

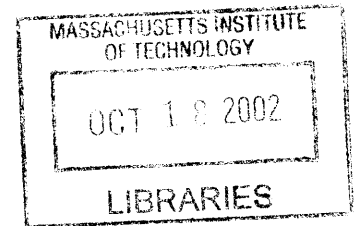
**CHANGING GEAR: DRIVING CORPORATE REAL ESTATE FINANCING DECISIONS FOR THE AGILE WORKPLACE**

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&  
Master of Science in Architectural Studies  
at the  
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## **ABSTRACT**

Given the needs of corporations in the global business environment, corporate real estate investment decisions represent strategic choices that support a company's overall business strategy. This thesis clearly illustrates that, contrary to the Modigliani Miller theorem, companies do face real trade-offs in deciding how they finance their real estate investments. Notwithstanding the need to customize decisions on behalf of the business unit customers and to ensure that these choices are economically sound within a given region, there are significant factors that drive real estate decision makers to make a particular financing decision. By analyzing these factors in relation to the financing alternatives available a comprehensive framework of decision drivers is developed to aid CRE managers in gathering relevant information in order to evaluate the overall effectiveness and trade-offs associated with each alternative. Through a series of case studies it is then shown that financing decisions which optimize the real estate portfolio 1) clearly reflect the financial and operational requirements of both the company and business units; 2) are very much part of a larger portfolio wide corporate real estate strategy, which is closely allied to the company's overall corporate strategy; 3) take into account the perspectives of other role players (IT,HR, Finance) in the decision making process.

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To Kev and Mike, for being brothers.

Finally, to my Mom and Dad, for everything.

## INTRODUCTION

In 1961 Modigliani and Miller published their seminal paper showing the irrelevance of dividend policy in a world without taxes, transaction costs, or other market imperfections. The Modigliani and Miller (M&M) theorem, which was developed through the 1950's, became a foundation of 'modern finance'.

The key insight of Franco Modigliani and Merton Miller, each of whom won a Nobel Prize for his work in this area, is that value is created on the left-hand side of the balance sheet when companies make good investments – in, say, plant and equipment or R&D – that ultimately increase the company's operating cash flows. How companies finance those investments on the right-hand side of the balance sheet – whether through debt, equity, or retained earnings – is largely irrelevant. These decisions about financing policy can affect only how the value created by a company's real investments is divided among its investors. In an efficient and well functioning capital market, they cannot affect the overall value of those investments. In other words, to paraphrase many finance theory lecturers:

*“financing policy affects only the slicing of the pie and not the size of the pie itself”*

If one accepts this view of M&M, it follows almost as a corollary that corporate real estate financing strategies are also of no consequence. They are purely financial transactions that don't affect the overall value of the company's operating assets. The bottom line however is that financial markets do not work as smoothly as M&M envisioned. Over the past two decades a different view of financial policy has thus emerged: one that allows a more integral role for financing decisions. This “postmodern” paradigm accepts as gospel the key insight of M&M but it goes further by treating financial policy as critical in enabling companies to make valuable investments. Most importantly, it recognizes that companies face real trade-offs in deciding how they finance their investments. Within the context of corporate real estate, the primary objective of this investigation is therefore to establish an understanding of what these trade-offs really are.

The real estate manager has many options as part of the real estate financial structuring strategy. The financing decision is

also typically made with the primary objective of optimizing the effectiveness of the workplace portfolio and maximizing shareholder value. Furthermore, each one of the financing alternatives has certain features which distinguish it in terms of its overall impact to the corporation. The objective of this inquiry is thus threefold:

1. to establish what primary drivers are considered by corporate real estate managers in selecting the most appropriate financing strategy.
2. to test the conclusions derived in (1) above through a series of case studies and be open to the finding of additional decision drivers.
3. to assess the relative importance placed on each driver and discuss why.

The supply and demand of these financing alternatives will vary with the immediate real estate and economic conditions and as a result, pricing, financial feasibility and overall workplace impact will vary at any given point in time.

