Globalization of Construction and Real Estate Companies through Mergers and Acquisitions

by

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ABSTRACT

This thesis examines the globalization of construction and real estate companies through mergers and acquisitions using a modern management approach and a practical analysis of selected case studies. It particularly focuses on mergers and acquisitions because they are changing the way firms do business in the global markets. Four companies have been selected in order to analyze the interactions between acquirers and targets in the international construction and real estate markets. The first is the successful Scandinavian construction and real estate firm Nordic Construction Company, which has based its growing strategy on mergers and acquisitions. This Swedish case represents strong evidence that managerial leadership at the top levels can make or break the acquisition process. In the second case study, the Irish Conglomerate CRH takes over smaller American businesses in order to enter the huge US market. The third case is about the homebuilding industry, where the largest and most successful firms have grown rapidly through mergers and acquisitions. The example here is the highly admired Centex Corporation, which has experienced considerable increases in revenue and profitability. The fourth example is Jacobs Engineering Group from Pasadena, California. In these four cases, many different variables are considered. The number of studies in mergers and acquisitions in the construction and real estate industries are very few as opposed to other areas such as banking or telecommunications. However, it remains certain that the driver of mergers and acquisition activity are very different for each particular firm --still within the same industry. International construction and real estate markets are very close to consolidate and become one. Therefore, managers of global construction and real estate companies will need to understand this consolidation trend and learn to compete for projects that once pertained only to firms in other geographies.

Thesis Supervisor: Professor Fred Moavenzadeh
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Section 1

Introduction

Objective

The objective of this investigation is to identify the critical factors of a successful globalization strategy through mergers and acquisitions in the construction and real estate industries. Certain generic business principles can be applied to any industry, but there are always differences for more entrepreneurial companies such as construction and real estate organizations. In this thesis, the specific mergers and acquisitions requirements for construction and real estate companies are analyzed through a series of case studies.

Scope

This thesis concerns globalization of construction and real estate companies through mergers and acquisitions, as opposed to achieve this corporate goal using a greenfield strategy.[1] Costs and benefits of either solution should be taken into account when making a decision about how to grow the company. This decision will also involve a time-frame analysis and the evaluation of a revenue growth profile.

Structure

This thesis is organized into six sections. Section 2 presents an overview of globalization through mergers and acquisitions and introduces both theoretical and practical considerations under a deregulation, growth and country risk approach. Section 3 describes the process and motivations for mergers and acquisitions. It also discusses the opportunities created by this and the sources of value creation for buyers and sellers. Dubious reasons for merging or acquiring a company are also explored. In Section 4 concerns about the process of developing a successful mergers and acquisitions strategy. Assessment of the target and amalgamation of the firms upon integration are the main issues within the context of this section. Section 5 explores

[1] This is a common growth strategy that consists in adding new capacity to the firm, as well as to the industry,

recent practices in the construction and real estate industries. This section includes four case studies. The first two case studies involve European companies that have grown aggressively using a mergers and acquisitions strategy: I) Nordic Construction Company, and II) CRH. The other two case studies concern mergers and acquisitions among US companies: III) Centex Corporation, and IV) Jacobs Engineering Group. In these case studies, the factors are a company overview, business areas, performance and lessons to be learned. Finally, Section 6 presents the conclusions and recommendations for construction and real estate companies based upon the findings of the thesis.

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performed by companies that establish new business entities from scratch.

Section 2

Globalization through Mergers and Acquisitions: Theoretical and Practical Considerations

Globalization through mergers and acquisitions is an interesting economic phenomenon that is affecting the way firms do business in the current domestic and international competitive environments. The impact of this trend differs among industries and can be best understood by taking into account the following considerations:

1. Deregulation in capital markets,
2. Growth in multinational enterprises, and
3. Country risk analysis.

Deregulation in capital markets

The global deregulation in the world's capital markets is a determining factor in the number and size of merger and acquisition transactions that take place every day. This political ideology started with the abolition of exchange controls and fixed rate commissions on international securities dealing in the UK. Among other factors, the growth of international markets and advancements in computer technology and communications permitted worldwide dealing in securities to be cheaper.

Deregulation in the UK has also been followed immediately by other industrialized countries and later by other developing countries. This activity has brought both positive and negative implications. For example, among the attractive qualities of deregulation are the free flow of capital throughout the world in pursuit of the highest return; greater financial efficiency as resources become allocated in a global scale; and increased innovation in financial instruments. Among the dangers is that a crash in one large securities house such as the New York, London or Tokyo stock exchange could endanger the health of the world financial system as a whole.

Threats of default by developing countries have led to a massive reduction and even termination of new loans to some countries. Although this issue can create financial burdens of considerable magnitude in these nations and can be viewed as a negative implication, it also create efficiencies by increasing the amount of capital that is available in other parts where funds need to be readily available in order to make acquisitions. (Cooke, 1988)

Growth in multinational enterprises

One of the most important factors of deregulation is the creation of genuine multinational enterprises rather than national enterprises with multinational operations. For example, deregulation in the capital markets has paralleled increasing restrictions on the physical movement of goods and services. One way of avoiding this problem is to invest in the host country by acquiring production facilities or distribution channels. In this manner, the firm becomes a multinational enterprise having a majority of its assets worldwide. Examples of these movements can be found in European companies, which realized that they must be large to compete effectively with multinationals in the US and Japan. This fact had led them to acquire competitors at home and abroad and take the opportunities to invest their massive cash surpluses.

The growth of multinationals is not very well accepted by the poorest nations of the world, whose only hope is to supply industrialized countries with agricultural products. For this reason, poor countries export people to more advanced economies, where they can compensate for their failure to export manufactured goods. As a result, severe economic and political problems arise, increasing the country specific risk for foreign investments. In other words, acquisitions in risky places will require a more careful analysis of the political risks in addition to the economic factors to compete in the local markets.

Country risk analysis

In all international mergers or acquisitions, two types of risk should be considered: transfer risk and generalized country risk. The transfer risk involves the unavailability of foreign exchange to permit the remittance of capital, dividends, interest, fees and royalties. The country risk is more specific for each nation in particular and is related to economic and political risk. These two components are sometimes so big that they can change the whole basis of analysis. Political continuity, economic growth, currency convertibility, labor cost/productivity, short-term credit, long-term loans and venture capital are among the most influential factors and must be borne in mind at the time of making the acquisition. (Eckbo, 1986)

In summary, deregulation in capital markets has developed on a worldwide basis as countries review their regulations in the light of increased competition. This means there is increased freedom for foreign investors. However, some sectors such as extractive industries are more prone to political intervention than other sectors such as retailing. In addition, it is far riskier to invest abroad in projects requiring heavy capital outlays than projects involving assembly using leased assets. As a way to restrict liability overseas and improve a company's image abroad, major business organizations have used the status of Limited Liability Company. However, sin some countries such as France, domestic enterprises or family businesses continue operating as partnerships.

It is very difficult to make generalizations about takeover trends since a number of special factors contribute to each case in particular. Lack of public information and available statistics aggravate this problem even more. However, it is possible to highlight a few such as the fact that sufficient currency is necessary to complete transactions. Also, current exchange rate between one country and another is very important. In addition to not having enough currency to trade, the decrease in loans to developing countries and newly industrialized nations can limit the number of takeovers occurring at a certain point. Then, a surplus of funds for other ventures in more industrialized countries is available, which might be one of the reasons that hostile takeovers are increasing in these industrialized nations. In contrast, Japanese transactions are nearly all negotiated as friendly mergers and hostile foreign takeovers would be greeted with considerable concern and would ultimately fail.

In order to avoid interest conflicts, governments have established controls of different kinds which that can be subdivided in two main groups: a priori controls and a posteriori controls. The former ones are characterized by the abuse of the government's dominant position that forbids M&A activity unless the authority grants permission. This type of control is used in the US, Canada, Argentina, Brazil, Germany, Netherlands and Japan. In contrast, a posteriori control does not forbid transactions, but instead these need to be examined by experts and be approved in a case by case situation. The UK, France, Sweden and South Africa are examples of this regimen. Finally, these controls can be tightened by national taxation regimes and accounting practices. Tax planning and consolidated tax returns among multinationals has been growing, but also negative factors such as tax evasion --avoiding taxation by illegal means-- have increased.

Section 3

Motivations for Mergers and Acquisitions

Types of Merger and Acquisitions

There are different types of merger and acquisitions that result in a variety of combinations among firms involved in the M&A process. The most common are horizontal mergers, vertical mergers and conglomerate mergers. Among acquisitions, the most important are the leveraged buy-out, the initial public offering and the hostile takeover.

Horizontal Merger

A horizontal merger is the corporate combination of firms with similar lines of activity. In this case, the company that keeps its corporate identity enhances its market power because of the elimination of a competing firm. The most important factors in this type of merger are economies of scale in production, research and management (Brealey, 1996). In the construction and real estate industry, a firm that is integrated horizontally can compete in different markets using a centralized estimating capability or sharing a single source of financing for projects. This will allow the firm to reduce costs and increase its market competitiveness.

Vertical Merger

In this case, a firm acquires the sources of its supply of raw materials, or other inputs of the productive process, or alternatively acquires control of the sales outlets for its products. For example, a highway contractor buying an asphalt plant is integrating vertically since it is buying its supply of raw materials and therefore it is able to coordinate more efficiently its operations to deliver its projects faster and with higher quality.

Conglomerate

A conglomerate merger is characterized by the combination of firms whose economic activities are fairly unrelated. Such mergers often appear to have the diversification of risk and financial synergies as motivators, rather than the achievement of economies of scale. Because of the cyclical nature of the construction and real estate industry, firms sometimes merge with or acquire companies in different sectors with the objective of reducing their dependence in a volatile source of revenue.

Consolidation

The corporate combination of merging firms which results in the formation of an entirely new company is known as consolidation. As a consequence, both of the combining firms lose their separate corporate identities as opposed to a merger where only one firm loses its corporate existence. Firms in the building materials industry are consolidating into larger companies in order to achieve economies of scale and share the best management practices.

