (1994) find that acquirers tend to gain value. However, some studies (see e.g. Seth, Song and Pettit 2000 and Brooks, Feils & Sahoo 2000) report that due to cross-border acquisitions, acquirers neither gain nor lose their value, on average. In terms of operating performance, Lee & Caves (1998) reports negative five years post-merger abnormal returns. The recent study by Chatterjee & Aw (2000) focuses financial performance of UK acquirers at home and abroad between 1990 and 1996. Over the two years after merging, acquirers performed poorly relative to the control group. This impact is most pronounced for cross-border deals. According to the study, UK companies making acquisitions in Continental Europe do worse than the acquirers of US targets, which are in turn outperformed by the acquirers of domestic targets. In these studies, the examination period varies heavily. While Brooks' et. al. (2000) post-merger period is 250 days and Chatterjee's & Aw's (2000) 2 years, Seth et. al. (2000) focus on much shorter period including only 10 days before and after the offer.

Method of payments

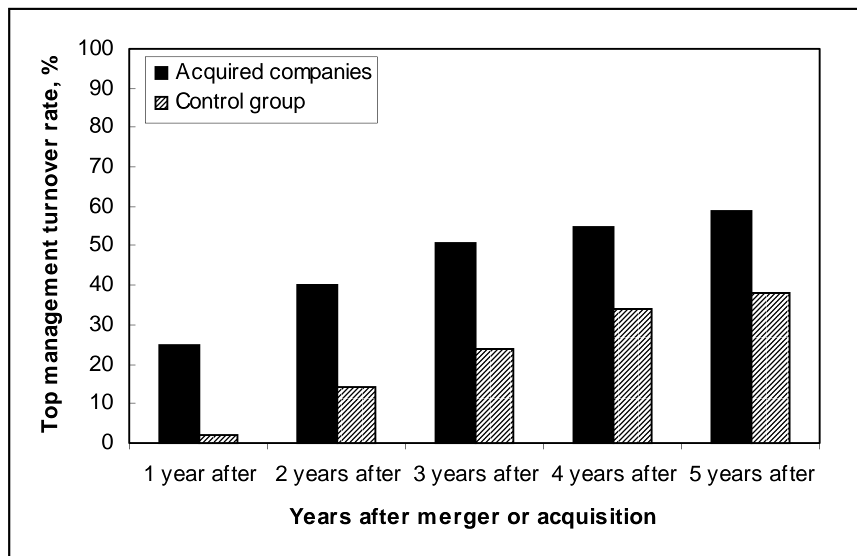
Harris, Franks & Mayer (1987) studied impacts of method of payment on M&A performance using data of 2,500 acquisitions in the UK and US over the period 1955 and 1985. The results suggest that acquirers making equity offers create worse post-merger performance than did those using cash. Also Raad & Wu (1995), Hefty (1998) and Travlos (1987) report similar results. However, Heron & Lie (2000) do not find statistically significant difference between deals with different method of payments.

2.3.4 Why some M&As succeed and some fail?

While the economics and the finance literature have focused on the question of do M&As improve value or profit of the merging firms, the strategic management literature focuses more on determinants of successful and unsuccessful M&As.

According to the market for corporate control view, M&As offer mechanism against managerial departures from profit or value maximisation. Analogously to that view, a number of empirical studies report high turnover rates of top management after merger or acquisition (Figure 2.4). While Walsh (1988) finds that 40 per cent of senior executives have left the acquired company after two years, the summary of nine studies by Dahya & Powell (1998) reports even more dramatic figures. Over the two years post-acquisition period the average top executive turnover rate exceeds 55 per cent. However, contrary to the prediction of the market for corporate control view, empirical evidence suggests that managerial turnover and replacements are harmful to acquisition performance (Cannella & Hambrick 1993, Zollo & Leshchinskii 1999).

Figure 3.1. Top management turnover following mergers and acquisitions



Source: Walsh (1988)

In addition to top executives, mergers and acquisitions impact on other employees, too. Davy et. al (1988) report that approximately one-third of all merger failures is due to employee problems. One source of these problems is uncertainty generated by merger or acquisition. This uncertainty may create job dissatisfaction and unproductive behaviour. According to the study by Cartwright & Cooper (1999, pp. 48-49), M&As cause five immediate concerns to employees: 1) loss of identity, 2) lack of information and increased anxiety, 3) survival becomes an obsession, 4) lost talent and 5) family repercussions.

Cultural and particularly organisational culture differences have also been proposed to be one explanation to post-merger failures and problems. Although cultural compatibility of merging firms seems to imply affinity, cultural similarity is not necessarily a precondition for successful combination (Cartwright & Cooper 1999, pp. 76). Cartwright & Cooper (1993) suggest that merger success depends heavily on the ability to integrate of displace a culture. In order to achieve their objectives, different integration strategy is needed depending on characters and objectives of acquisition and the existing type of organisational cultures. In terms of merger strategy, every merger or acquisition fall into following three types of combination namely 1) extension mergers, 2) collaborative mergers and 3) redesign mergers (Cartwright & Cooper (1993). First, *extension* mergers occur particularly when the acquirer is satisfied with the current financial performance

of the target and trusts its existing management and its abilities. The acquired organisation is allowed to maintain target's existing culture and to operate as rather autonomous unit. Second, *collaboration* mergers occur in circumstances where success depends on the integration of operations or technology exchange or other expertise. Merger is seen as a combination of complementary but different forces creating mutual benefits. In terms of organisational culture, the aim is to create 'best of both worlds' culture. Third, *redesign* or traditional mergers often occur when the acquirer is not satisfied with the target's current performance or its management. The success depends on target's willingness to adopt and assimilate into the culture of the acquirer. Difficulties occur when target resists or call into question acquirer's terms or practises. Cartwright and Cooper (1993) suggest that merging employees automatically assume every M&A to be the type of redesign even if it is an intended collaborative merger.

The view of need of different merger types in different circumstances is also suggested by Puranam (2001). According to his theoretical and empirical study, particularly in technology-grafting acquisitions the optimal level of integration depends on characteristics of the target and acquiring company. Therefore, generic advice to managers to integrate fully or take hands off is specious. However, it has been argued that failures are often attributed to cultural differences, while successes are attributed by management actions (Vaara 2000).

One intuitive explanation for merger success is experience. However, empirical evidence of the acquiring firm's experience and acquisition performance is mixed. Although some studies report a positive impact (Bruton, Oviatt & White 1994, Lee & Caves 1998), some others do not find significant effects (see e.g. Singh & Zollo 1999).

Based on survey, Capron (1999) analyses the sources of post-merger financial performance. According to her, both cost and revenue-based synergies should be taken into account when analysing the impacts of merger or acquisition. The results suggest cost-based synergies, which often lead to the divestiture of assets, are often difficult to achieve. The transfer of resources between target and acquiring company both creates cost savings and increases revenues through enhanced market coverage and innovation capability. Results of the study suggest that the primary value creating mechanism of acquisitions is resource redeployment. By resource deployment merged companies may create value by improving market coverage and to lesser extent by achieving cost savings.