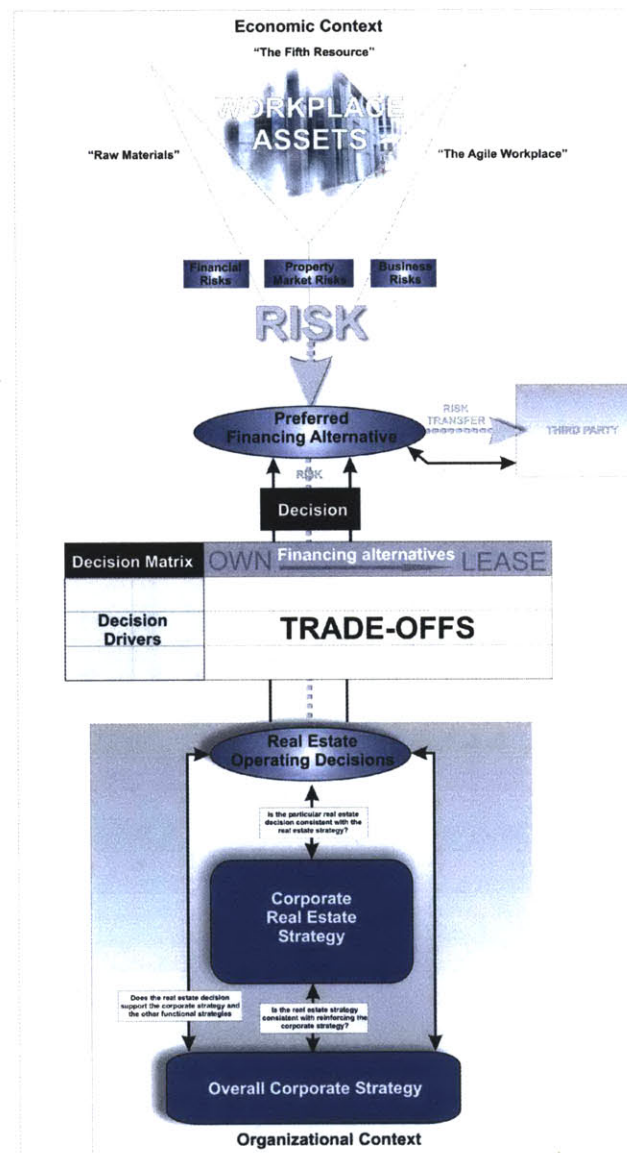


Figure 1 Contextual Diagram



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The establishment of a comprehensive framework of decision drivers will thus serve to aid CRE managers in gathering relevant information, evaluating the overall effectiveness and trade-offs of each alternative (Figure 1).

The real estate manager can then make a sound recommendation to the business unit with the knowledge that the solution is acceptable to the marketplace, can provide flexibility to a dynamic business model and agile workplace infrastructure at the most reasonable cost.

Using this framework, the CRE manager can routinely reevaluate the effectiveness of its real estate assets and thus optimize the portfolio to give appropriate support to the primary objective of maximizing shareholder value.

Chapters two and three establish the parameters of both the economic and organizational context (see figure 1) within which these financing decisions are made. Chapter four explores the basic spectrum of financing alternatives which are available. As a matter of definition, ‘financing alternatives’ refers to the full spectrum of real estate procurement

alternatives or contractual arrangements available to a corporation. The ‘financing alternatives’ that are explicitly considered in this thesis are direct corporate funding, leveraged acquisitions, synthetic leasing, bond net leasing and traditional NNN operating leases. Chapter five then establishes a framework of quantitative drivers which influence the corporate real estate financing decision followed by chapter six which focuses on the qualitative drivers. The quantitative and qualitative frameworks are then tested through a series of three case studies, making up chapters seven, eight and nine. Chapter ten then closes with the conclusion.

## CHAPTER TWO

### ECONOMIC CONTEXT

*“September 11<sup>th</sup> reinforced a fact of contemporary life: ours is a period of change and uncertainty – a period in which dramatic economic developments, acts of man and the vagaries of nature require us to respond rapidly.”*

- (MIT/Gartner et al, 2001)

The purpose of this chapter is to establish the nature of the relationship between workplace assets and the organization within today’s dynamic global context. As a response to this changing context, the following perspectives on corporate real estate will be reviewed:

- Real estate as the ‘fifth corporate resource’,
- Corporate real estate in “The Agile Workplace”,
- Corporate real estate as a raw material

Changes in domestic and international markets, the globalization of production, shifts in technology, brief windows of opportunity for product innovation, troubles and caution in the capital markets, shareholder activism, deregulation of some industries and more regulation of the environment and the workplace – all of these factors affect

both large and small companies, creating an atmosphere of inevitable yet unforeseeable change in today’s global context. Taken together, recent changes in the business environment signal not just another economic cycle but a restructuring of the economy.

Within such an uncertain economic context, to remain profitable companies must be increasingly nimble, tailoring appropriate responses to many sources of change. Operational/organizational flexibility as a response to this economic climate has become absolutely critical. Executives are thus turning to newer, more fluid organizational forms to align their business units with the company’s core strengths. These changing organizational structures are in turn profoundly altering work patterns. The whole concept of work has shifted from isolated individuals working individually to goal-oriented teams that bring workers together to perform a complex function and then break apart and reform as new teams. The increasing numbers of workers loosely tied to the company then create greater pressures for greater flexibility in the sharing, schedule and location of work. As social and economic circumstances of labor change, so does the

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relationship of worker to the firm. New organizational structures are calling forth new physical and non-physical alternatives to support work.

**Real Estate as the ‘fifth corporate resource’ in today’s global context:**

Today’s competitive environment calls for business managers to focus on improving the use of their resources. By making use of the four major corporate resources: capital, people, technology, and information, managers have made their operations more efficient and customer-focused. In 1993 the importance of real estate’s role in this process was emphasized by Joroff and his research team at Harvard and MIT. In an environment where scores of real estate units and service organizations were already rethinking their functions, Joroff et al described real estate as the fifth strategic resource: “we have concluded that a corporation’s real estate – its land, buildings, and work environments – is a powerful resource whose strategic value is just emerging” (Joroff et al 1993).

In the early years of the twenty-first century, it is clear that the corporate real estate function is beginning to move way beyond

the concerns of growth, efficiency and effectiveness, to emphasize the efficacy and the significant contribution that corporate property can make to achieving corporate business objectives. Corporate property is now beginning to be recognized as “the means” by which an enterprise connects both with its resource inputs (*e.g.*, employees and suppliers) and its customers.

The growing significance of real estate to today’s corporation has been echoed by others. In nominal terms real estate has been shown to represent: “Often the second most expensive cost after labor and representing a significant portion of the asset base” (Weatherhead, 1997). “Around the world corporations are among the largest owners of real estate assets; and in the United States they own more than \$1 Trillion of real estate or at least five times the value held by publicly traded real estate companies” (Deng & Gyourko, 2000). In reference to the economic context in the late 1980’s Veale (1989) suggests that “The buildings and land held by large organizations, both public and private, typically represent about one quarter of corporate worth. Recent estimates have placed corporate real estate at 7% of total US investable



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wealth, greater than the total of corporate bonds (3.4%) or government Treasury bills (4.0%). Total occupancy costs for corporations have ranged between 5% and 8% of (pre-tax) gross sales, which can be upwards of 40% or 50% of net income.” These statistics certainly illustrate the significance that real estate has come to play in the modern organization.