Initial Public Offering (IPO)

The benefits of dispersed ownership such as risk diversification, risk sharing, increased consumption and the publicity of going public drive the motivations of this type of transaction. The founder of a firm can create value by selling the firm to outside investors. If he decides to go public through an Initial Public Offering, the entrepreneur can increase his bargaining power by selling shares to a larger number of outside investors, before bargaining over the controlling shares. In this strategic step, the entrepreneur succeeds in extracting part of the buyer's surplus.

Firms that offer shares through an IPO usually produce an introductory prospectus. In this document, the firm discloses all relevant information to outside investors. Auditors may be hired and a large investment bank usually backs the IPO. The firm can also break up the offering through a small IPO followed by a large seasoned offering. For those firms where the costs of going public dominate, private ownership by the founder is optimal. If these costs are constant then going public will increase the effects of diversification, risk sharing or consumption. At the same time, if the benefits of going public are constant, then going public will allow for a sufficiently large reduction of the discount for adverse selection or moral hazard.

On average, large firms are widely held because diversification premium dominates over the adverse selection discount that affects smaller firms. For example, in a closed capital market where investors can only diversify within the domestic market, investors with an internationally well-diversified portfolio will be willing to pay a premium. If the market suddenly opens up, then there will be IPO waves because many firms will have their stock revalued.

Leveraged Buy-Out (LBO)

An LBO is a financial vehicle where investors buy a firm using significant debt and investing very little or no equity. In general, the acquired firm has a clean balance sheet with huge debt capacity because it has little or no debt. This type of transaction is a permanent on going part of M&A where a need for buying and selling companies is satisfied through complex leveraged deals. These deals are usually financed with money from the junk bond markets. Since this is a non-investment grade category, buyers earn a profit at the expense of bondholders who see their secured debt transformed into junk. In an LBO, investors typically pay 2-4 times net earnings after taxes for companies with price/earnings ratios of 8-10 times a pre-acquisition net income after taxes. (Gargiulo, 1982)

This vehicle is very well suited against inflation because it is highly leveraged. In addition, many managing founders in retirement age are using it as an incentive for other managers. In this case, when the managers of the company are the investors who will buy the stock, the transaction is denominated Management Buy-Out (MBO). Leverage is an excellent incentive for good management, since it avoids wasting free cash flow in empire building or other types of inefficiencies. In addition, it allows taking advantage of tax shields through the deduction of interest payments.

Hostile Takeover

In the near future, with the internationalization of the economy and the globalization of markets, there will be fewer and larger corporations in operation. This will result in companies finally being able to realize efficiencies through economies of scale and scope in order to compete in international markets. However, there are obstacles to this view since sometimes managers are opposed to their firms being acquired. This is the case when a hostile takeover comes into play.

Generally, a hostile takeover occurs when there is a refusal of management to accept an initial offer for the acquisition of the company's stock. Since a takeover might represent losing their jobs, managers have created numerous mechanisms of defense to avoid a takeover.[2]

Opportunities created by M&A activity

Indeed, the most important opportunities created by M&A activity are economic efficiencies and the acquisition of scarce resources. Synergies, economies of scope and scale, horizontal and vertical integration and the opportunity to invest surplus funds into more profitable sectors represent the economic efficiencies created. In addition, the acquisition of scarce resources is fulfilled by the opportunity to buy specific assets at a discount, to acquire human talent or supplies, and to provide for external growth.

Economic Efficiencies

The synergy motive is one of the main reasons for which managers of the targets and acquirers maximize shareholders' wealth and engage in takeover activities only if it results in gains to both sets of shareholders. In general, it will be required that firms are worth more together than separately because of complementary resources such as unused tax shields or negatively correlated revenue sources (Goldberg, 1983). If this is the case, the reallocation of assets will make economic sense and the merged firm will be more efficient in achieving economies of scale and scope. This will result in cost savings in order to compete more effectively and maintain profitability.

Synergies through a horizontal merger can also be achieved by replacing inefficient management or increasing market share and also acquiring other firms' production facilities to limit supply instead of expanding the industry capacity. In contrast, synergies through a vertical integration can enhance coordination in the value chain and provide an opportunity to invest a surplus of funds in more profitable sectors of related activities. Synergies can be achieved because of the indivisibility of individuals, overhead or equipment in industries with heavy

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2 This creates even more value for the acquired firm, since the buyer needs that the premium paid to be increased given the more competitive environment in which the purchase takes place.

capital equipment. For example, the unit cost of transporting bulky materials such as building blocks is lower the larger the truck used. Also, economies of scale through learning effects between specialization of men and construction equipment are more achievable in horizontal mergers.[3]

Tax benefits are among the most common issues when discussing possible reasons for a merger. A firm with a tax loss carry-forward is ripe for a merger with a firm with sufficient current profits to ensure that the tax benefits will not expire due to insufficient earnings. A premium might be justified if the target has some tax pools that may be realized sooner by the acquiring firm than by itself. However, the Internal Revenue Service closely scrutinizes purely tax-oriented transactions. In addition, acquiring control of another firm in order to provide for expansion into new markets; acquisition of technology; and achievement of potential synergies due to economies of production, research or marketing are also of considerable importance.

The acquisition of a competitor in the aim of raising prices through market power might also be an economic --profit maximizing-- reason for a merger. This can also be accomplished by taking advantage of marketing skills, especially where products are complementary. The reasons for this profit maximizing can be explained as a result of the following factors:

- achieving real efficiencies,
- increasing market power and tax and accounting opportunities,
- growth and general external- speculative goals, and
- insider opportunities to all parties and deterrents
- antitrust law enforcement,
- securities law and enforcement, and
- transaction costs of public and congressional opinion.

[3] Financial synergies are more likely to be achieved by conglomerates, since transaction cost decreases as the sum raised increases.

Acquisition of Scarce Resources

Human assets in the form of efficient management are the scarcest resource that a firm requires for continuing growth. These talent acquisitions can be accomplished by the acquisition of well-managed firms. However, the acquirer should be careful to avoid paying too much for managers who might leave the firm after the acquisition to work elsewhere, or worse, to join a competitor. Another opportunity in this classification is the acquisition of raw materials by integrating with a supplier or acquiring a competitor's assets in order to expand production facilities. This is the case of a construction company buying a mixed-concrete supplier or the former acquiring its concrete aggregates vendor. In all cases, it is sometimes possible to increase the value of the firm by acquiring specific assets at a discount for example, when the acquirer knows more about the real value of assets such as land or depreciated buildings. Another option is to acquire an unprofitable company and close down the loss-making activities and sell off the profitable sectors in the hope of making a gain.

Mergers might also look for other economic interests such as achieving size and growth, profitability, return on shares and profit variability among others. Buying equity is often a cheaper and faster means of entering markets than establishing subsidiaries by building up so-called greenfield plants from scratch. In the case of human talent, it is important to highlight that a merger requires managerial skills, such as integration, and change orientation ones, rather than the entrepreneurial ones --not frequently available-- needed to launch new ventures. Also, merging with -or acquiring- indigenous firms is a method quite frequently used by foreign firms to enter new markets and internationalize their operations.

Sources of Value Creation for Buyers

Most businesses seek to grow and must plan and manage the growth in order to minimize risks while expanding by a combination of strategies. The most important gains can be obtained by combining the value of several organizations over the sum of the value that they can create separately (Scharf, 1991). This phenomenon is called incremental effectiveness through synergies and can be accomplished when integrating the firms after the merger by creating investment cuts to avoid investing in negative present value projects. Also, replacement of inefficient management and strategic sell-offs and divestitures are common in M&A. From a taxation point of view, an increase in the market value of the company using tax savings through interest deductions can also be achieved.

The effectiveness in realizing these synergies will be based on unique corporate strategies for each case in particular. For this reason, it is very important that managerial motivations are in line with those of shareholders. This point is very important because an acquisition has a better chance to succeed when managers are devoted to their work rather than to compensation and perquisites. During the integration process that all who contribute shall share in the rewards, not just a few senior managers.

Acquisitions are preferred to internal expansion when price and closing date are important. Internal expansion is preferred when confidentiality, control of size, scope, location, time, schedule and planned costs of the expansion are fundamental to the success and long-term operation of the company. Should an acquisition be more appropriate, financial analysis is a vital short-term element to determine a realistic purchase price. Prudence in matching availability of cash flows to debt obligations and post-acquisition steps to realize the objectives of the acquisitions should be taken into account carefully.

Sources of Value Creation for Sellers

Acquisitions create the most value under circumstances such as retirement and estate planing programs, divestiture of non-strategic businesses, and reorganization of firms in bankruptcy or trustees for companies being liquidated. Also, they serve as an exit strategy for certain type of investors such as venture capitalists. In the case of young founders with an unusual business opportunity that cannot be realized without access to the sales, technological, financial or other resources of a larger organization, selling the company might be optimal.

Sellers' general objectives are focused on price and payment terms, certainty, simplicity and prompt completion of the acquisition, and continued performance of the arrangements. Therefore, sellers often make important concessions in price and payment terms to a buyer who responds strongly to the other general objectives. Sellers typically develop initial objectives that are both numerous and highly optimistic as a good strategy to be revised during negotiations. As a recommendation, it is very important for sellers to screen carefully potential buyers during the due diligence activities in order to check reputation and authority, level of approvals needed and when professionals such as lawyers and accountants will commence work. Sell-offs may generate greater profits if the assets are sold to a strategic buyer; that is, to a horizontal or vertical buyer, or to an incentive organization.

Sometimes, managers commit errors of overoptimism in evaluating takeover opportunities due to excessive pride. When there are no synergies, the takeover premium is a random error mistake by the bidder that produces greater gains for the sellers. There might also be agency problems, which arise when managers own only a fraction of the equity of the firm that can also be a source of gains for sellers. This issue can lead managers to work less vigorously because the majority owners bear most of the cost. It is reasonably expected that increased management effort generally increases firm value, but managers are averse to effort.

Managers are risk averse and typically have much of their wealth in firm-specific human capital, which must be amortized over their careers. As a result, they are concerned about the portion of firm specific risk that can be eliminated through diversification. Another fact is that managers have shorter time horizons than shareholders, as their claims on corporations are generally limited to their tenure with the firms. It has been suggested that some takeovers be primarily motivated by the self-interest of the acquirer management. The basic idea behind this is that acquisitions result in the extraction of value from the acquirer shareholders by acquirer management. Therefore, the more severe the agency problem, the higher the target gain.