3 MOTIVES OF MERGERS AND ACQUISITIONS

The empirical evidence of merger success, although it is mixed, tells that a number of mergers and acquisitions do not achieve their goals. This raises the question: Why do companies often use M&As as an investment mode.

3.1 Firm-level motives for M&As

The aim of this chapter is to some bring light to the question of firm-level causes of corporate acquisitions. The first part of this chapter (3.1) introduces key theories of causes of M&As, and in the second part (3.2) the empirical evidence of motives is described.

3.1.1 Hypotheses and theories of causes of acquisitions

Economic performance and efficiency

The dominant motive of M&As in the economics and finance literature is economic performance improvement. The economic performance motive suggests M&As occur because of economic gains of merging two companies. Thereby, the value of a merged company (V_{AB}) is assumed to be higher than the sum of the value of separate companies (V_A, V_B).

$$V_{AB} > (V_A + V_B)$$

This motive is strongly related to the neoclassical theory of firm whereby firm behaviour is derived from assumption that a firm maximises its profit or value. However, maximising profit or shareholder value is too general motive for merger or acquisition. It does not reveal how does the deal is assumed to lead up to profit or value improvement. Therefore, next we go through possible sources of performance gains.

Cost reductions. The term synergy is often used as a synonym for cost advantages. According to this motive, mergers are undertaken in order to achieve cost savings. Potential cost advantages includes both fixed costs and variable costs.

By eliminating intersecting costs such as administration costs and IT expenditure, financial performance can be improved. Due to the nature of fixed costs, cost reduction potential is not restricted only on horizontal mergers but also includes other types of mergers. Vertical integration has some unique sources of cost reduction. For instance, cost advantages can be achieved by avoiding costs of communication and bargaining (Arrow 1975, Williamson 1975). Moreover, if production processes require tightly integrated production chain, lower production costs may be achieved by vertical integration (Mueller 1980, p. 30). The bigger size can be the source of cost reductions for less than minimum efficient size firms. In this case, with the help of bigger size, average unit costs reduce, hence a merged company enjoys economics of scale. However, in the multiple-product case, the relation between scale economies and benefits of mergers is more complex. Due to diseconomies of scope, there may exist overall diseconomies of scale even if there are product specific economies of scale (Stennek & Verboven 2001).

It has also been argued that companies may achieve financial synergy by merging. While some firms have excess cash flow, some other companies have large investment

opportunities but short of financing. Due to the lower costs of internal financing versus external financing (Myers & Majluf 1984), combining these two companies may result benefits. Also tax advantages from mergers may drive some firms to combine.

Market power. According to the market power motive companies merge in order to achieve more market power (see e.g. Stigler 1950). If the merger or acquisition is large enough, the firm obtains a monopoly-like position in terms of above-normal profit. Moreover, if large economies of scale exist, a big company may set its price above marginal cost but below the level that would lead to entry. Thereby in some cases, large mergers cause an entry barrier for potential competitors.

Acquiring resources. By acquiring an existing company, control of target company's resources is transferred to the acquirer. This transfer offers several potential advantages for acquirer. An acquiring company is able to increase its own capacity without increasing the total capacity of the industry that may have large impact particularly in declining industries. Moreover in terms of rapidity, acquisition offers superior way to increase capacity compared to greenfield investment.

Particularly in vertical mergers, the acquirer can secure supply of critical input and reduce external uncertainty (Porter 1980). In addition to raw materials, intermediate products and distribution channels, resource-seeking motive also covers acquisition of know-how such as technological, geographical and managerial knowledge. Rather than developing technology only through R&D, acquisition can be used as a source of new technology. With acquisition, not only patents, copyrights but also technological know-how of the acquired unit's personnel are transferred to the acquiring company. Moreover, cross-border acquisition offers a potential means to acquire geographical know-how. Particularly for companies with a limited international experience, cross-border acquisition is an attractive means to acquire country or continent specific know-how. Naturally, In addition to know-how, there might be also other determinants of cross-border acquisition.

Market for corporate control. According to this view, managers compete for the right to manage the resources of company. Hence, poorly performing managers are threatened to become a victim of takeover (Jensen 1988). After takeover, the incumbent inefficient management team is replaced by value maximising managers. Hence, the acquirer assumes that economics gains can be achieved by replacing inefficient incumbent management with more efficient persons.

Speculative motive. Instead of long term benefits, in some cases M&As are motivated by speculative motives (see e.g. Gort 1969). There might be significant differences in present value expectations between current shareholders and potential shareholders that are interested to purchase the company. Particularly, periods with large economic fluctuations may produce these differences.

Managerial motives

The background of managerial motives can be found from the principal-agent theory (Jensen & Meckling 1976). Corporate managers act as agents on behalf of the owners of company (principal). Agency problems arise when ownership and management of firm are separated (Berle & Means 1932). These problems exist because owners and managers have different interests and because perfect contracts between owners and managers cannot be written.

Agency view assumes that instead of shareholder wealth, managers maximise their own wealth. These managerial incentives may drive company to grow beyond the optimal

size (Jensen 1986). Hence, managers build their own empire in order to obtain personal benefits such as managers' compensation, power and prestige. These benefits are often positively related to the bigger company size and the growth rate of sales. Moreover, managers of big companies have better opportunities to obtain position in other companies' boards. Mergers and acquisitions provide much faster means to grow than internal expansion does.

According to the free cash flow hypothesis (Jensen 1986), managers use free cash flow, i.e., cash flow after all investment with a positive net present value are funded, excess investments instead of paying this money to shareholders.

Hubrid

The hubrid hypothesis by Roll (1986) suggests that managers make mistakes in estimating the value of target firms. Suppose the bidder management is equally likely to overestimate as underestimate the synergy to be achieved by acquiring some listed company. The bidder knows that the current market price is the lowest price that a target company shareholder can accept. Hence, when bidder's valuation is below the market price, it does not make offer. If bidder believes that there are potential synergies but actually there are not, the takeover premium is a mistake made by the bidder. Of course such errors are made also in the opposite direction but those can not be observed empirically because they are not make public. In sum, the hubrid hypothesis does not imply that managers act consciously against owner's interests. The main implication is that managers make mistakes in valuateing target.

3.1.2 Empirical evidence of causes of M&As

A number of attempts to find the motive for M&As has been done. Berkovitch and Narayanan (1993) summarised motives and implications of M&As into three categories as shown by Table 3.1.

Table 3.1. Implications of different hypotheses of M&As

	Gains to acquirer	Gains to target	Total gains
Economic or efficiency	+	+	+
Agency	-	+	-
Hubrid	-	+	0

Source: Berkovitch and Narayanan (1993)

According to Berkovitch and Narayanan, motives of M&As can be tested by examining correlation between different gains. Using a sample of tender offers in U.S. during 1963-1988, they conclude that synergy motive dominates. Moreover, results suggest that the dominating motive of value-decreasing acquisitions is agency, not hubrid. Focusing on foreign acquisitions of U.S. firms, Seth, Song & Pettit (2000) reports similar results as Berkovitch & Narayanan (1993) for domestic acquisitions. However, a serious problem of these two studies is that motives are derived from the post-merger financial performance. Hence, causes and consequences of M&As are mixed in these studies.