### **Corporate Real Estate as the “The Agile Workplace”:**

The unprecedented reconnecting of people following the attack on the World Trade Center testified to the resilience and grit of thousands of people. It also emphasized the basic findings of the research partnership between Gartner, MIT and 22 Industry Sponsors, “The Agile Workplace: Supporting People and Their Work”: “a workplace that is distributed and connected, and that facilitates work anytime and anyplace in a face-to-face or virtual environment, is a prerequisite of organizational success and survival.” (pp.9, MIT Gartner et al, 2001) This finding also shed light on two further characteristics that were explored in the project, “workplace agility and a new professionalism in the workplace industry.”

The MIT Gartner research revealed that “workplace agility has emerged as the single highest priority for the providers of workplace services and infrastructure.” (pp.10, MIT Gartner et al, 2001) What is meant by workplace agility?

- “Agility is the ability to respond quickly and effectively to rapid change and high uncertainty.” (MIT Gartner et al, 2001)
- “Workplace agility involves both infrastructure flexibility and a commanding focus on work itself”. (MIT Gartner et al, 2001)
- Agility means sensitivity to the evolving context, among other things, and in broad terms an objective of this investigation is to assess how businesses might more sensibly perceive that context and adjust to it.

In the context of the workplace, MIT Gartner suggest that agility is achieved through the co-evolution of the workplace and work. The co-evolution is only possible when the work is clearly understood. Agile workplaces then represent the next important step in workplace evolution. “They are created by the simultaneous and coordinated development of places and the work done in them”.

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This implies a dynamic relationship between work, the workplace and the tools of work. The workplace thus becomes an integral part of the work itself – “enabling work, shaping it and being shaped by it in turn”. This is certainly a radical departure from the more traditional notion of the workplace as a predetermined, standardized and stationary container of work.

This shifting of the workplace in terms of agility also suggests a new way to think about the workplace portfolio. To most organizations, the workplace portfolio is about real estate – a collection of properties that are owned leased or controlled in some way. This is certainly one of the founding premises of this inquiry. However, this focus on the workplace as a bundle of services that enables the particular work of the organization helps us reframe the notion of portfolio to what the MIT Gartner team phrased as:

*“a network of places, electronic connections and management policies that enable agility.”*

- (MIT Gartner et al, 2001)

Because change and uncertainty are always with us, agility is a constant objective – a moving target. The notion of workplace agility certainly implies an emphasis on workplace flexibility. The significance of flexibility within the corporate real estate context will be discussed and elaborated on later as one of the primary drivers of the financing decision.

#### **Corporate Real Estate as a raw material:**

Current corporate real estate (CRE) financial management practices predominantly reflect a view of real estate as an investment vehicle. However, with such emphasis being placed on financial reporting in today’s shareholder driven context, it can perhaps be more appropriately viewed as a raw material in the firm’s production process (Deeble, 1999). The focus is on real estate as a financial asset/raw material for which corporate real estate managers examine the terms of contracts and the ability to terminate those obligations. A reading of Porter and other writers on strategic management (Porter, 1985a, 1985b; Rappaport, 1986; Tregoe 1980) suggests that both managers and academics consider the purchase of real estate assets to be the purchase of an input and not the vertical integration of a firm into the real estate business.

The reality is that the typical CRE manager is not in the business of investing in real estate for profit. Rather he is in the business of sourcing a critical raw material in his firm's production process. CRE's primary financial relevance to the firm is not its investment value, but rather its value as a productive asset. From this perspective the CRE manager's goal is to optimize reliability, flexibility and cost across the CRE portfolio.

Deeble (1999) suggests that the fundamental mission of a raw materials approach is to ensure that availability of materials at an acceptable cost to the firm, while preserving flexibility to reduce or terminate procurement commitments as business conditions change. Deeble goes on to suggest that this can be broken down into three key objectives:

1. Maximize reliability – the degree to which availability is assured. CRE managers stress time and again that one of their most critical tasks is to ensure that space is available when needed, so that the CRE does not create an impediment to the operations related to the core business of the firm. This was certainly one of the

major concerns that became evident through the case studies conducted as part of this inquiry.

2. Maximize flexibility – the degree to which procurement commitments can be reduced without cost or eliminated as business conditions change. In the case studies this was presented as one of the primary rationale for leasing and not owning real estate.
3. Minimize cost – procurement costs, occupancy costs and the potential future cost to carry excess inventory or terminate procurement commitments.

Following this raw materials procurement process approach to CRE portfolio management, Deeble suggests that the CRE manager must essentially answer three questions:

1. How much do I need (and how sure am I)? This should be tied to a rigorous space demand forecasting process.
2. When do I need it (and for how long)? This is related to operations assessment issues.
3. How do I pay for it? This thesis focuses primarily on this question and provides an analytical framework for making this decision.

In dealing with the question of financing, the CRE manager then essentially faces two fundamental issues:

- How long do I wish to commit to occupying the space?
- How long do I wish to control the right to occupy the space?

Deeble(1999) thus highlights two key variables that need to be managed in the CRE procurement process: commitment & control. Commitment is the degree to which the firm is obligated to take delivery of, and pay for, raw materials. In the context of CRE, commitment is measured in terms of duration. The duration of a lease commitment is simply the remaining contractual lease term, excluding options. The duration of an ownership commitment, on the other hand, is equal to the useful life of the building. Of course, the firm can terminate an ownership commitment early by selling the building, but the existence of liquidity does not shorten the commitment duration.