Dubious Reasons for Merging and Acquiring companies

Diversification

Sometimes, cash rich companies in stagnant industries merge with fresh woods and new pastures. Management of these companies claims that they are creating value by decreasing the firm's risk. However, this type of diversification does not increase value because investors can diversify more cheaply on their own. This issue can create problems for example when the president and majority owner of a closely held corporation avoids paying taxes by merging with other company instead of selling his shares in order to defer capital gains.

The Bootstrap Game

Increasing earnings per share is another reason that managers use to justify a merger. This might sound reasonable since the combined effect on the stock of both companies can actually increase this ratio considerably. However, if the stock price of the company remains unchanged, no value is created and the price/earnings ratio falls.

Lower Financing Costs

This argument is commonly used since companies plan to grow in order to reduce their interest rate on their debt. However, this is not a sufficient reason for merging since the debt of the newly formed company is safer --which only benefits creditors-- as opposed to a separate debt for each firm (Brealey, 1996). Firms are losing their option to default separately and now their new debt is cross-collateralized --where firms have the option to default on an asset by asset basis. This argument may be valid in the case in which a merger can create value by making debt safer because of the choice of an optimal debt ratio. This situation is a trade-off of the value of tax shields on interest payments made by the firm against the present value of possible costs of financial distress, other things being equal. If it allows increased borrowing, and increased value from the interest tax shields, there will be a net gain to the merger and therefore lower financing costs are a suitable reason to justify the merger.

Section 4

Developing a successful M&A strategy

M&A is a very complex and delicate process that often destroys decision-making cultures and forces individuals and organizations to learn by doing. In general, more experienced acquirers are more successful at buying companies than other less knowledgeable protagonists (Bengtson , 1992). However, most major companies will experience a merger or acquisition at some point in their history. For this reason, these firms should follow a structured plan of action to take into account the two major steps in every M&A process:

1. Assessment of the target
2. Amalgamation of firms

Assessment of the Target

The first step in a successful M&A strategy will be to assess the value of the target company to be merged or acquired. To accomplish this endeavor, a company should evaluate the impact of two important factors in the future of the integrated company: the purchase price and the strategic fit of the target.

Purchase Price

The purchase price for an acquisition is determined by negotiation. This is because sellers most of the time are uncertain about an asking price, even though they are closely familiar with every asset and operation of the company. On the other side of the negotiation, buyers are often more uncertain because they are initially unfamiliar with the business being sold. According to negotiation theory, this asymmetry of information is the motivation that induces both sides to agree within a bargaining zone. However, uncertainty can be reduced and informed judgements for sellers and buyers can be made by hiring M&A expert advice from a Certified Public Accountant, an investment bank or a specialized appraisal firm.

Professionals will be of great value in helping to understand the complex balancing act of satisfying everybody during the negotiation. In the case of a leveraged merger or acquisition, they will also collaborate to create a flexible debt structure that will make sense according to the current market place. In most cases, professional valuations will be required at some point during the transaction conditions.

Different methods of valuation can be used in order to assess a merger or acquisition. Among the most common are:

1. Book Value,
2. Return On Equity, and
3. Price-Earnings ratio.

*Book Value (BV).- M*ost M&A transactions are priced at between 1 to 3 times the book value. This is not a very efficient way of valuing a company since it does not take into account the earning power of the business intangibles. However, its importance is based on the fact that tangible assets are the primary collateral for secured lenders. This factor can help the company in many ways such as achieving the optimum leverage ratio in order to minimize tax payments.

Return On equity.(ROE)- This measurement is better suited to companies with a higher return on assets than their intrinsic growth rate since it will be higher with more leverage, even with high interest rates, because these firms can produce enough cash to pay for debt service. In general, an acquirer should look for companies with high return on sales after taxes --more than 6 per cent-- and a low debt/equity ratio --less than 20 per cent.

Price/Earnings Ratio.(P/E)- This is a variation of payback analysis. Buyers usually look for acquisitions with a P/E of less than 10 times, with an approximate price of 8-10 times earnings. This is a very useful measure and probably one of the most accurate in valuing a company. It accounts for the earning power of the company that is what investors should care about when they are acquiring control of a company. [4]

Strategic Fit

In order to establish an adequate and complete framework for assessment when merging or acquiring a target company, a strategic fit of the firms involved should be considered. This strategic analysis approach is based partly on diversification benefits that smooth earnings and reduce risks (Cooke, 1986). However, this is not the case for all companies, and growing through acquisitions as a long-term strategy should be planned thoroughly in order to minimize risks. This approach is worth careful consideration for construction and real estate entrepreneurs that reach a point where a large group environment is necessary for further development. With this framework, it is possible to acquire financial advantages and maximize profits from business and product life cycles.

Experience curves should be taken into account when trying to define the expanded levels of activity in a merger or acquisition. It is well known that unit costs will be different because of the learning process if the business is labor-intensive such as building construction and interior finishing. Financial advantages, production capacity and technological advances will be more important in capital intensive businesses such as heavy construction and real estate operations. Profits will be higher in an industry that is more highly concentrated and, in most cases, cost advantages will lead to higher profitability and improvements in net cash flow. As a result, the company that is quickest down the experience curve will become the price leader by securing a cost advantage over other competitors.

[4] When dividend policy cannot be changed, buyers should use price-dividends instead of the price-earnings ratio. In the particular case of Real Estate Investment Trusts (REITS), dividends are set by law at a minimum of 95% of after tax income.

Three different approaches to assess strategic fit

Because of their importance and effectiveness in helping to understand the competitive scenario of most mergers and acquisitions, and in order to evaluate the strategic analysis of fit between the firms, three different approaches will be considered:

1. The BCG approach
2. The Braxton approach
3. The Shell directional policy matrix

The Boston Consulting Group (BCG) approach

This model is based on a market share vs. market growth comparison, where products are divided into four categories: stars, cash cows, question marks and dogs.

Product	*Market Share*	*Market Growth*
Stars	High	High
Cash Cows	High	Low
Question Marks	Low	High
Dogs	Low	Low

Table 4.1 Market Share vs. Market Growth Comparison --BCG approach

A portfolio theory framework is used when analyzing the competitive position within a particular market. The use of cash is considered to be proportional to the rate of growth of the product and to generation of cash as a function of market share because of the experience curve effect described above. The object in this case is to convert a product as quickly as possible into a cash cow and consider liquidating dogs and investing this money into question marks in order to move them to stars. The implications for construction and real estate companies are that a firm should acquire others in the same industry. In addition, these companies should look for growing markets with at least a 5 per cent market share, because success increases with market share and size is an entry need for big companies competing for international contracts.

The Braxton approach

This model states that for an effective acquisition process, a firm should state a sound strategy and develop an acquisition criterion. It is very similar to the BCG approach in the necessity of eliminating inappropriate sectors and screening for promising ones. In other words, a firm should choose only lower resource costs that will improve competitive position within a promising industry and set up an upper limit in financial terms. This process should avoid considering biases of management preferences. Once this is done, and before profitability is yet introduced, the acquirer should eliminate across non-suitable industries and screen for promising sectors by looking at competitive dynamics and industry trends. Synergies of broad activity, technology and skill base should be looked at carefully.

Unlike the BCG approach, candidate to be selected will be targeted in sound but not necessarily high-growth industries. This argument takes into account the fact that companies have different value added for each activity, such as retailing, marketing or manufacturing. All will depend on the product/market segment being served. The entity with the best competitive position becomes the prime target and then it is assessed for financial performance in a risk-return framework.

The Shell Directional Policy approach

This approach states that earning a certain rate of return is not sufficient for corporate planning and takes into account different factors that will impact the projected cash flows. For example, market growth, industry supply/demand balance, prices, costs, future market shares, manufacturing competitiveness, research and development strength, activities of competitors and the future business environment. This model identifies the main criteria by which to judge favorable prospects by using a comparison with sector prospects and company's competitive capabilities. These ratings are estimated by accumulating scores to strategic questions and are then compared across sector prospects and company's competitive capabilities.

The BCG, Braxton and Shell Directional Polity approaches are very valuable tools for performing strategic analysis in order to asses the fit among firms to be merged or acquired. However, a word of caution is very important when using these models. Even though the strategic theory framework might show a perfect fit among companies, practical judgement should be used in order to avoid very expensive mistakes. Failed acquisitions and other bad investments have resulted from applying only a theoretical perspective to acquisitions. Therefore, the common business sense and experience of senior managers should be applied throughout this risky business.

Amalgamation of firms

A successful M&A strategy will indeed require the amalgamation of firms between the acquirer and the target company to be merged or acquired. During this stage, the important factors are the pre-acquisition strategy, managing management and company consolidation.

Pre-Acquisition Strategy

Buying companies is relatively easy, but managing them successfully is not. This is because there is a lot of risk involved and oversimplification of judgements can be very dangerous. The time when a merger or acquisition is considered complete can be crucial and the majority of companies can achieve good investment returns after a well-conceived and executed merger or acquisition. Therefore, in order to make a merger or acquisition work better and last longer, it should be motivated by the pricing and strategic fit analysis described earlier in this section. A prepared plan of action for each stage of the process is crucial during the management of change in the acquisition process and managers should bear in mind all the time the reasons for the acquisition, from synergies and market share to strengthen core business and achieve competitive size.

Since a merger or acquisition can only be considered successful where it functions over time as a stable, profitable and clearly identifiable entity, the process should be managed correctly from the beginning. Once the merger is a legal fact, change should be planned and carried all at once. Because of its importance on the effect of the strategy, relative company size should be compared and adapted according the following situations:

1. Merger of Equals,
2. Buying Small Subsidiaries, and
3. Hostile Takeovers.

Merger of Equals.- A quick decisive action is vital to establish an identifiable unit when companies of similar size merge within the same industry. It is necessary to create a clear profile for clients, the industry and the public. Loss of market share, 1+1=1.8, is almost inevitable initially but carrying through change as fast as possible will help to minimize this issue. Exceptionally competent senior management is a prerequisite for success and they need to know what are they doing and why. Leadership and agreement on strategic objectives is required to keep the new company functioning fast and smoothly.