Ingham, Kran & Lovestam (1992) suggest that managers attempt to achieve several goals with merger and acquisitions. Based on the survey answers concerning mergers in the UK during 1984-88, the top three motives are said to be 1) increasing profitability, 2) pursuing market power and 3) marketing economics of scale. Brouthers, van Hastenburg and van den Ven (1998) reports similar results based on the survey results concerning mergers of Dutch firms in 1994. After categorisation of causes into three classes, Brouthers et. al. conclude that economic motive is the most important followed by strategic and personal motives.

However, in questionnaire studies pure increasing profitability motive is problematic. It is unlikely that managers would admit that M&As are not driven by the pursuit of increased financial performance. Moreover, pursuit to increase profitability does not reveal how profitability is assumed to improve. Motives such as cost savings, redeployment of assets or increasing market power would explicitly recount the assumed sources of performance improvement.

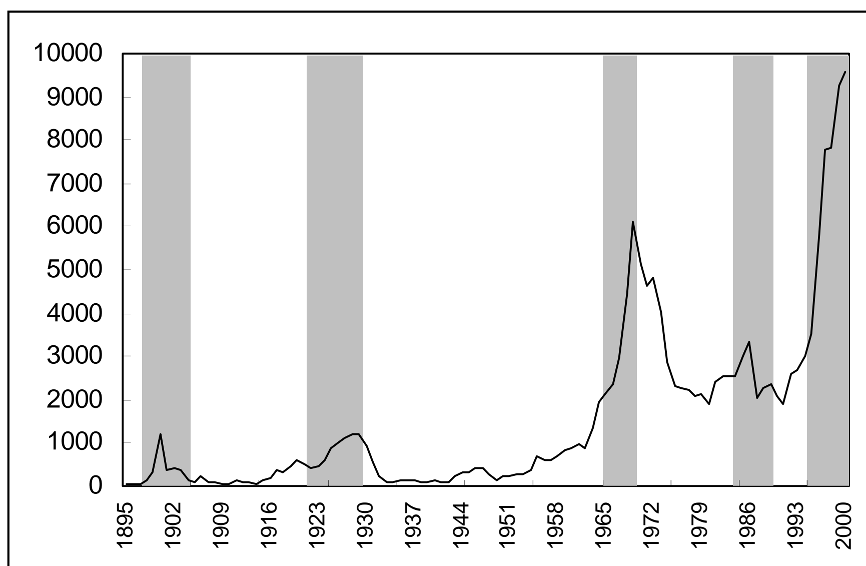
3.2 Macro-level causes for M&As

Albeit final decisions to merge or acquire are made in firms and their boards, general economic trends and fluctuations affect on assumptions and views behind these decisions.

3.2.1 Mergers occur in waves

Figure 3.1 illustrates the merger activity of United States from 1985 to 2000. Despite different data sources have been used when the picture was drew, the figure shows clearly the merger waves (grey areas) over the past century.

Figure 3.1. The number of mergers and acquisitions in U.S.



Source: Yago et. al. (2000), Nelson (1959), Thorp (1941), Mergerstat. Author's calculations

The first wave (1897-1904) involved predominantly M&As between large firms operating in the same industry (i.e. horizontal M&As) that resulted in high concentration

rates or even the creation of monopolies. The second wave (1916-1929) was mostly composed of combinations outside the previously consolidated heavy manufacturing industries. Rather than monopolies, the second wave created many oligopolies. The third wave (1965-1969) can be termed "the wave of conglomerates". In order to reduce cyclical risks, a number of companies acquired unrelated firms and business units. The fourth wave (1981-1989) was characterised by leveraged buyouts and hostile takeovers (Holmström & Kaplan 2001). In Finland and other Europe, a great number of international M&As was undertaken. The current wave (1994-present) can be termed "the wave of megadeals". A number of very big M&As have been carried out. Most of the largest deals have been horizontal in nature but also diversifying mergers have been undertaken (e.g. deals between banks and insurance companies). Particularly in U.S., the current wave can be considered to be the first truly international merger wave (Black 2000).

3.2.2 Changes in economic environment as a driving force

Merger waves seem to coincide with economic booms (Mueller 1989). By definition during the booms economy enjoys a rapid growth rate. Moreover, at the same time the stock market surge. Nelson (1959) reports that M&As are positively correlated with stock market prices. The stock market may affect on M&As at least via two different routes. First, a high market capitalisation helps company to finance its acquisitions if it uses its stocks as a method of payment. In this case acquirer does not have to spend its retained profits or raise additional debt in order to finance the deal. Another channel is related to the availability of finance. In general during booms, cash reserves of companies are high and also debt finance is more available than during recessions. Moreover, a rising market increases the collateral value of firms (Kiyotaki & Moore 1997). All these three factors increase the volume of assets that companies are able to acquire.

However, ordinary business cycles are not sufficient condition for the existence of merger waves. Economic upturns are observed much more frequently than merger waves. The question arises: Does the appearance of merger wave require some revolution? It seems that merger waves coincided with big changes in environment and technology. New means of transportation and communications and energy production have been utilised. For example, the first merger wave accompanied major changes in economic infrastructure and business environment. Railroads were completed and use of electricity and coal was become common. Also the second wave coincided with big changes in infrastructure. Major developments in transportation, communication and merchandising have been emphasised to be the main motivational factors behind the restructuring during the second wave (Markham 1955, Weston, J., Chung, K & Siu, J. 1990). Broaddus (1998) suggests that the most important force behind banks' consolidation in 1990s is the development of communications and data processing technology. Cost savings achieved by utilising this latest technology increase when the size of company increases.

Also political decisions impact on M&As and also other kind of restructuring. Forming free trade areas, such as NAFTA and EU, changes the business environment in member states. New competitors come into market leading to a fiercer competition. Moreover, deregulation of financial market has positively impacted on mergers and acquisition. Restrictions in foreign ownership have been liberalised that has lead to the growing number of cross-border deals. However, in some cases political decisions might decrease the M&A activity. Antitrust authorities are able to block deals that are assumed to lead a significant reduction in competition. However, it is not always easy to define

whet is a relevant market area to be considered from the competition's point of view. For instance in Europe, in many cases the conclusion would be different depending on whether to focus on competition effects on a single country or on the whole EU area.