Control is the degree to which the firm has the right, but not necessarily the obligation, to take delivery of raw materials. Control is also measured in terms of duration, and is equal to

the sum of commitment duration and the term of any options (Deeble, 1999). In many cases, control can be managed independently of commitment. Whether a firm commits to a five-year lease or a twenty-year lease, a purchase option or several renewal options can often be obtained at little or no additional cost, assuming they are at fair market value. Many CRE managers have an unjustified bias towards owning buildings in the name of maximizing control, without recognizing that an equivalent amount of control can usually be negotiated in a lease without over-committing the firm. The ability to negotiate maximum control in formulating a lease agreement is certainly a strategy which was used particularly by Charles Schwab as illustrated in the case study.

From a CRE portfolio perspective, the optimization of commitment and control durations in an uncertain demand environment is of critical importance. This suggests that the optimal financing strategy for CRE is to utilize financial structures which match commitment duration to the expected occupancy period. Optimization is thus attained by adopting a financing strategy of asset/liability matching; similar to any other capitalized item on the balance sheet. In other words, the



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CRE manager should attempt to match the duration of his/her financial real estate commitments to the real estate's expected productive life as a raw material.



ORGANIZATIONAL CONTEXT

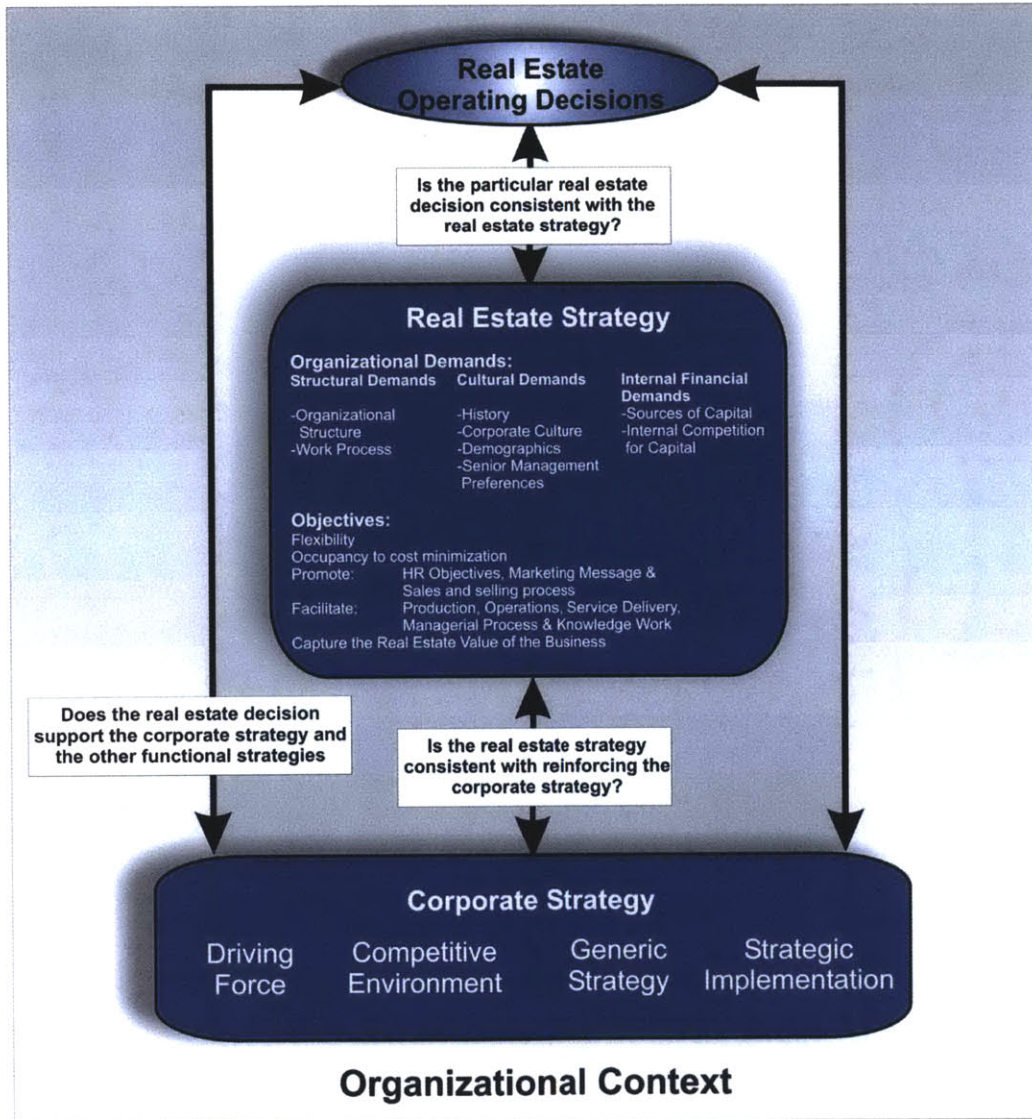


Figure 2 Organizational Context

*“Enlightened management recognizes that the finance calculation is more complex than just lease vs. buy, reduce space use and lower occupancy costs. Superior corporate property strategy drives the top line, enhances the bottom line, maximizes the impact of the marketing budget, reduces business process and people costs, and creates extraordinary shareholder wealth.”*

- Stephen Roulac (2001)

The purpose of this section is basically to define and demonstrate the linkages between corporate real estate strategy and:

1. overall business strategy
2. real estate operating decisions.

It is perhaps not surprising that issues concerning real estate and the workplace often escape the thoughtful attention of most senior corporate

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executives. Although these issues typically fall within the realm of their responsibilities- and, of course, they use the facility in their daily operations- many do not appreciate the potential impact on company performance. So they delegate real estate to specialists who operate on a deal-by-deal basis and consider their decisions as administrative and technical tasks. Most importantly, the specialists alienated perspective on the core dynamics of the company typically yields poor results in the generation of an appropriate real estate strategy.