Buying Small Subsidiaries.- Deceptive simplicity is one of the biggest dangers when a large company buys a smaller one. This is commonly known as corporate stomachache. This problem is mainly caused by small organizations that suddenly become part of a large group and all are traumatized to some degree. Initially feelings vary from euphoria, gratitude and pride, to bewilderment and insecurity. When integrating the small subsidiaries, fueling ambition in former employees should be avoided or this will create headaches for the new organization. Also, there is the risk of losing important personnel who may then set up in opposition. A successful integration of smaller subsidiaries is perfectly possible, but takes a disproportionate amount of time and effort.

When an integration of this form takes place, it is important to avoid common mistakes by doing a careful analysis of timing and change sensitivity, which are the main factors of post-acquisition concern when a larger company buys a smaller one. Also, communication channels should be used to their fullest extend and the welcome to the new company should be as warm as possible to stress to the new workforce the real benefits of belonging to a large organization.

Hostile Takeovers.- Speed of integration is an absolute precondition to success in a hostile takeover. Friendly mergers can also fail if necessary change is not implemented immediately. In the case of complementary products and similar-sized companies, the change is less drastic than if they were competitors. In any case, senior management positions should be filled immediately for joint decision-making and key strategic planning. This will allow the new organization to establish a recognizable company identity as a signal that the merger or acquisitions is progressing properly.

Managing Management

Mergers and acquisitions are very sensitive to human resources and particularly, merger traumas have a big effect on the success of the new organization after a merger or acquisition. Even in capital intensive industries, it is very dangerous to neglect the human factor, because in many cases a new senior management team is appointed and should be assessed for style and quality (Bengtsson, 1992). This means that it is necessary to keep a personality mix in mind by combining geniuses with more solid types that will act as catalysts.

It is of vital importance to get the board and executive committees in shape and working as fast as possible. Now, it is time for a "getting-to-know-you-period" after the artificial or overcautious stage is past. After a merger or acquisition, it is not uncommon for the executive team to have too many vice-presidents. It is not easy to cut it down to workable proportions, however it should be done at once. In order to relieve some of the emotions involved in this phase, it is recommended to encourage voluntary non-executive director status, setting an upper age limit on membership, allowing early retirement and voting on membership.

In the case of middle management, the vulnerable stratum, it is very important to identify tomorrow's leaders. If the company is worth buying, it is reasonable to suppose that they have at least some people worth keeping. A recommended course of action is to declare jobs vacant and request applications from within during the first month of completion. This measure will eliminate partisanship and increase impartiality by letting the merger team and the personnel department work together during this time. Supervisory, operational and line staff are also important and should not be neglected. Supervisors are very good channels of information and in certain industries, such as construction and heavy engineering, loyalty may be to the individual supervisor rather than to the company. Whole teams of good workers can disappear virtually overnight if these key people are ignored. Last but not least, the trade union support can be essential in some countries if the union representatives have been involved from the beginning. Acquiring companies in an area with no tradition of such cooperation must really do their homework if trouble is to be avoided.

Company Consolidation

Maintaining momentum after a merger or acquisition, and eliminating routines is a gray area for most companies and where many can go wrong. There should be intense activity in implementing immediate change, and fine-tuning for efficiency and profitability will lead to a successful merger consolidation. Above all, a company feeling should be established in order to have adequate product integration and a uniform public profile. What works best in terms of personnel policy should be checked out for the whole organization.[5]

Company effectiveness will depend on the type of firm involved in the merger or acquisition. For example, a financial or highly creative real estate company may have to show results very quickly and is usually rapidly deemed a success or failure. On the other hand, a heavy engineering or construction firm company can take years before it is possible to measure actual profitability or evaluate performance. Despite industrial variations, certain steps must always be taken to ensure that the process of integration is really happening and that it is not just superficial. In addition, this action should include contingency plans for emergencies in order to cope adequately with crises.

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[5] Remember that people are extremely sensitive to changes that affect their personal well being, security and comfort.

Joint material, financial and human resources should be assessed throughout the consolidation phase. It is important to avoid financially overextending the company by rushing into other acquisitions. Before this, realistic targets need to be set for the post-merger phase. It is very important to remember that mergers and acquisitions are always more expensive than estimated and real profits normally fall short of the optimistic figures calculated in advance.

Section 5

Case Studies

In Section 5, four case studies concerning M&A of construction and real estate companies are carried out. Each case study looks first at each individual company and describes major events chronologically. Then, it highlights the approach that firms are taking towards the acquisition process and how they have succeeded with this strategy. Finally, the lessons to be learned from the case are explored. The four cases studied are listed in Table 5.1 below.

— Case I	Nordic Construction Company	Stockholm, Sweden
— Case II	CRH	Dublin, Ireland
— Case III	Centex Corporation	Dallas, Texas
— Case IV	Jacobs Engineering	Pasadena, California

Table 5.1 List of Case Studies

Case I

Nordic Construction Company

NCC

Case I analyses the growth of Nordic Construction Company into a multinational player in the construction and real estate business through an excellent example of speed and efficiency. The M&A strategy of this firm was to build a well-integrated unit capable of weathering the recession-hit construction and real estate markets and prepare them strategically for recovery.

Overview

NCC has annual sales of slightly more than SEK 33 billion, with more than 20,000 employees. The Group is organized in six business areas: Civil Engineering, Housing, Building, Industry, Real Estate and Invest. NCC shares are listed on the Stockholm Stock Exchange and the Group had a market value of SEK 6.7 billion at year-end.

In its domestic markets - Sweden, Denmark, Finland and Norway - NCC builds roads and civil engineering facilities, residences, industrial premises, hospitals, offices and other buildings. NCC also produces building materials and is one of the leading suppliers of crushed and asphalt products and ready-mixed concrete in the Nordic region. In Germany, NCC is building houses in the Berlin-Brandenburg area, through its subsidiary NCC Siab. The Group is pursuing an aggressive growth strategy in the Baltic Sea area, with the ultimate aim of also making Poland a domestic market. In other, selected markets outside the Nordic region, NCC engages in large-scale, technologically advanced civil engineering projects, either independently or in cooperation with strategic partners.

In NCC, project development is a core business and real estate sales and real estate management are supporting activities. In Sweden, the real estate portfolio is being concentrated to expansive regions, in which synergistic benefits can be generated between the Group's construction operations and project development activities.

Corporate vision

— To be the sector leader in the Nordic region and in other Baltic Sea countries in terms of profitability and market positions and to use this as a base for the development of strong international project operations.

— To be regarded as the leading construction and real estate company in terms of quality, the environment, efficiency and development resources in all markets in which we are active.

— To be perceived as young, exciting company that focuses on innovation and the commitment and competence of each employee.

History

In the summer of 1997, Siab and NCC were merged. Two successful companies with traditions formed the new NCC.

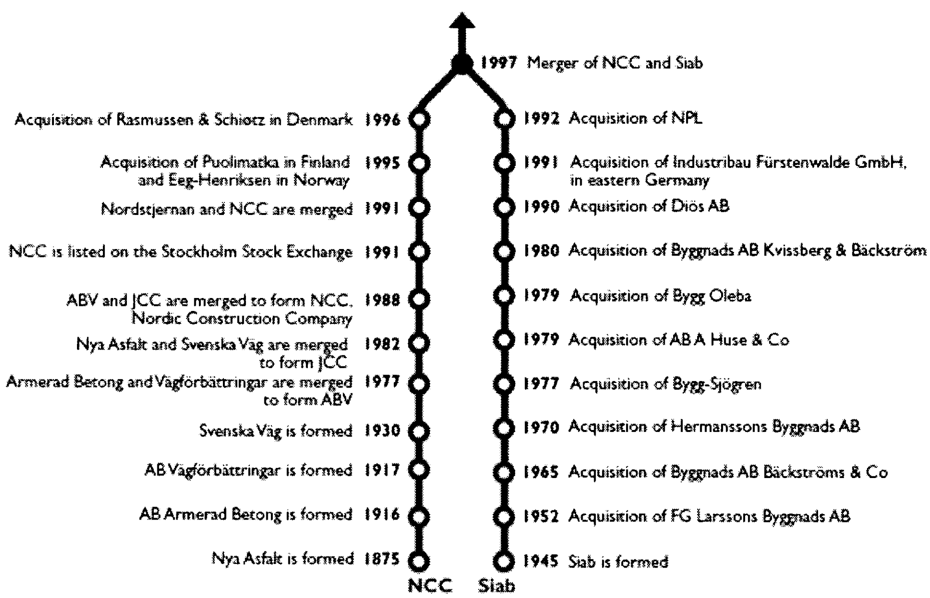

Figure 5.1.1 1997 Merger of NCC and Siab[6]

6 **http://www.ncc.se/english/group/history/mitten.htm**

Organization

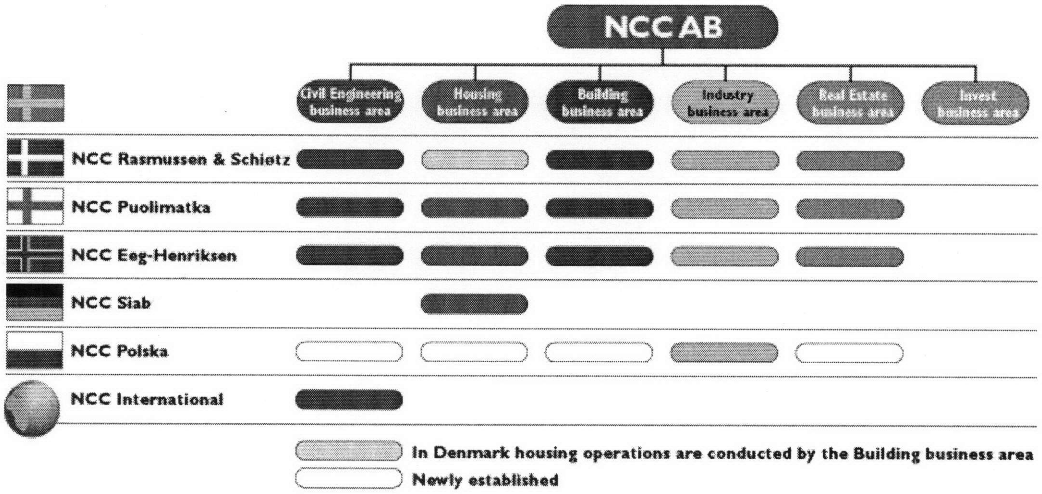

Figure 5.1.2 Organization of NCC AB[7]

Business areas

NCC has expanded geographically throughout Sweden in order to combine local expertise with the continuity and strength of a large company. This position will allow the firm to be chosen as a possible partner in the construction industry in six different business areas: Civil Engineering, Housing, Building, Industry, Real Estate and Investments.