In some cases, macroeconomic changes lead to excess capacity and ultimately downsizing and exit. Mergers and acquisitions with closure of inefficient units are one means to resolve the problem of the surplus capacity (Jensen 1993). Changes in economic environment also form a basis of an industry shock explanation for mergers and acquisitions (Mitchell & Mulherin 1996). Different kinds of industry-level shocks push companies to react to changes by restructuring. Mitchell and Mulherin (1996) and Andrade, Mitchell & Stafford (2001) provide empirical evidence about industry clustering in the M&A activity (Table 3.2)

Table 3.2. Top five M&A industries in U.S. (based on average annual merger activity)

1970s	1980s	1990s
Metal Mining	Oil & Gas	Metal Mining
Real Estate	Textile	Media & Telecom.
Oil & Gas	Misc. Manufacturing	Banking
Apparel	Non-Depository Credit	Real Estate
Machinery	Food	Hotels

Note: Ranked by market values.
Source: Andrade, Mitchell & Stafford (2001).

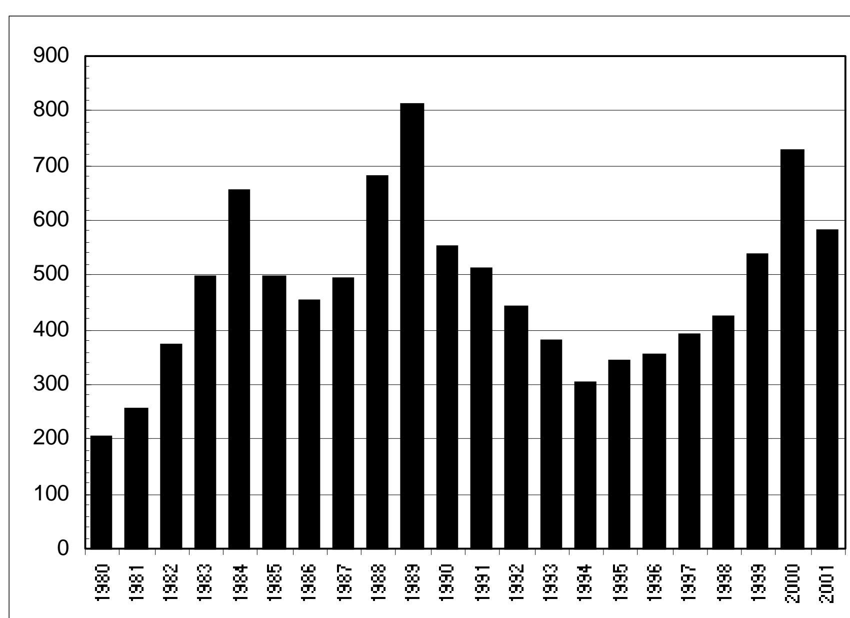
4 PATTERNS OF THE FINNISH MERGER ACTIVITY

Our interest is to benchmark the Finnish M&A activity against other countries. Hence, we ask whether the Finnish M&A activity is low or high compared to other countries.

4.1 Volume of mergers and acquisitions

The overview of the number of Finnish M&As over the past twenty years reveals that the volume of M&As varies drastically in tandem with macroeconomic cycles (Figure 4.1). During the economic booms in the late 1980s, a great number of M&As was undertaken.

Figure 4.1. The number of M&As in Finland (1980-2001).



The data source: Talouselämä-magazine

In the late 1980s, the major causes behind the high M&A activity were a strong economic upturn, the liberalisation of capital markets and changes in capital income taxation. Just before the taxation change was come into force, many deals were carried out.

Table 4.1. Top five industries based on the number of M&As in Finland.

1980s (1982-1989)	1990s (1990-1998)	2000
Metal and engineering	Metal and engineering	IT-services
Other services	Wholesale business	Other services
Wholesale business	Retailing	Metal and engineering
Construction and contracting	Other services	Retailing
Printing industry	Finance and banking	Construction and contracting

Data source: Talouselämä, author's calculations.

In the early 1990s, Finland ran into a crisis. The economy went into a deep recession that reflected also to the number of mergers and acquisitions.

The recent empirical findings suggest that there is the presence of industry clustering in M&A activity. Next, we consider whether the industry clustering exist in the Finnish M&A market (Table 4.1).

We have ranked the industries in each decade by the number of deals of all acquired or merged firms. Just few industries overlap between decades. Hence, the M&A booms are not similar. One explanation for this industry clustering in merger activity might be found from industry level shocks. Companies react to these shocks by restructuring (Andrade, Mitchell & Stafford 2001). For example, due to the extremely deep bank crisis with large bankrupts in the beginning of 1990s, the entire banking industry was restructured. The industry clustering hypothesis is backed up with events in 2000. The IT industry was booming and a number of IT companies were listed in the Helsinki Stock Exchange. After listing these companies were able to use their stocks as an efficient method of payment in acquisitions. The ability of unlisted companies to undertake acquisitions was rather weak due to the limited amount of cash reserves.

Table 4.2. The Finnish mergers and acquisitions by the target size (percentages)

	1-49 persons	50-99 persons	100-199 persons	200-499 persons	>500 persons
1982	63 %	14 %	11 %	6 %	6 %
1983	61 %	19 %	9 %	6 %	6 %
1984	62 %	17 %	11 %	6 %	4 %
1985	56 %	16 %	15 %	9 %	4 %
1986	59 %	13 %	10 %	11 %	7 %
1987	64 %	14 %	8 %	8 %	6 %
1988	62 %	14 %	10 %	9 %	4 %
1989	67 %	13 %	8 %	8 %	5 %
1990	64 %	14 %	11 %	6 %	6 %
1991	61 %	13 %	12 %	7 %	6 %
1992	62 %	16 %	7 %	9 %	6 %
1993	55 %	16 %	10 %	11 %	8 %
1994	63 %	11 %	11 %	9 %	6 %
1995	53 %	16 %	14 %	9 %	8 %
1996	57 %	13 %	10 %	8 %	12 %
1997	53 %	16 %	10 %	10 %	11 %
1998	54 %	14 %	7 %	14 %	11 %
Average	60 %	15 %	11 %	8 %	7 %

Author's calculations. Data source: Talouselämä-Magazine

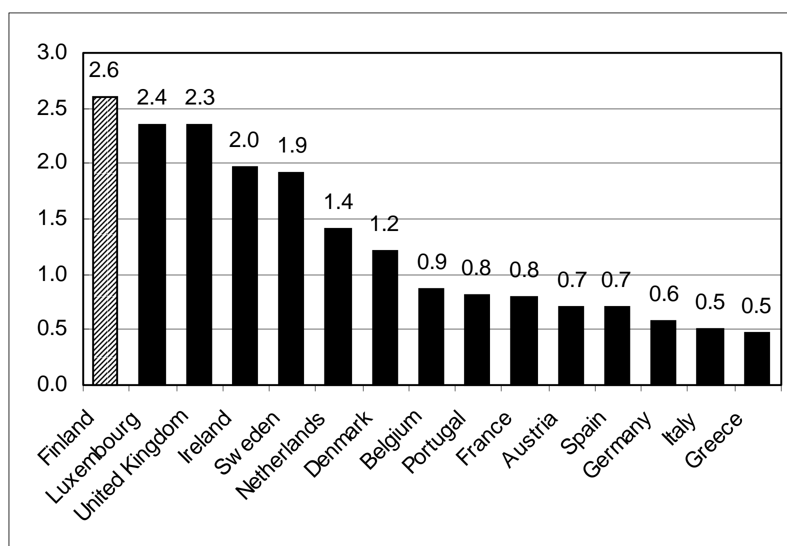
A large share of the Finnish deals has targeted on small companies (table 4.2). Roughly 60 per cent of the targets have had less than 50 employees and 20 per cent of all targets have had less than 10 employees. The share of the targets with more than 500 employees is only 7 per cent. However, the latest figures indicate that the share of large targets has slightly risen during the latter part of 1990s.