The tremendous importance of corporate real estate to any business just simply as an asset on the balance sheet is also largely unrecognized. This notion is advanced in a number of articles and research studies (Zeckhauser and Silverman, 1983; Veale, 1989; Nourse, 1990, 1992; Andersen, 1993; Joroff, Louargand, Lambert and Becker, 1993; Apgar, 1995; Manning and Roulac, 1996; and Carn, Black and Rabianski, 1999), which point out how significant property is on the corporate balance sheet and just how large the component of operating expenses is that property services represent.

Furthermore, corporate property in the past has been concerned too much with the facility, and insufficiently concerned with the relationship of that facility, to the larger real estate markets and to corporate business strategy. Researchers in corporate strategic management have rarely been sensitive to the significance of the properties, in which corporations operate, as a vital means to connect those corporations to their markets for resources and customers. As a consequence, the corporate real estate function generally has tended to be marginalized and disconnected from the concerns and priorities of a corporation's senior management and board of directors. An omission that must—and inevitably will—change. Recently however, many companies seem to have recognized that by managing real estate and the workplace as a business function, they can cut costs significantly, increase productivity, and at the same time, build value.

O'Mara (1999) suggests real estate and facilities fulfill two crucial roles in supporting the work of the organization and the realization of its competitive strategy. The first role is to physically support the production process. Depending to a large extent on how they are designed and managed, facilities

can either support or impede communication between people and the actual flow of work. The second role is the symbolic representation of the organization to the world. A sound corporate real estate strategy harnesses both the logistical and symbolic power of place, and puts it to work to complement the competitive strategy which has been adopted. What also becomes crucial is the ability of place to integrate today's three main corporate resources- people, technology and strategy- so that they are mutually supportive. (See Fig. 3)



**Figure 3** The Importance of Place

So what exactly is meant by a 'corporate real estate strategy'? It is widely recognized that every business employs an overall strategy. Less recognized is that every business with a corporate strategy usually also has or should employ a strategy—explicit or implicit—for its primary functions (*i.e.*, marketing, human resources, and information systems) (Roulac 2001). Growing numbers of corporations seem to now be

including an explicit corporate property/real estate strategy. The importance of the link between a company's overall corporate strategy and its real estate strategy has been emphasized by various studies, including Roulac (2001) and O'Mara (1999). Many also realize that not to have a corporate property/real estate strategy is to put the enterprise at risk.

Nourse & Roulac (1993) maintain that the collection of corporate considerations that form the overall corporate strategy, including the driving force, the generic strategies employed to implement that driving force, and the particular culture and values of the company, often determine an appropriate real estate strategy. O'Mara (1999) suggests that the dynamics within an organization, specifically structural (organization), cultural and internal financial demands, also drive the formulation of a company's real estate strategy. In addition, O'Mara (1999) stresses the importance of the company's competitive environment in determining an appropriate real estate strategy. The multiple factors concerning products and markets that need to be supported by real estate may in fact mandate multiple rather than single real



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estate strategies. According to Nourse & Roulac (1993, pp.497) there are eight generic types of real property strategies:

- Occupancy cost minimization
- Flexibility
- Promote human resources objectives
- Promote marketing message
- Promote sales and selling process
- Facilitate and control production, operations, service delivery
- Facilitate managerial process and knowledge work
- Capture the real estate value creation of business

The positive implications of the strategic management of corporate real estate have been outlined by Roulac(2001) who establishes various significant benefits of an explicit, proactive real estate strategy to:

- **Create and retain customers:** Physical environments play an extraordinary role in the marketing function—both in connecting with and serving customers, and also in creating and promoting brands. An explicit proactive

approach to three-dimensional marketing transforms the perception and utilization of property from a cost center to a significant driver of revenue generation and growth.

- **Attract and retain outstanding people:** An enterprise's corporate property strategy can be integral to achieving human resources' objectives of attracting and retaining outstanding people as well as in enhancing productivity. A superior corporate workplace environment can contribute to superior business performance. A superior corporate property strategy can produce a competitive advantage in attracting outstanding people; and also can be the means to achieving and reinforcing other forms of competitive advantage. This was certainly emphasized by Sun Microsystems as a critical objective of their corporate real estate strategy.
- **Contribute to business processes:** Companies' business processes occur in places and spaces that either promote or hinder the effectiveness, productivity and efficiency of the enterprise's operations. Notwithstanding the redesign of processes and methods

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of doing work, corporate facilities are the settings in which the work that is integral to the company's operations is performed.

- **Promote enterprise values and culture:** The implementation of the corporation's strategy through its places and spaces represents a very strong statement of its values and culture. The places in which a company's facilities are located and the specific spatial attributes of those facilities both define and reflect its culture.
- **Stimulate innovation/learning:** The ambiance of the places in which company facilities are located, the access to learning resources, the stimulus of the spaces in which the company operates, all combine to impact innovation and learning.
- **Enhance core competency:** Corporate property strategy is crucial to core competency—its implementation determines enterprise access to resources and markets and also determines the settings in which the enterprise's interactions and operations occur. Central to core competency is access to requisite resources and markets: resources are crucial, because they are the inputs that make the potential of the core

competency real; markets are crucial, because they are the outlets of the expression of core competency. All three case studies conducted emphasized the objective of real estate to essentially provide support to the company's core competency.

- **Enhance shareholder wealth:** The design and implementation of corporate property strategies have direct, significant impacts on shareholder wealth. It has already been emphasized that for many enterprises corporate property expenditures account for a substantial part of the capital budget and claim a significant portion of discretionary cash flow.