The Civil Engineering area is in charge of infrastructure projects that are based on long-term resource-efficient and environmentally compatible perspectives. Operations are established throughout Sweden, and are represented in other markets by foreign subsidiaries through NCC International. Housing participates in the building of new communities and pays careful attention to environmental considerations. This unit plans projects with great care in order to use materials and methods that are sound from the viewpoint of both people and the environment. Residential buildings throughout Sweden and in northwestern Germany are constructed through the subsidiary NCC Siab.

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[7] http://www.ncc.se/english/group/org/mitten.htm

In Sweden, NCC Industry is organized in two units, Ballast and Machinery. Ballast develops and manufactures crushed-rock products, asphalt and ready-mixed concrete. Machinery supplies equipment for all types of construction. This area conducts operations in the Nordic region, the Baltic countries, Poland and Germany. The Real Estate area builds and develops properties based on a land holding and generating value growth through gaol-oriented management and property sales. Ten growth regions are targeted in Europe, and the real estate portfolio consists mainly of commercial properties in Sweden. Among the regions, Nordic capitals and a few major cities in continental Europe are included. Finally, as a future-oriented company, NCC looks ahead for new business opportunities through business area Invest. This arm serves as the Group's resource in terms of strategy, analysis and the implementation of structural transactions.

Projects

Among the most recent NCC contributions to the built environment, we can name a few of the most distinguished projects in Scandinavia and Europe. The Arlanda Link is one of Europe's largest infrastructure projects. This new rail links Stockholm Arlanda Airport and Stockholm City and will come into service in the fall of 1999. NCC was commissioned by Sweden's National Real Estate Administration to construct the Museum of Modern Art on the island of Skeppsholmen. This project was designated Stockholm's most beautiful building in 1997. Skoghall, another project, which required a total investment of SEK 32 billion, encompassed a pulp mill, electricity connections, monitoring center, roller stores and carton-board machinery, in addition to offices and a laboratory is Swede's largest industrial investment of the 1990s.

The Oresund Tunnel is maybe the most well known project in which NCC has participated. This is the world's largest immersed tunnel in terms of volume and NCC leads construction. By the year 2000, it will be possible to travel directly by train or automobile between Sweden and Denmark. The project comprises three parts: a tunnel, a bridge and an artificial island linking the tunnel and the bridge in the middle of the Oresund straits. The bridge starts in Sweden and the tunnel in Denmark.

Performance

According to the report on 1997 operations, Jan Sjoqvist, NCC's president, says that the firm plans to implement major structural transactions in the construction and real estate sector trough its M&A strategy. The effects of the merger of NCC and Siab are now beginning to become noticeable. Management expects to be able to realize most of the coordination gains. Excluding merger costs, income after net financial items totaled SEK 74 million. The merger with Siab was the Group's major transaction completed during 1997 and now that has been completed is yielding coordination gains of approximately SEK 400 million annually.

Despite a weakening trend in the Swedish construction market, NCC is strengthening its position in the Nordic region. In 1997, construction in Sweden declined by 14 percent, although all other Nordic markets noted a favorable trend. NCC's Nordic base rose by 2 percent, which is serving its purpose of leveling out cyclical differences between the Nordic economies. At the same time, the real estate market in Sweden's three largest cities, and in cities with universities, is continuing to develop favorably. This is resulting in increased property prices and rent levels in expansive locations throughout the Nordic region, which is boosting the potential for real estate development.

During the autumn of 1998, unrest in financial markets affected investments in the construction sector. In NCC's markets, investment propensity is mainly determined by the state of the various domestic economies, and there are no signs to date of any weakening following the recent turbulence in the global economy. By December of 1998, NCC sold its wholly owned subsidiary Hedemora Diesel to Daros Holding for SEK 18.5 million. Also, as part of efforts to concentrate operations on NCC's core construction and real estate business, the Board also decided to study the potential for a liquidation of NCC's shareholdings in Neptun Maritime and Hufvudstaden, through either a sale or a spin-off to NCC shareholders.

In February of 1999, NCC Real Estate acquired assets in central Gothenburg for SEK 131 million in order to develop attractive properties in locations that offer value growth. The real estate portfolio is being concentrated in the inner city area and will be developed into state-of-the-art office properties. In the same month, NCC's wholly owned subsidiary NVS Nordiska Varme Sana reached an agreement regarding the acquisition of Nofamo VVS AS, a Norwegian plumbing and heating installations company based in Sarpsborg, and its subsidiary Nofamo Industry AS. Since NVS established operations in Norway in 1997 through the acquisition of Drammens Ror, now named Nordiska Varme Sanitaer, the objective of the company has been to grown through additional acquisitions of companies in the plumbing, heating and industrial installations market.

Nofamo and NVS complement each other well in terms of both types of operations and geographic locations. NVS mainly has customers in Oslo and the area west of Oslo, while Nofamo's customers are concentrated in an area that starts in Oslo and extends in an easterly and southerly direction. Now, both companies can offer a complete range of plumbing and heating installations, as well as service for industrial and sprinkler installations and it is expected that the acquisition will make a positive contribution to the NVS Group's earnings in 1999.

In order to improve profitability, NCC is participating actively in the restructuring of the industry. Growth is planned through measures as expansion in the emerging nations around the Baltic Sea. NCC plans to control more levels of the value chain, which will involve a focus on residential construction based on the company's total-package concept, on project development and on BOT projects which entail privately financed infrastructure assignments. Also, NCC plans to specialize in submarkets with higher added value such as telecom, bedrock and bridge assignments, as well as building services with the overall aim of improving profit margins.

Construction Market

The Group reported a loss for the first quarter of 1999 of SEK 63 million after net financial items. This is mainly because of the acquisition in February of Superfos Group's European asphalt and ballast operations with annual sales of approximately SEK 1.7 billion. The acquired company will be merged with NCC's wholly owned subsidiary NCC Rasmussen & Schiotz to form the largest construction company in Denmark by a large margin. Net sales increased mainly because of the above acquisition and to growth in Swedish construction operations. The seasonal variations in earnings, which are normally strong in the construction sector, were intensified by the acquisition of Superfos Construction.

After the acquisition, profitability remained unchanged. However, the Group's gross investments in other fixed assets amounted to SEK 1,441 million predominantly pertaining to the acquisition of Superfos Construction. For the same reason, cash flow was negative but is expected to be positive during the remainder of the year. The acquisition of Superfos Construction also impacted NCC's net indebtedness, which increased to the amount of SEK 5,869 million and additional personnel from Superfos Construction accounted for about 1,500. By the end of the year, this acquisition is expected to add 50 million to NCC's full-year earnings. Also, NCC expects to increase revenues during 1999 since most of the Group's operations are active in the expanding Swedish and Finnish markets. By the year 2000, the acquisition of Superfos Construction is expected to contribute approximately SEK 100 million annually to NCC's earnings. In addition, Superfos' 50-percent interest in the Finnish civil engineering company Valtatie will provide NCC Puolimatka with a solid base for the build-up of competitive industrial and civil engineering operations in Finland. The acquisition is in line with NCC's strategy of establishing a strong market position in all domestic markets in the Baltic Sea region.

Real Estate Market

The trend in the Swedish real estate market remains favorable and market growth continues to be dominated by the Stockholm region. Rent levels for premises in Stockholm are higher than they have been for several years and the largest increases are being noted in central locations. The trend in the Gothenburg market also remains favorable. In Finland, the rental market in Helsinki remains strong, with low vacancy rates and stable rent levels. High-quality modern premises in prime locations are still highly attractive in the market. In Copenhagen, demand for office premises remains good and the vacancy rate is now less than 3 percent. The average rent level has increased gradually, while upper-end rents remain essentially unchanged. Investors are mainly interested in high-quality commercial properties in prime locations, preferably combined with long leases and solid tenants. Conditions in the Oslo market peaked during autumn of 1998.

The Real Estate business area had sales of SEK 245 million (299). Income of SEK 69 million (83) was reported after net financial items. Sales volume within project development operations amounted to SEK 95 million (564), generating income of SEK 8 million (99). During the first quarter of 1999, the business area sold managed properties with a value of SEK 133 million (530), yielding a capital gain of SEK 18 million (loss: 4). Rental revenues amounted to SEK 187 million (207). The operating net was SEK 122 million (139). The visible yield was 6.6 percent (6.6). Income after net financial items from real estate management operations amounted to SEK 33 million.

In line with the strategy of conducting project development operations as a core business, with real estate management and property sales as supporting business, NCC intends to implement a further sharp reduction in the portfolio of managed properties. It is estimated that an optimal size for the portfolio of managed properties would be approximately SEK 4 billion, compared with the current level of SEK 8.7 billion for wholly owned and partly owned properties. The portfolio will be adapted gradually, at a pace permitted by market conditions. Concentrated in a few expansive locations in Sweden and, in exceptional cases, in the other three major Nordic capitals. An additional focus will be to maintain a high rate of property turnover in the portfolio.

Lessons to be learned

The Capital gains for SEK 93 million (loss: 45) are attributable to the sale of Neptun Maritime shareholding and to the fact that NCC's is no longer adversely affected by any participation in this company. Despite an anticipated decline in the construction market in the Nordic region, NCC has made the assessment that the output of its construction operations will increase in 1999. The trend in NCC's selected real estate markets remains positive, which will facilitate continued favorable project development activity in 1999.

It is interesting to highlight that NCC was continuously in the press as it imposed its profile firmly on the Scandinavian market. It was a study in speed and efficiency. Once established and integrated as recession-proof unit, NCC was capable of taking full advantage of a recovering construction market. Because of this, time was very important through NCC's growth through

M&A. The modern NCC was created through the amalgamation of a number of companies in the construction and real estate value chain. The process was not easy and many failures had to be turned around throughout the negotiations. However, the ultimate measure of its success will be its stable existence over a long period, with good profitability relative to other companies in the same market.