4.2 Benchmarking Finland against other countries

Next, we compare the M&A activity of Finland to other areas. The time series consideration reveals some interesting findings. First during the past 15 years, the evolution of the number of M&As have varied between different areas. At the end of the 1980s, the great number of deals was undertaken in Finland and in the EU. Despite such peak can not be observed in the U.S., in terms of the number of deals the 1980s were characterised by a large dollar volume of mergers and acquisitions. During the latter part of 1990s, the overall trend of M&A activity in US, EU and Finland shows remarkable similarities. While in 1995 the number of M&As was roughly 8800 in EU, in 1999 the corresponding figure was 12 800 representing a growth of 46 per cent (European Economy 2000). In Finland, the corresponding growth was 55 per cent. In U.S., the growth has been even faster exceeding 150 per cent during the same period.

In order to obtain more comprehensive picture of the M&A activity by countries, a natural starting point is to benchmark Finland against other EU member states (Figure 4.2). The relative size of countries has been taken into account by proportioning each country's share of the number of M&As in EU to each country's share of the total GDP of EU area. If this figure is above one, more M&As are undertaken in that country than it would be expected by considering its GDP. These figures cover both national and cross-border M&As.

Figure 4.2. The M&A activity* in the EU member states (1991-99)

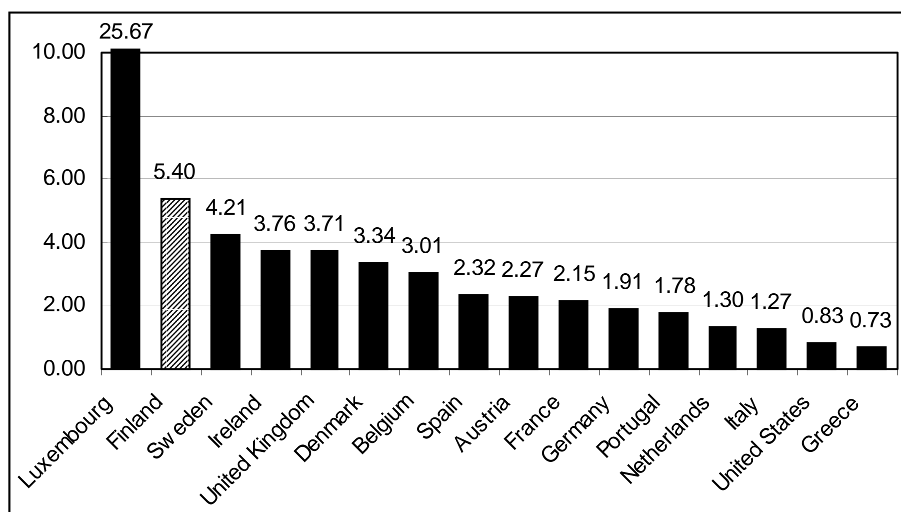


* (The country's share of EU's M&A activity)/(country's share of EU's total GDP)
Source: European Economy, Supplement A, No 5/6 – 2000, author's calculations

The result of the comparison is surprising. Finland is ranked 1st out of the EU member states during the 1990s. Finland's share of the total M&A volume in the EU area is more than double compared to its share of GDP in EU. Hence during the 1990s, once we control the size of national economy, we find that Finnish companies have been the most active in the M&A market. In order to improve robustness, also other measurements for M&A activity were used. Proportioning countries' M&A activity to the total population and to the number of listed companies yielded similar results than in the Figure 3.2 (see Appendix).

In order to obtain a more complete picture of M&As, we benchmark cross-border inward investments by countries (Figure 4.3).

Figure 4.3. Countries as cross-border M&A targets* (1990-99)



* (The sum of the number of inward cross-border deals during 1990-99)/GDP at market prices in 1999, mill. EURO
Data source: OECD 2001, author's calculations.

As the figure reveals, the ratio of cross-border transactions to GDP is clearly highest for Luxembourg (25.67) followed by Finland, Sweden and Ireland. The figure suggests that the high M&A activity of Finland is not only due to domestic transactions, but also foreign companies have seen Finland as a quite attractive target country.

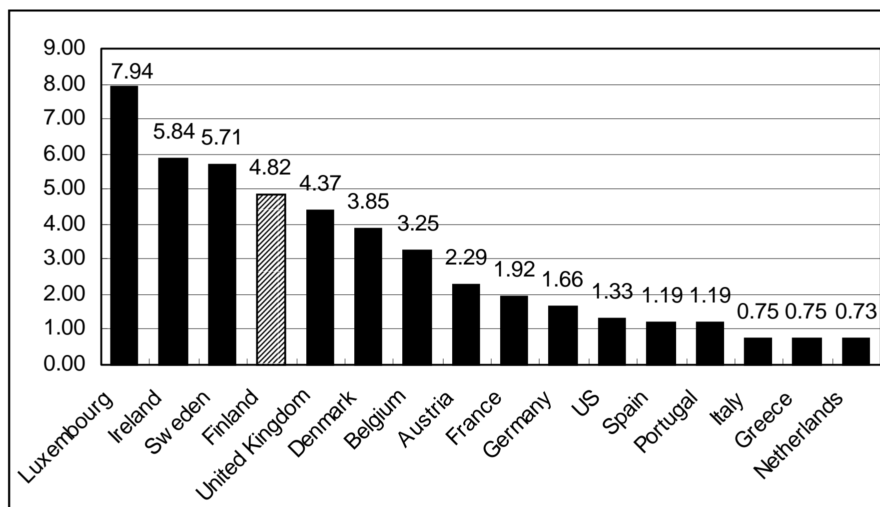
However, benchmarking the value of inward cross-border M&As by countries provides slightly different picture of the merger activity in different countries (see appendix). Because Finland's ranking is clearly lower in terms of the deal value than in terms of the number of deals, we can conclude that Finnish transactions have not been as large as in several other countries. While Luxembourg and Sweden ranks top two as an inward M&A country, Finland occupies the seventh position in this comparison. Hence, the position of Finland is not unexpected high. It is worth noting that unlike one might expect, the position of US is as low as 11th.

Now, we turn to outward mergers and acquisitions. M&As have served as the main internationalisation establishment mode of Finnish companies. According to the recent survey (TT 2001)[1], acquisitions have a very important role in Finnish companies' growth strategy. Approximately 40 per cent of the growth of foreign sales is estimated to achieve by mergers and acquisitions.