There appears to be little doubt that a superior corporate property strategy impacts and produces positive outcomes in employee satisfaction, production factor economics, business opportunities realized and forgone, risk management considerations, and other impacts on enterprise value. These consequences enhance or detract from business outcomes—specifically management's ability to add value to increase shareholder wealth.

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Once the real estate strategy is made explicit, of critical strategic concern for the CRE function is then the implementation of operating decisions in a way that corresponds to the enterprise's real estate strategy. Effective real estate decisions are integral to the realization of overall business objectives. The transaction decisions companies make concerning their real estate assets are essentially operating decisions embracing the processes of acquiring, controlling, managing and disposing of real property interests. Drivers of a company's real estate operating decisions include a diverse range of issues, from demographics, location and transportation issues to building size and character, building amenities, mechanical systems and identity and signage.

Given the diversity, breadth and complexity of these critical operating decisions, there is a plethora of different alternatives that might be considered. The critical strategic concern for the CRE function in implementing the decisions is how to guide them in a way that corresponds to the enterprise's real estate strategy. Again, lacking an explicit strategy, operating decisions may be made that are unrelated to or even in conflict with the enterprise's overall business strategy rather than being

consistent with the real estate strategy and thereby reinforcing the overall business strategy.

Nourse & Roulac (1993) also stress that this decision process is not unilateral but rather involves the search for solutions that is acceptable to both the corporation and all involved parties. The operating decision process thus involves negotiation to optimize competing interests. They also point out that the focus of this process in the past has predominantly been on economic issues, all too often at the expense of other important strategic priorities. Lacking the context of how a particular operating decision fits with the organization's overall real estate strategy and ultimately links to its business strategy, such a negotiated outcome may therefore frustrate and impede rather than promote the realization of overall corporate objectives. This implies the need for a very sound understanding of the various decision drivers considered in the negotiation process: more particularly, how these key tenets relate with the wide menu of financing alternatives currently available to corporate real estate managers.

## CHAPTER FOUR

### FINANCING ALTERNATIVES

The real estate manager has many financing alternatives from which to choose. There is a diverse continuum, with complete ownership at one extreme, traditional leasing at the other and hybrid alternatives in between. The aim of this section is to describe and outline the basic spectrum of alternative contractual arrangements available to corporate real estate managers. In broad terms a corporation has five basic alternatives:

- **Direct corporate funding.** i.e. purchasing the property for all cash.
- **Leveraged acquisition.** i.e. purchasing the property but financing a substantial part of the cost through mortgage debt or unsecured corporate debt.
- Leasing the property under a **synthetic lease**.
- Leasing the property under a **bond net lease**.
- Leasing the property under a **traditional operating lease**.

Note that references to ‘ABC corporation’ and other illustrative examples are consistent with the scenario and financial statements as generated in Chapter Five.

#### **Direct Corporate Funding:**

If the corporation elects the all-cash alternative, it will be using up funds it could otherwise invest in its primary business, retain as working capital, or distribute to shareholders.

Research carried out by Redman & Tanner (2002) show that the top-ranked source of financing from a sample of 56 corporations in the United States is, in fact, operating cash. Assuming that cash is not a scarce resource, as is the case at Sun Microsystems which is conservatively leveraged with significant cash reserves, the use of direct corporate funding may be justified for strategic reasons. Alternatively, management may justify investing the cash in real estate as a means of diversification from the core business. Investors however, would likely argue that it is cheaper for them to diversify their interests at the investor level. Direct corporate funding is most appropriate for those properties that are core to a corporation’s operation and in situations where no real estate

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investor will value or assume the risk outside the corporation's tenancy. Examples of this asset type may be manufacturing plants, clean rooms and call centers.

**Leveraged acquisition:**

Leveraged acquisition is similar to other corporate borrowing in that it accesses nominally low-cost funds and enables the company to purchase and own real estate. The leveraged position can be accomplished through the use of unsecured corporate debt or secured mortgage debt. Typically, the amount of the mortgage debt (loan to value ratio) will not exceed 80% of the property value, or \$7.04 million in the case of the \$8.8 million R&D facility as discussed in chapter five. The company must provide the \$1.76 million balance in cash. Assume again that the company's opportunity cost of capital is 17.5%. In that case, the cost to the company for using its cash will be equal to its 17.5% investment opportunity rate. Therefore, if the company invests \$1.76 million of its own funds, its annual expense under this alternative will be (a) \$168,000 (15% of \$2 million) plus (b) the cost of the mortgage debt.

The primary feature of this alternative is 'ownership'. The value of ownership depends upon the company's estimate of what the property will be worth when it decides to dispose of the asset. If the company projects the property will increase in value, this alternative becomes relatively more attractive. If it projects a decline, then this alternative begins to lose its financial allure. In making a typical own vs lease analysis what becomes particularly evident is the degree to which the valuation of the ownership option is so highly dependant of the residual value assumed for the disposition of the asset. Nessen (2001) states that in making a projection of future value, the company should keep two things in mind: "One, twenty years is a long time. In real estate it is often the equivalent of several lifetimes. Two, no matter what the estimated value is after twenty years, its current or present value is dramatically less". For example: \$1.00 received in twenty years (assuming a 10% discount rate) is worth about \$0.15.

According to Nessen (2001) this alternative has the following disadvantages:

- Depending upon the actual value of the property after twenty years, the cost of funds to the company may be



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higher than under the leasing alternatives, even when the tax benefits of owning versus leasing are taken into account.