In the early eighties, the atmosphere at NCC was terrible with open rivalry between polarized factions and public squabbling among managers of different divisions. The company was operating well below optimum. In addition, the market was not supporting an expansionist policy and organizational chaos encouraged customers to leave. Obviously, poor results came and strong leadership was required. This is the point in time when the CEO and managing directors were replaced. There was no room for internal fights and the worry of financial loss could not be ignored. For this reason, new managing directors where appointed from inside the company. Acting quickly, as far as was possible in the circumstances, was essential for the success of the plans and maximization of the combined strength in the Scandinavian market.

NCC is still changing. There are areas that have just begun to work properly in order to compete against the inevitable forces of the international construction market. Preparation, planning, speed and firmness have been the most important in the success of NCC growth into a global company through M&A. Top management must be directly involved since M&A cannot be delegated. They must be carefully followed up in order to work operationally within NCC's core business dominated by construction, civil engineering and real estate.

Case II

CRH The International Building Materials Group

Case II analyses an international group of companies that manufacture products and materials for the construction industry. CRH has been selected as a particular example of successful growth through acquisitions for a building materials company to become a multinational leader.

Overview

The company's businesses produce bricks, polystyrene, glass, steel, cement, and other products. CRH operates in Ireland, Great Britain, continental Europe and North America. About half of the company's sales are in North America, approximately one-quarter in Ireland, and the remainder in the UK and mainland Europe. CRH also owns construction firms that provide concrete paving services and sold its Keyline building-materials store chain to Travis Perkins.

CRH plc has operations in 12 countries, which are organized broadly on a product basis. This helps to bring a focus to business development and best practice and provides a stimulus to growth throughout the organization. It creates opportunities for managers across national boundaries and builds an organization tailored to country, product and cultural differences. The Group has three operating divisions: Europe Materials, Europe Products & Distribution and The Americas.

Corporate Vision

"an international leader in
building materials,
products and distribution,
delivering sustained and superior
shareholder returns"

Business Areas

Europe Materials

CRH Europe Materials operates in Ireland, Spain and Poland. This Division is a major producer of primary materials and value-added manufactured products. In Ireland, CRH is the market leader in cement, aggregates, ready-mixed concrete and asphalt. Extensive reserves, high quality and low cost production are the hallmarks of these operations. In Spain, CRH produces aggregates, ready-mixed concrete and precast concrete products. These operations form a good commercial network and are well located near large markets. In Poland, CRH owns 83% of a leading low cost cement producer with good market positions and access, providing a strong base and the opportunity to add complementary products. In total, CRH Europe Materials employs approximately 6,000 people at over 190 locations.

Performance

% of CRH	18% Sales	€ 955 million	+17%
	28% Trading profit	€ 127 million	+16%
	21% Year-end net assets*	€ 552 million	+24%
	Sales margin	13.3%	

Table 5.2.1 Performance for CRH Europe Materials Group

*Including goodwill

Development strategy

To build and maintain strong market positions in primary building materials and related products through organic growth, greenfield development and acquisitions in selected European markets.

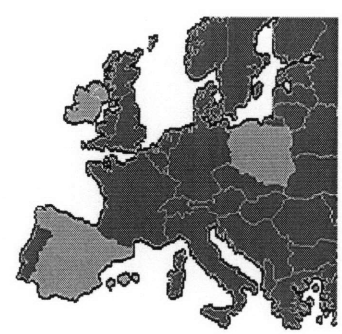

Figure 5.2.1 CRH Europe Materials Group

Ireland

- Maintain position as the lowest cost/best value producer.
- Continue to operate to the highest environmental standards.

Spain

- Strengthen existing market positions.
- Expand selectively into related products and regional markets.

Poland

- Invest in increase cement capacity in a growing market.
- Develop a strong national presence in the Polish materials industry.

Elsewhere

- Build options for future growth in the developing economies in central Europe.
- Selectively acquire materials businesses in other European countries.

Products	Presence	Market position
Cement	Ireland, Poland	No. 1 producer in Ireland
Aggregates	Ireland, Poland, Spain	No. 1 producer in Ireland
Asphalt	Ireland	No. 1 producer
Ready-mixed concrete	Ireland, Poland, Spain	No. 1 producer in Ireland Leading position in Catalonia, Spain
Agricultural & chemical grade lime	Ireland	No. 1 producer
Concrete blocks, pavers, rooftiles	Ireland, Spain	No. 1 block and rooftile producer in Ireland
Clay bricks	Ireland	No. 1 producer

Table 5.2.2 Product, Presence and Market Position for CRH Europe Materials

Product end-use

Infrastructure	22%
Non-residential	37%
Residential	41%

Europe Products & Distribution

CRH Europe Products & Distribution is one of our two new European Product Divisions. It is organized in three groups of related manufacturing businesses and a distribution group. The manufacturing groups are involved in concrete, clay and other building products. Distribution encompasses builders merchants and Do-It-Yourself stores. Operations are located mainly in the UK and the Benelux with promising bases for future growth in France, Germany, Ireland, Poland and Portugal. CRH Europe Products & Distribution has around 8,000 employees at over 300 locations in 8 countries.

1998 Results

% of CRH	29% Sales	€ 1,500 million	+13%
	18% Trading profit	€ 79 million	+3%
	28% Year-end net assets*	€ 734 million	+21%
	Sales margin	5.3%	

*Including goodwill

Table 5.2.3 CHR 1998 Results for Europe Products and Distribution

Development strategy

To build leadership positions in targeted European markets in the manufacture and distribution of building products through acquisition and organic investment.

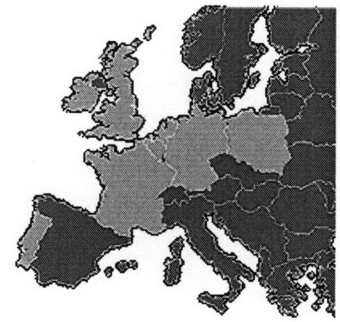

Figure 5.2.2 CRH Europe Products and Distribution

Netherlands and UK

- Maintain ranking and profitability in an increasingly competitive arena.
- Develop and strengthen existing businesses.
- Build leadership positions where not yet realized.

Belgium, France, Germany and Ireland

- Grow existing businesses profitably and strategically.
- Attain leadership in targeted product/market sectors.
- Integrate and consolidate newly acquired businesses.

Portugal and Poland

- Nurture and grow these investments as future core businesses.
- Extend outwards to build strong geographic clusters.
- Develop requisite management, operational skills and disciplines.

Products	Presence	Market position
Concrete blocks and pavers	Belgium, France, Netherlands, UK	No. 1 decorative patio tiles in Belgium No. 2 precast flooring in the Netherlands No. 1 architectural masonry niche producer in the UK
Precast concrete products	Belgium, France, Netherlands	No. 2 precast flooring in the Netherlands
Clay bricks and rooftiles	Germany, Netherlands, Poland, UK	No. 1 clay pavers in Germany No. 2 quality facing brick in the Netherlands Joint No. 1 facing bricks in the UK

Security gates and fencing	Belgium, France, Germany, Netherlands, UK	No. 1 rooflights & ventilation in the Netherlands.
Insulation products	Belgium, Ireland, Netherlands, UK	No. 1 PU Insulation in the Benelux No. 1 EPS insulation in Ireland No. 2 EPS insulation in the UK
Builders merchants	France, Netherlands, Poland, UK	No. 2 builders merchant in lle de France No. 1 roofing products in the Netherlands No. 1 ironmonger & tools in the Netherlands Top 5 builders merchants in the UK
BIY stores	Netherlands, Portugal	Member of leading DIY chain in the Netherlands Joint No. 1 DIY in Portugal

Table 5.2.4 Product, Presence and Market Position for Europe Products and Distribution

Product end-use

Infrastructure	10%
Non-residential	30%
Residential	60%

The Americas

The Americas are the largest region in the CRH Group, comprising in excess of 50% of sales and profits. Oldcastle, the holding company for CRH's North American operations, is a national leader across the US in the manufacture and distribution of primary construction materials and building products, with a growing presence in Canada. They operate in a total of 49 states and provinces. Each of Oldcastle's five product groups - Materials, Precast, Architectural Products, Glass and Distribution - has built local and national leadership positions in its own particular field and all continue to grow organically and by acquisition. In Argentina, Canteras Cerro Negro (CCN) is a major producer of clay products. CRH's American operations employ approximately 16,000 people in over 430 locations.

1998 Results

% of CRH	53% Sales	€ 2,756 million	+32%
	54% Trading profit	€ 246 million	+43%
	51% Year-end net assets*	€ 1,323 million	+1%
	Sales margin	8.9%	

*Including goodwill

Table 5.2.5 Performance for CRH The Americas

Development strategy

From the existing strong base, by reinvestment and acquisition, to consolidate and expand leadership positions in current and related products and markets; building profitable, safe, environmentally responsible and strategically sound businesses for the long-term.

Figure 5.2.3 CRH The Americas

North America

- Grow all product groups by in-filling regional markets, product lines and distribution channels.
- Develop a substantial Materials position in new regions.
- Seek related diversification for the building products groups, possibly creating a new core businesses, while maintaining Oldcastle's overall strategic balance.
- Continuing relentless attention to delivering results from existing operations.

South America

- Consolidate market positions and enhance production capability by selective investment.
- Seek opportunities in other product areas and neighboring countries.

Products	Presence	Market position
Aggregates	US	No. 5 national aggregates producer No. 1 materials producer in the northeast, inter-mountain and northwest regions
Asphalt and surfacing	US	No. 2 producer
Ready-mixed concrete	US	Top 10 producer
Precast concrete products	US, Canada	No. 1 US producer
Concrete masonry, pavers, rooftiles	US, Canada	No. 1 US producer masonry and paving No. 1 Canadian producer paving
Clay bricks, pavers, tiles	US, Argentina	No. 1 northeast US producer bricks No. 1 Argentine producer rooftiles No. 3 Argentine producer wall and floor tiles
Glass fabrication	US, Canada US	No. 1 US custom tempered glass fabricator
Roofing/sidling products		No. 3 distributor

Table 5.2.6 Product, Presence and Market Position for CRH The Americas

Product end-use

Infrastructure	40%
Non Residential	30%
Residential	30%

Latest acquisition activity of CRH-plc.