The next figure benchmarks Finland against the EU Member States and US in terms of the number of outward M&As.

[1] Teollisuus ja Työnantajat: Suomalaisyritysten ulkomaantoiminta ja sen kehitysnäkymät, January 2001.

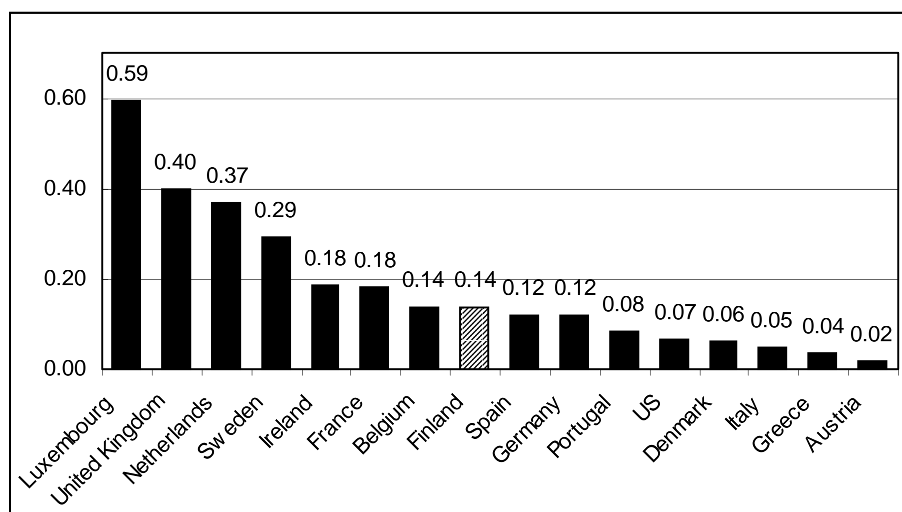
Figure 4.4. The number of outward cross-border deals in relation to GDP (1990-99)*



* (The sum of the number of outward cross-border deals during 1990-99)/GDP at market prices in 1999, mill. EURO.
Data source: OECD 2001, author's calculations.

Luxembourg occupies the first place with 7.9, followed by Ireland, Sweden and Finland. The comparison confirms our presumption that Finnish companies have undertaken a number of cross-border mergers and acquisitions. In order to obtain comprehensive view of outward cross-border M&As, the value of outward deals is next considered (Figure 4.5).

Figure 4.5. The value of outward cross-border deals in relation to GDP (1990-99)*



* (The sum of the value of outward cross-border deals during 1990-99, USD billions)/GDP at market prices in 1999, mill. EURO.
Data source: OECD, author's calculations.

When the value of outward deals is considered, the pattern is somewhat different. While Luxembourg keeps its position on the top, the UK and Netherlands have risen to 2nd and 3rd positions. Finland's ranking is clearly lower in terms of the deal value than in terms of the number of deals. However, the recent statistics by KPMG show that during the fast half of 2000, the value of Finnish outward M&As drastically increased.

According to considerations above, we conclude that the Finnish M&A activity has exceeded the EU average in the 1990s. By taking into account the relative size of countries Finland is ranked on the top three in several comparisons. This evidence indicates that the Finnish M&A market functions properly.

Explaining M&A activity

We consider three macroeconomic factors to try to explain the distribution and evolution of M&A activity in the EU Member States during the period 1994-99 (panel data). Like most macroeconomic phenomenons, also GDP, market capitalisation and the number of listed firms are not exogenous hence it is difficult to draw causal inferences. Therefore, we make no claims about the direction of causality between the number of M&As and GDP, market capitalisation and the number of listed firms. Instead we analyse whether these three factors are useful for explaining cross-sectional and time series variation in the M&A activity.

Our basic regression model (OLS) is:

$$MA_{it} = \alpha + \beta_1 GDP_{it} + \beta_2 MCAP_{it} + \beta_3 LISTED_{it} + e_{it} \,,$$

where

MA_{it} = The number of mergers and acquisitions in country *i* in year *t*.

GDP_{it} = GDP (millions EURO at 1995 prices) in country *i* in year *t*.

$MCAP_{it}$ = Market capitalisation (millions EURO at 1995 prices) in country *i* in year *t*.

$LISTED_{it}$ = The number of listed companies in country *i* in year *t*.

e_{it} = Error term.

Table 4.2 shows the results of regressions for the number of M&As. In models (1-2) the dependent variable is the number of M&As, while in models (3-4) logarithmic transformation for M&As and independent variables is used. In models, R-squared varies from 0.7 to 0.91 indicating that most of cross-sectional and time series variation can be explained by utilising the regressors above.

As indicated by model (1), the coefficients on GDP, market capitalisation and the number of listed firms are positive and highly significant. The positive coefficient of GDP indicates at least two issues. In the bigger economy, there is more companies and more mergers and acquisitions. Moreover, the growth rate of GDP impacts on the number of M&As to be undertaken. The coefficients of market capitalisation and the number of listed firms suggest that also the size of financial market and its changes correlate positively with the number of M&As. In model (2), the dummy variable has added in the equation. It's positive coefficient and high statistical significance indicate that in addition to these independent variables, there is also some other positive factor(s) in Finland not captured by these three regressors. In model (3) logarithmic transformation has used. The results of this estimation are very similar than in models (1) and (2). In model (4), panel data estimation procedure has been used. The value of Hausman's test argues in favour of the random effects model rather than the fixed effect model. As can be seen from the table, the results deviate slightly from other models. The number of listed firms is no longer statistically significant and the coefficient is unintuitively negative.

Table 4.2. Explaining M&A activity (the number of M&As)

	(1)	(2)	(3)	(4)
	OLS Dep=MA	OLS, with dummy Dep=MA	OLS, logarithmic Dep=Log(MA)	Random effects, logarithmic Dep=Log(MA)
Constant	-133.76*** (-3.196)	-178.67*** (-4.221)	-2.272*** (-3.680)	-0.293 (-0.323)
GDP	0.399*** (5.39)	0.433*** (6.066)	0.299*** (3.759)	0.414** (2.465)
Market capitalisation	0.543*** (4.202)	0.496*** (4.000)	0.384*** (3.661)	0.767*** (4.504)
Number of listed firms	0.849*** (9.361)	0.890*** (10.187)	0.3037** (2.289)	-0.589 (-0.311)
Dummy(Finland=1)		358.94*** (3.132)	1.096*** (3.759)	
R-Squared	0.91	0.922	0.771	0.70
N	90	90	90	90
Degrees of Freedom	86	85	85	72
Hausman's test (P-value)				5.8 (0.122)

*** denotes statistical significance at the 0.05 level, ** denotes significance at the 0.01 level.
Note: In models (3) and (4) logarithmic transformation were used also for independent variables including GDP, market capitalization and the number of listed firms.

Estimation results suggest that a large share of cross-country and time series variation of the number of M&As can be explained by GDP, market capitalisation and the number of listed firms. However, in Finland there is some other positive factor(s) affecting on the M&A activity. In the next chapter, some preliminary explanations for the high Finnish M&A activity have been proposed.