- The mortgage will be shown as long-term debt on the company's balance sheet.
- To the extent the amount of the mortgage (\$7.04 million in the ABC example) is less than 100% of the cost of the property, the company will have to invest its own equity (or \$1.76 million in the ABC example).
- Although the company will be able to deduct interest and depreciation for federal income tax purposes, the tax benefits arising from the rent deductions under the lease alternative may exceed those from interest and depreciation depending of course of the rent level negotiated by the parties. Under the leasing alternative by paying tax-deductible rent, 100% of the rent is deductible, including the amounts allocable to the land and to the return of "principal" of the owner's investment. The lessee is effectively depreciating the value of both the land and the building. By contrast, under the mortgage alternative, any debt service payments made by the company and applied to the

principal are not tax deductible, and depreciation can only be taken for the building and improvements and not for the land portion of the property.

There may also be restrictions from a financing point of view. Firstly, the company will be forced to meet certain loan covenants as included as terms in the loan agreement. These may include maintenance of debt service coverage ratios concerning the mortgagor's ability to service the debt. Also, lenders generally have interest in the property being fairly typical and not specialized, since the lenders concern is with the underlying real estate asset as security for the loan.

**Synthetic lease alternative:**

Synthetic means fake. A synthetic lease is basically a loan disguised (and documented) as a lease. Under the synthetic lease alternative, the corporate user is regarded as owning real estate for income tax purposes, but leasing it for financial reporting purposes, due to an asymmetry in the definition of ownership under tax and financial reporting rules. A synthetic lease, thus, entitles the corporate user to achieve effective ownership and control of the underlying real estate asset, while

avoiding having its balance sheet cluttered with (depreciating) real estate assets and mortgage debt. This duality can create attractive financial opportunities for corporate users. A synthetic lease is classified as an operating lease for financial reporting purposes and as a secured financing for income tax purposes (Reavey, 2002). For financial accounting purposes, the corporate user is able to expense the rent paid under the synthetic lease without having to report either the ownership of the asset or the debt used to finance its acquisition. Simultaneously, the corporate user is able to enjoy certain financial (tax) benefits associated with real estate ownership – tax savings generated by being able to depreciate the asset along with potential appreciation in the value of the asset.

The combination of these structural features yield financial benefits for the corporate user. One is a sharp reduction in the reported cost of occupancy, which is typically further reduced due to lower financing costs. More specifically, the financing for a synthetic lease transaction is underwritten as corporate (credit-based) debt, not as an asset-based debt. In today's market, that means the LIBOR-based interest rate (LIBOR quoted at 1.85% as of 07/28/02) applicable to a synthetic lease

transaction might be as low as 2.5% per annum (1.85% + 65 basis points to compensate for corporate credit risk), versus 4.5-5.5% rate on a conventional real estate loan in today's market. For the ABC example, the LIBOR – based interest rate assumed is equal to 3% (115 basis point spread to reflect ABC Corp's "A" credit rating).

As can be seen from the accompanying Figure 3 which depicts a typical synthetic lease transaction involving a pre-existing building, there are three participants – the lender, the lessor and the tenant. The lender is a financial institution, such as a bank, insurance company or investment banking firm. The lender provides financing for at least 97% of the amount of the financing. The lessor for the transaction is a special purpose entity ("SPE"), which is usually a bankruptcy remote entity controlled by the lender, not the corporate user. The third member is the corporate user/tenant. Typically, synthetic leases have a term of five to seven years. The rent paid by the tenant equals the variable rate, interest-only debt service on the LIBOR-based loan provided by the lender. The lender receives two types of collateral for the loan. One is a deed of trust or mortgage granted by the lessor for the purpose of encumbering

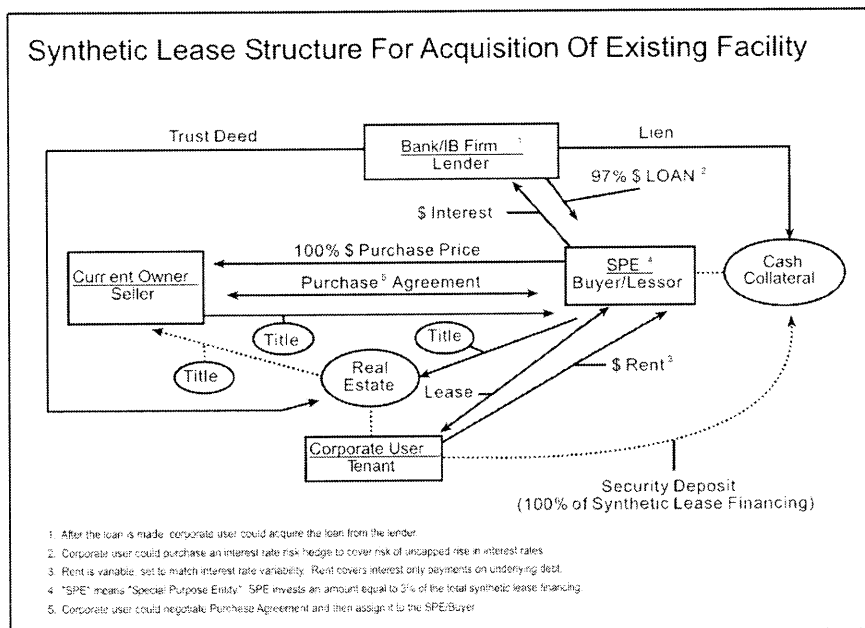


the underlying real estate asset. The second is a lien on cash collateral, such as T-bills, provided by the corporate user in its capacity as tenant. In the event of a default, the lender can take the cash collateral and pay off its loan. Upon such payment, the deed of trust or mortgage is released, leaving the lessor and the corporate user/tenant to resolve their respective contractual obligations. (Reavey, 2002)

The corporation therefore assumes rate, residual and renewal risk while also fully benefiting from appreciation. The main attraction of synthetic leases is that they allow off-balance-sheet ownership of an asset. In order to mitigate risk, the corporation could actually amortize a portion of the principal balance in a synthetic lease, in preparation for dramatic changes in rates or unfavorable renewal terms at the end of the lease (in the ABC example for simplicity the financing is assumed to be interest only).