During the last three years, CRH has been very active in the M&A arena by buying companies around the world through its three different subsidiaries: Materials and Product & Distribution in Europe and Oldcastle Incorporated in The Americas.

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Price	Date	Transaction
20.4	09/28/99	Raboni S.A / Prefaest S.A
422.0	07/08/99	Thompson-McCully Cos.
146	07/08/99	Millington Quarry, Inc / Dell Contractors, Inc.
591.7	05/10/99	Finnsementti Oy / Lohja Rudus Oy
32.8	10/30/98	Holding Cement Polski S.A
36.0	05/01/98	M.A. Segale, Inc.
40.0	10/13/97	New York Trap Corporation
26.4	10/06/97	Trenwyth Industries / Akron Brick&Block
38.0	09/30/97	RSI Wholesale,American Pacific Supply,Builders Supply,A&R Supply
94.0	09/17/97	CPM Development Corporation

Figure 5.2.4 1999 Latest Acquisition activity of CRH plc

Particular motivations appreciated in CRH's acquisitions strategy

— Acquire economies of scale through increased revenues and capacity expansion.

— Expand existing operations into contiguous areas and provide opportunities to achieve cost reductions through production and transport efficiencies.

— Strengthen leadership in domestic markets and development of new ones.

— Acquire leadership positions in new markets and enhance international network.

— Expand successful operations through geographic coverage and product ranges.

— Use acquired companies as platforms for growth in consolidating sectors.

— Amalgamation of operations in order to enhance synergies and profitability.

— Acquire well-located material reserves in large markets with promising future.

	Materials						Building Products						Distribution	
	Cement	Aggregates	Asphalt and surfacing	Readymixed concrete	Agricultural and chemical lime	Seawater magnesium	Precast concrete products	Concrete blocks, pavers and rooftiles	Clay bricks, pavers and tiles	Insulation products	Security gates and fencing	Glass fabrication	DIY stores	Builders merchants
Number of Operations														
US		141	112	66			38	33				25		88
Canada							1	6				6		
Argentina		2							2					
Ireland	2	68	22	42	22	1	4	27	1	2				
UK		12	6	13	1		3	12		4	6			103
France							2	2			1			23
Portugal														9
Spain		5		57			14	9						
Belgium							5	5		1	1	1		
Netherlands							5	16	5	1	4	2	43	47
Germany									8	3	3	4		
Poland	2	2		6			3	2	1					6
Annualised Production Volumes														
The Americas		63	16	3			1	5	1			10		88
Europe Materials	5	29	2	4	1	90	1	3	1					
Europe Products & Distribution							1	3	1	1	1	1	43	188
Total	5	91	18	7	1	90	3	11	1	1	1	11	43	276
Physical units	million tonnes	million tonnes	million tonnes	million cubic metres	million tonnes	thousand tonnes	million tonnes	million tonnes	million tonnes	million cubic metres	million lineal metres	million square metres	stores	branches

Figure 5.2.5 CRH Geography and products

Lessons to be learned

A robust cash flow and a healthy balance sheet are the main factors which have enabled CRH to continue its growth strategy through mergers and acquisitions. Prudent financial risk management has paid back for the group in maintaining profitability while at the same time achieving an impressive growth in sales up 23% and pretax profits up 27%. This, coupled with the positive impact of currency exchange effects, accounted for the excellent performance of CRH during the year of 1998. In terms of M&A performance, the incremental impact of 1998 and 1997 acquisitions is almost entirely due to this activity in North America.

The proven record of CRH demonstrates that the organization has a coherent strategy to become a global leader in the industry. Its growth strategy continues to be fine-tuned as markets, operations and opportunities evolve. Market leadership, for example, is achieved through local acquisitions and the development of entrepreneurial teams with the required effective negotiation, evaluation and integration skills. Many of these acquisitions are mid-sized family companies where the owner-entrepreneurs continue to lead and grow their businesses within CRH. From time-to-time, these mid-sized deals are augmented by larger acquisitions such as the major strategic purchase of Lbstock, the leading brick maker in the UK. This investment offered an exceptional strategic fit since it will help CRH to achieve a leadership position as clay brick maker in both Europe and the US.

The firm plans to maintain its growth strategy for another 20 years, and the ability to sustain this vision will depend mainly on achieving an international leadership in each sector. Among the critical components for growth, it is possible to highlight the product and know-how leverage achieved through acquisition synergies. It is expected that this tactic will help to achieve above average returns for CRH's capital projects and will provide new investment opportunities. These plans will be put in action by the top 100 managers at CRH, which get together each year to discuss issues about Customer Service, IT Strategy, Human Resources Planning and of course, The Acquisition Process.[8]

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[8] Within the board of directors, there is an Acquisitions Committee that has the power to approve acquisitions and capital expenditure projects within previously agreed limits.

Case III

Centex Corporation

Overview

Centex Corporation has built its way to the top of its profession: This Dallas-based company, which constructs houses for first-time buyers --starter homes begin at $54,000-- and move-up buyers --up to $869,000--, is the leading US homebuilder. Centex also buys and develops land, provides mortgage loans and insurance to home purchasers, and offers commercial contracting and construction services. Its main subsidiary, Centex Homes, builds more than 14,000 homes each year in 19 states and Washington, DC. More than 90% of its homes are single-family detached houses; townhomes and condominiums make up the balance. Centex also has holdings in Latin America and the UK, including British builder Fairclough Homes, and owns 80% of Cavco Industries, a leading builder of the manufactured homes used in mobile home parks.

Centex Construction Group is made up of six independent regional construction firms, with projects in both the private sector --such as office and apartment buildings-- and public sector --such as education, government, and health care facilities--. Centex has cemented its leadership position by offering home-related products and services. Its majority-owned subsidiary, Centex Construction Products, makes and sells gypsum wallboard, aggregates, and ready-mix concrete. CTX Mortgage makes loans to more than 70% of its parent's homebuyers. The firm's Centex HomeTeam subsidiary provides pest control, security, and lawn services.

History

Tom Lively and Ira Rupley, who built their first large subdivision near Dallas in 1949, founded a homebuilding company, Centex, the next year. Centex's first out-of-Texas project was a development of 7,000 houses near Chicago. By 1960 it had built 25,000 houses. Branching out from homebuilding, Centex built its first cement plant in 1963 and established four more plants over the next 25 years. Centex expanded into commercial construction with the purchase in 1966 of Dallas contractor J. W. Bateson --founded 1936--, later buying other general contractors in Florida, California, and Washington, DC, in the 1970s. To combine homebuilding with home financing, Centex began mortgage banking in 1973, and when oil prices soared during the 1970s, the enterprising company formed subsidiary Cenergy to go digging for petroleum --spun off in 1984.

Centex increasingly built outside its Southwest territory -- from 28% of all new homes in 1979 to 45% in 1984. Larry Hirsch, a New York-reared lawyer who had headed a Houston cement and energy company, became COO in 1984 --and CEO in 1988--. The early 1980s were a boom time for Texas real estate as deregulation spurred S&Ls to make loans -- any loans. The market became overbuilt, and when oil prices collapsed in 1986-87, credit dried up. With the spectacular failure of several Texas S&Ls, the Texas real estate market crashed. Centex was pinched, but it survived on sales from less-depressed areas of the US. Centex Development Company was established in 1987 as a custodian for land the company could not develop during the bust. Centex created Centex-Rodgers Construction that year to focus on medical facility construction. In 1994 the company took its construction products division public and sold off its S&Ls.

In 1995 Centex entered into ventures to build luxury houses in the UK and living centers for people suffering from Alzheimer's disease and memory disorders. The next year Centex purchased parts of security systems firm Advanced Protection Systems and Pest-control Company Environmental Safety Systems -- both are now part of Centex HomeTeam. The company was selected by Builder and Home magazines in 1997 to build the Home of the Future, showcasing cutting-edge products and design. On the other end of the housing spectrum, Centex acquired 80% of manufactured-home maker Cavco Industries; the next year Cavco bought AAA Homes, which had about 260 manufactured-home retail outlets in 12 states, Canada, and Japan. In 1998 Centex entered Ohio and New Jersey by acquiring Wayne Homes and Calton Homes, respectively. Along with other Houston builders, Centex contracted ClearWorks Technologies in 1999 to pre-wire Houston homes for Internet, networking, and other "smart home" capabilities. The US company also went further abroad: It bought UK builder Fairclough Homes --operating in the Northwest, Midlands, and Southeast-- from AMEC for $175 million. Meanwhile, CTX Mortgage was sued by a Washington-based ISP, Connect Northwest, for breaking that state's spam laws, allegedly sending out thousands of e-mail advertisements with false return addresses.

Business Areas

Through its subsidiaries, Centex ranks among the nation's leading homebuilders, home mortgage providers and commercial contractors. Centex also has an investment real estate operation and currently owns approximately 61% of Centex Construction Products, Inc., a publicly traded company. The divisions that integrate the group are shown in the following table:

Subsidiary	Revenues (4Q)	Net Earnings (4Q)	Profit Contribution
Home Building	$985.7 million	$93.3 million	61.2%
Investment Real Estate	N/A	$7.2 million	4.7%
Financial Services	$112.2 million	$20.7 million	13.6%
Construction Products	$79.6 million	$16.0 million	10.5%
Construction Services	$1.551 billion	$15.2 million	10.0%
TOTAL PROFITS	---	*$152.4 million*	*100%*

Table 5.3.1 Profit Contribution for Centex Corporation Subsidiaries

Lessons to be learned

Centex is a very good example of a measured, balanced growth in the construction and real estate industries. After an aggressive growth period in the early 1990s which resulted in doubling its size and being considered for six straight years the largest builder in the country, the company has slowed down in order to build the bottom line. Over the past three years, Centex has slowed down the top line and has focused on building its bottom line. This will serve them better in a downturn by not avoiding the kinds of bets that some other companies are making. Fine tuning operations to improve its financial performance, while also maintaining a high level of customer satisfaction, will get the company better before it gets bigger. Centex Corporation is considered an organization that sets the financial and performance standards for the industry. This argument is strongly supported by record financial results for the year of 1998 achieved due to substantially stronger performances by all of the Centex's major business segments.