5 CONCLUSION AND DISCUSSION

The current surge of M&A activity is the fifth merger wave during the past hundred years. In addition to the number of mergers and acquisitions, also their value has drastically increased. Worldwide M&As – national and cross-border – have grown reaching US$ 2.3 trillion in 1999. However, during 2001 there has appeared some signs that the growth of M&As has broken.

The literature review of this paper examined causes and consequences of M&As. We focused on two issues: 1) the post-merger financial performance of mergers and 2) the driving forces behind mergers and acquisitions.

Winners and losers in the merger game

No doubt, target company shareholders benefit from mergers and acquisitions. By receiving premiums these shareholders often enjoy gains of tens of per cents. Premiums historically have exceeded 40 per cent of the pre-offer target value. While, the evidence concerning target company shareholders is conclusive, same can not be said about bidding firms' owners. Hence, the empirical evidence of gains of acquiring company is ambiguous. In terms of stock price, bidding stockholders may win or lose in takeover. While there is rather strong evidence of negative returns following mergers, similar evidence not exists following tender offers.

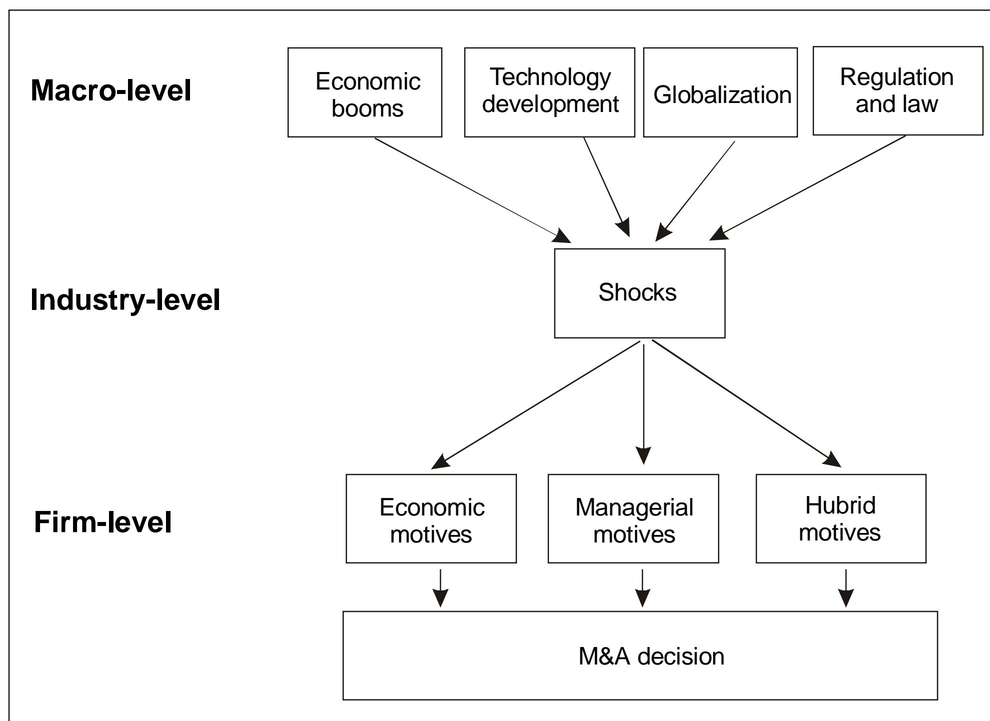
Although the literature of impacts of M&As on operating profitability is also slightly mixed, in most of the studies the operating performance has decreased after merger. Taken into account both the stock performance and operating performance studies, it is clear that bidders are not big winners in the merger game. One might ask what are the consequences of unsuccessful mergers or acquisitions. It is possible that bad bidders are far more likely to become the next target candidates (Mitchell & Lehn 1990).

Why do failure rates are so high? Albeit empirical studies do not offer unambiguous answer for this question, some crucial factors can be found. *First*, one possible explanation is that it is always difficult to merge the operations of two separate firms. Despite the positive net present value projects, benefits are not achieved because it is difficult to make acquisitions work. After the deal, the turnover of top management drastically rises. Moreover, the deal often generates uncertainty to the entire personnel creating potential job dissatisfaction and unproductive behaviour. *The second* explanation considers the rationality of stock market reaction. Even if management maximises shareholder wealth and the M&A project has positive net present value, market reaction might be negative because the acquirer has information that the market has not. On the other hand, if managers pursue their own incentives, the market reaction is again unknown because if wealth destruction is anticipated, acquisition does not produce abnormal return instead of the fact that the acquirer destroys wealth. In this case, acquisition with negative or positive abnormal returns are both possible depending on whether management wastes more or less wealth than expected. Also accounting measures of performance have drawbacks. M&As often incur restructuring costs that may mask long term performance gains. The *third* explanation focuses on initial goals of merger or acquisition. If managers pursue their own benefits, the negative post-merger performance is not surprising.

Driving forces behind merger and acquisition decisions

The first empirical observation is that mergers and acquisitions occur in waves and these waves occur in economic booms. The paradox is that during booms targets are very expensive to buy. Despite M&As occur in waves, these waves are not similar. Industries that represent high levels of the M&A activity in one wave do not necessarily do so in other waves. Therefore, different kinds of industry shocks might cause changes in the merger activity. The interesting point of the industry shock explanation is that it does not contradict to three main firm-level M&A motives (economic, managerial and hubrid motives) proposed by the previous literature. Hence, we see that the industry shock explanation complements rather than substitutes previous hypotheses about causes of M&As. Hence, we propose that M&A decisions are composed of macro-level, industry-level and firm-level factors. In Figure 5.1, these different level factors are drafted.

Figure 5.1. Causes of mergers and acquisitions



In the top of the figure, main macro-level factors have been proposed. Albeit in some cases these factors influence directly to firm-level motives, these elements might cause industry-level shocks.

Often, time periods of *economic booms* vary between industries. Hence, while some industries are booming, some others do not face equal upturn in the same period. During the booms, cash flows of companies are usually strong and the overall financial position of companies is typically good. Hence financial constraint does not hinder companies to carry out M&As. Moreover, in economic upturns, capacity is often fully utilised. Both these factors encourage firms to invest, and merger or acquisition may provide an attractive means to expand operations. Another important macro-level factor concerns *technological development*. Radical technological innovations such as the development of transport and communications technology cause shocks in industries. Due to these shocks, business environment might drastically change, which in turn, accomplishes

restructuring. Also impact of *globalisation* varies between industries. While in some industries international operation mode create large benefits, in some other industries these benefits are much smaller. However, changes in *regulation and law* might change the situation giving an impetus to industry-level shock. For instance, due to deregulation of foreign ownership, cross-border M&As become more attractive.

In sum, we argue that the impact of macro-level changes varies between industries accomplishing different kinds of industry shocks. Firms react to these industry shocks by restructuring via acquisitions, divestments and mergers.