Among these business segments, successful integration of acquisitions in the homebuilding division has been a major factor that contributes to the company's profitability. For example, the acquisition of Cavco's retail sales operation[9] allowed to increase operating margins to 9.9% this year, in comparison with 9.4% for last year. Another example is the acquisition and successful integration of Canton Homes. This transaction will improve Centex's position in the Northeast by providing land and a strong management team. Finally, the Wayne Homes acquisition will enlarge the business in the Midwest and at the same time spread across the company the particular management disciplines that create high margins.

At certain points it would be better not to expand. This is specially important when margins do not grow as they have. However, growth is part of the Centex culture and consideration for this issue is taken into account when making decisions. These decisions will always reflect the customer's needs and wants for the market. Also, they will retain the innovative spirit of homebuilders in the increasingly competitive nature of the business. This reasoning will provide room for savings in every activity that generates costs --direct construction costs down from 62% to 60% represented $50 million in earnings to flow right to the bottom line in 1998.

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[9] Cavco is a leader in the growing affordable housing market segment in Arizona and New Mexico.

Case IV

Jacobs Engineering ~ Sverdrup

Overview

Jacobs Engineering Group continues growing through acquisitions. This Pasadena, California-based engineering and design firm builds facilities, such as manufacturing plants, for companies in the chemical, oil refining, semiconductor, pulp and paper, pharmaceutical, and biotechnology industries. Chemical and petroleum industry projects account for about half of revenues. The company also manages construction activities for commercial, industrial, federal, and other large customers and provides process plant maintenance services. It manages the Department of Energy's Oak Ridge, Tennessee, facilities with Bechtel Group through the Bechtel~Jacobs joint venture. Government projects, primarily environmental engineering, account for 8% of its revenues.

Jacobs Engineering is using acquisitions as rungs in its upward path. It has strengthened its overseas operations by acquiring French firm Serete Group and a controlling interest in its Indian affiliate Jacobs H&G --formerly Humphreys & Glasgow. Jacobs Engineering also has acquired Sverdrup, a US construction, architecture, and engineering firm best known for its transportation projects. The firm founder and chairman Joseph Jacobs owns 14% of the company.

History

Joseph Jacobs graduated from the Polytechnic Institute of Brooklyn in 1942 with a doctorate degree in engineering. He went to work for Merck, designing processes for pharmaceutical production. Later he moved to Chemurgic Corp. near San Francisco, where he worked until 1947, when he founded Jacobs Engineering as a consulting firm. Jacobs supplemented his consulting work by selling industrial equipment, avoiding any apparent conflict of interest by simply telling his clients what he was doing. When equipment sales outstripped consulting work, Jacobs hired four salesmen by 1954 and Stan Krugman, an engineer, who soon became his right-hand man. Two years later, the company got its first big chemical design job, for Kaiser Aluminum. The following year Jacobs incorporated his sole proprietorship.

Until 1960, the company had avoided actual construction work; then it won a contract to design and build a potash flotation plant and Jacobs Engineering became a fully integrated design and construction firm. In 1967 the company opened its first regional office but kept management decentralized to replicate the small size and hard-hitting qualities that had made its home office successful. Three years later Jacobs Engineering went public. The firm continued its expansion by merging with Houston-based Pace Companies, which specialized in petrochemical engineering design, in 1974. That year Jacobs Engineering became Jacobs Engineering Group and began construction in Ireland of its first major overseas chemical plant.

By 1977 the firm's sales had reached $250 million. A decade of lobbying paid off that year when the firm won a contract for the Arab Potash complex in Jordan. Jacobs began to withdraw from his firm's operations in the early 1980s, but the 1982-1983 recession and poor management decisions pounded the company's earnings. Jacobs returned from retirement in 1985, fired 14 VPs, cut the staff in half, and returned the firm to the pursuit of smaller process plant jobs and specialty construction. Jacobs abandoned an attempt in 1986 to take the company private, then began to make acquisitions to improve the firm's construction expertise. In 1992 Jacobs relinquished his role as CEO to president Noel Watson. The next year the company expanded its international holdings by acquiring H&G Process Contracting and H&G Contractors in England. The firm's $38 million purchase of CRS Sirrine Engineers (engineering design) and CRSS Constructors (construction management) in 1994 was the largest at that point in its history and opened up new markets in the paper and semiconductor industries. By 1995 Jacobs Engineering was consolidating its acquisitions and working on a record backlog. Jacobs Engineering spent the rest of the decade making acquisitions. In 1996 it purchased a 49% interest in European engineering specialist Serete Group (it bought the rest the next year). In 1997 it gained control of Indian engineering affiliate Humphreys & Glasgow (now Jacobs H&G), increasing its 40% stake to 70%, and bought CPR Engineering, a specialist in pulp and paper converting processes. It also formed a joint venture with Krupp UHDE to provide design, engineering, and construction management services in Mexico. In 1999 the company paid $198 million for St. Louis construction and design firm Sverdrup.

Business Areas

Geographic Diversification

Jacobs Engineering Group has offices in the following countries: Chile, France, India, Italy, Spain, the UK, and the US.

	1998 Sales	
	$ mil.	% of total
US	1,677	80
Europe	411	20
Other regions	13	-
Total	2,101	100

Table 5.4.1 Jacobs Engineering Group sales by region

Product Diversification

	1998 Sales	
	$ mil.	% of total
Construction	1,012	48
Engineering	822	39
Maintenance	267	13
Total	2,101	100

Table 5.4.2 Jacobs Engineering Group sales by product type

Selected Services:

Construction

- Advanced Construction Technology (ACT; advanced form of off-site engineering, design, fabrication and assembly, and field erection).
- Construction management
  Field construction (primarily process plants and facilities
  designed by Jacobs Engineering)

Engineering

- Commercial and municipal buildings
- Engineering consulting
- Environmental remediation
- High-technology industrial plants for the microelectronics industry
- Process plants for the chemical, fertilizer, mineral, oil
- refining, pharmaceutical, and pulp and paper industries
- Specialized plants for the food industry
- Support services such as planning, procurement, project accounting, quality, and safety
- Technically complex buildings (such as clean rooms) for research and development

Maintenance

- Major plant refurbishment
- Repair and replacement of plant equipment

Lessons to be learned

Jacobs Engineering Group's merger with Sverdrup has resulted in an immediate increase in the gross profit margin for the integrated company --up to 14.4% from 12.3%. The main reason for this is a result of the increased competitiveness of the firm in the global markets. Sverdrup is one of the world's finest companies in engineering, architecture and construction, and in scientific and technical services but it reached a point where it was necessary to evaluate alternative sources of funding in order to continue to grow. The merger with Jacobs Engineering Group was then chosen as the most viable alternative.

Sverdrup was selected by Jacobs because it has worked internationally, being engaged in planning, design and construction management of air bases to ferry military aircraft across the Southwest Pacific. This global client contacts and project experience was a main source of value for Jacobs Engineering when contemplating whether to merge with this firm. On the other side, Sverdrup would gain from the excellent reputation that Jacobs Engineering enjoys in the United States. It can be said that this merger created value to both sides by complementing each other's project capabilities. As a result of this merger, Jacobs Engineering Group is positioned as a leading global firm in engineering, architecture, construction, maintenance, operations, consulting and technology. This will create competitive advantage within the changing requirements of the international markets such as full-service capabilities, rapid response, innovation and creativity.

Finally, the merger will allow the company to take complete responsibility for complex projects from design to construction to the operation of projects and facilities. In domestic and international markets there would be resources backed by a global network of offices and technical expertise. These added resources and complementary technical skills will allow the company to expand into a broader mix of public and private clients.

Section 6

Conclusions and Recommendations

Conclusions

I find strong economic differences in M&A as opposed to a greenfield strategy. Especially, M&A oriented firms show faster growth in revenue, which has significant effects on the investment decision. In addition, financial calculations indicate that a the Return on Equity (ROE) is significantly higher for construction and real estate companies that merge and acquire instead of starting from the ground up. This effect might be due to the riskier nature of acquisitions because of their less flexible approach and their higher leverage position. However, in public companies, the short run post acquisition market's response has been favorable to the acquirer.

The value of companies is very sensitive to variations in operating costs as well as valuations are highly dependent on the economic outlook. For acquirers, it has been costly to compete among themselves and pay premiums for their targets. However, these premiums can be justified if they can achieve the synergies from economies of scope and scale, at the time that they gain the access to more profitable markets in order to export their management expertise.
Economies of scope and scale are firm specific and therefore very difficult to generalize. However, target firm efficiencies and reduced cost of borrowing are among the potential benefits of M&A in the construction and real estate industry. As the reduction of competition and expansion into new markets is developed, firms will achieve geographic diversification with lower default risk and increase the industry profitability.

Recommendations

Using a modern management approach to analyze the case studies contemplated in this thesis, it is possible to make the following recommendations when selecting a globalization strategy through mergers and acquisitions.

1. Mergers and acquisitions cannot be delegated. Top management leadership is required throughout the process, mainly during the negotiation stages.
2. Time and efficiency have a great impact when growing through acquisitions. As a general rule, decisions are to be made quickly.
3. Changing customers' needs and wants are very important when considering a merger or acquisition. They are the most valuable assets of any company.

In addition, and as a way to minimize risks, it is important to take into account these fundamental business issues:

1. Consider operating margins when growing the top line. Measured and balanced growth is a key to success for any sustainable mergers and acquisition strategy.
2. Utilize profitability as a benchmark within companies in the same market. Construction and real estate companies tend to have a very high volatility in their revenues. Do not allow profitability fall to unacceptable levels.
3. Spread best management practices from acquired companies across the firm. An acquired company must be able to provide human talent with potential for senior management positions within one year. Do not forget this issue.
4. Look for targets with complementary capabilities. This is one of the best ways to create synergies.

A final word of advice is to do a thorough market research and carefully evaluate the company's strategic focus. Any successful globalization strategy must be sustainable during a long period.

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