Industry shocks can create, for instance, excess capacity and need for consolidation. In this case the firm-level motive is *efficiency or economic*. But shocks and booming industries might also provide managers an opportunity to acquire more personal benefits by empire-building. These *managerial motives* are hidden to the turbulence of industry. But it is also likely that due to the industry shocks, it is difficult to estimate accurately the real value of target. Particularly during booms, managers and investors have absorbed same overoptimism regarding future profits. Thereby, also the *hubrid* hypothesis is valid in industry shock explanation. Naturally, these firm-level motives are also valid in periods without industry shocks. However, in some cases revolutionary industry-level changes boost restructuring needs.

Finnish firms are active in the merger and acquisition (M&A) market

The M&A activity varies drastically between the EU member countries. During the 1990s, the most active countries have been Finland, Luxembourg, Sweden and Ireland. Hence, by taken into account the size of the economy, Finland ranked first out of all EU member states in terms of the number of M&As. The high M&A activity is not only due to domestic deals but also many cross-border deals have been undertaken. Our analysis suggests that the number of M&As correlate positively with GDP, market capitalisation and the number of listed firms. However, it is difficult to draw causal inferences about the relations of these variables. In addition to these elements the analysis indicates that there exist some other positive factor(s) affecting to the high Finnish M&A.

The question arises, why the Finnish M&A activity is unexpected high. Despite this question is not the focus of this study, some preliminary explanations can be proposed. *First*, despite there not exist comparison data from other countries, the fact is that approximately 60 per cent of the Finnish target companies have been small companies with less than fifty employees. Hence, acquirers have bought especially small companies. *Second*, during the 1990s the structure of the Finnish national economy has drastically changed. A number of former conglomerates have carried out restructuring programs leading to divestments. *Third*, it is easy to find industry shock explanations for the high Finnish deal activity. For instance, due to the very deep banking crisis and deregulation of financial market, a number of banks were consolidated. Moreover, during the late 1990s, the booming IT industry has undertaken a great number of deals. *Fourth,* Finland is a small country with limited size of domestic market. Hence, a number of Finnish firms have expanded their international operations by undertaking mergers and acquisitions. *Fifth,* due to the creation of the internal market of European Union, possibilities and incentives to undertake M&As have multiplied. The liberalisation of restrictions of foreign ownership has made it possible to carry out deals abroad. Moreover, companies have responded to the increased competition by restructuring and acquiring business units.

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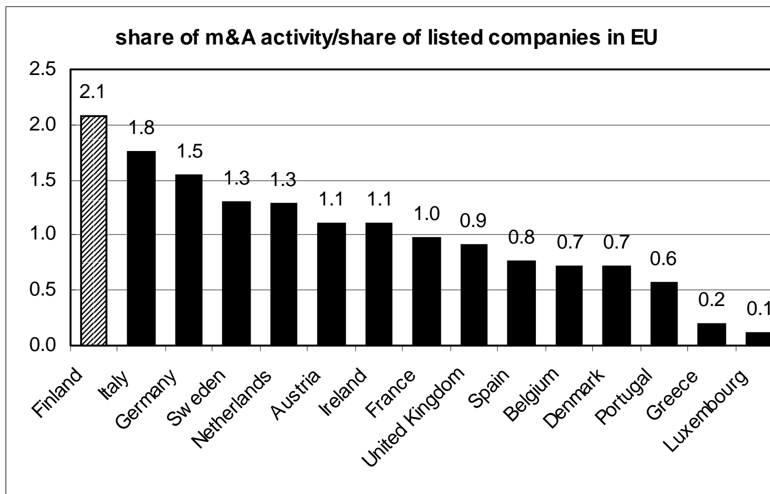
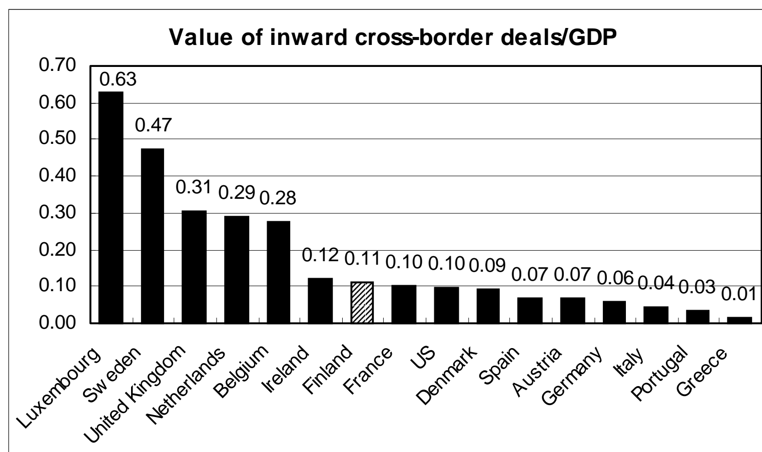
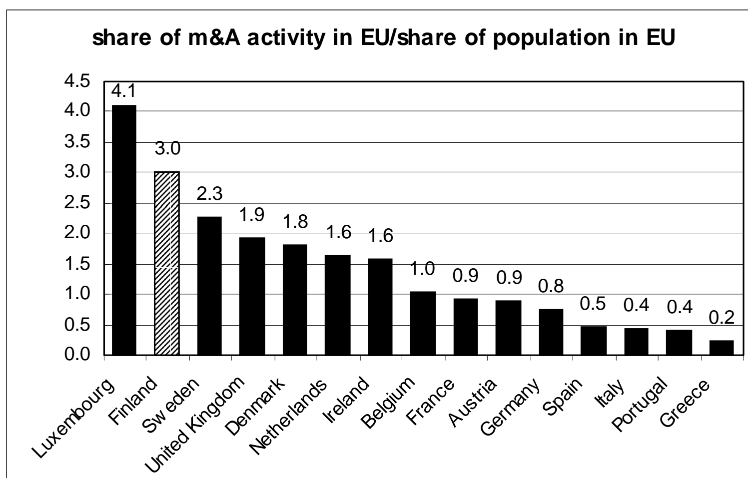
7 APPENDIX





* (The sum of the value of deals during 1990-99)/GDP at market prices in 1999, mill. EURO

Data source: OECD 2001, author's calculations.



Regression analysis

Construction of the variables used in the regression analysis.

The variables were constructed as follows:

M&As	$\frac{\text{The number of cross-border M \& As (source: OECD 2001)}}{\text{1 - share of national M \& As (source: European Economy 2000)}}$
GDP	GDP in millions EURO/ECU, current prices. Source: Eurostat.
Market cap.	Market capitalisation (millions ECU/EURO), current prices. Source: International Federation of Stock Exchanges, see: http://www.fibv.com
Listed firms	The number of listed firms. Source: International Federation of Stock Exchanges, see: http://www.fibv.com
Dummy (FIN)	Dummy variable for Finland. The variable gets value 1 for Finland otherwise the value is 0.
Population	The population (thousands) at the end of each year. Source: Eurostat.

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