The actual structure of the lease under this alternative is a so called “bond net lease”, since the cost of the financing is tied directly to the company’s overall credit rating. It is also treated by the company as an "operating" lease for GAAP accounting purposes. The major structural features of this type of transaction are as follows:

- The lease term is usually for not more than five years. However, the company will have several options to renew so that it can continue to use the property for a period of time that is probably sufficient to satisfy its operational needs. In the ABC example, a 5 year term with options to renew is considered.



**Figure 4** Synthetic leasing structure (Source: Reavey, 2002)

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- The lessor will finance close to 100% of the cost of the property through bond debt, with the interest rate floating over LIBOR or some comparable index. The debt will usually mature in not more than five years and typically, only interest will typically be payable (\$240,000 in the ABC example). At maturity, the debt will either be repaid or rolled over.
  - The lease will be in the form of a bond net lease, and the rent will reflect the floating interest rate payable on the debt. Consequently, the rent will not be fixed, and the company will be taking the interest rate risk.
  - At the end of the basic term of the lease (i.e., five years), the company will have the following options:
    - To terminate the lease. In that case, the company must make a final payment that, together with the rents previously paid, has a present value of not greater than 89.9% of the cost of the property.
    - To purchase the property at a price at least equal to the then outstanding debt balance.
    - To have the property sold to a third party at fair market value. To the extent the sale price is less

than the debt balance, the company must pay the deficiency. If the sale price is greater than the debt balance, the company can keep the excess.

- Renew the lease, provided that the debt is refinanced or rolled-over.

From an accounting and financial perspective the basic advantages to this alternative are as follows:

- The company retains the residual ownership of the property.
- The lease will be an "operating" lease.

The disadvantages of this alternative are:

- The transaction is, in substance, a short-term borrowing. Unlike the bond lease alternative, the rent cannot be fixed for a long-term period. This reduces the company's protection against inflation and subjects the company to interest rate risk. The company can obtain a protective hedge against any interest rate increases through the purchase of a derivative instrument. The company will however obviously have to pay the cost of the hedge, which can be significant if the hedge

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contract is for more than six months, thereby increasing its effective cost funds.

- Although synthetic lease structure has thus far avoided being regulated away, it is currently under scrutiny by FASB and is vulnerable to attack by the SEC. Despite its form, the essence of the transaction is a financing transaction, and we expect it eventually to be treated as such by the regulatory agencies.

The tax implications of this alternative are as follows:

- Virtually all synthetic leases satisfy the FASB Statement of Accounting Standards No. 13 (FASB 13) criteria for operating leases, which means that net rent is fully deductible for financial accounting purposes (Graff, 2001). If tax accounting and financial accounting were consistent, this would imply full deductibility of net rent for tax purposes as well.
- However, synthetic lease vendors do not make this interpretation. Instead, they assert that the corporate lessee in a synthetic lease should be viewed as the real estate owner for tax purposes, which implies that the SPE is viewed as a financier. This tax interpretation is

consistent with tax accounting with favorable implications for the lessee in general, because it means that the portion of each net rental payment to the SPE is deductible for tax purposes as well as the statutory depreciation deduction for building improvements.

#### **Bond Net Lease:**

Bond net leases improve the lease rates charged to the company, since the tenant's credit is used directly to obtain borrowing capacity by the owner/lessor of the building with little regard to the real estate. When reviewed at a portfolio level, the incremental cost savings of entering into a bond net lease rather than a traditional lease is high for most major corporations. This structure is typically utilized for any substantial lease as a vehicle to lower cost.

Under a bond net lease, the company has complete freedom of use of the property. In return, the company assumes all of the real estate risks and obligations of ownership. There is no abatement of rent in the event of casualty or condemnation, with one exception: if there is a major casualty or condemnation, the company will have the option to terminate

the lease. However, if the company does not exercise its termination option, and the insurance proceeds or condemnation award are not sufficient to pay off the balance of the lessor's investment with interest, then the company will be required to make a final payment to the lessor equal to the deficiency. The advantages of this alternative are the following:

- The rents will reflect the credit rating of the company. In the case of an investment grade company, this will often result in below market rents. ABC Corp is rated as "A" credit and a 10% discount on NNN market rents is therefore assumed.
- The rent structure can be very flexible, including provisions for stepped rents, floating-rate rents, and a balloon rent.
- The transaction is typically structured as an "operating" lease, so that the lease will not appear as debt or other long-term obligation on the company's balance sheet.
- The company will not have to put up any of its own capital to control the property. This alternative represents 100% financing for the tenant.

- In the case of an investment-grade corporate lessee, there will usually not be any financial covenants in the lease restricting the company's operations.
- The company will be able to deduct, in full, all of the rent, including the rent theoretically attributable to the land portion of the property.

As discussed above, the major disadvantage, and frequently, the only disadvantage of this alternative, is the loss of ownership. The company will not own the property at the end of the lease term and will, accordingly, lose the value of the residual in the property in, say, fifteen to twenty years.

#### **Traditional Operating Lease:**

Under this alternative, the company will lease the property rather than purchase it. The lessor will be an independent third party, and the term of the lease will usually be for the period over which the company requires the use of the real estate, whether five, ten, fifteen, or twenty-five years.

In the typical real estate leasing transaction, the lessor will be responsible for many, if not most, of the obligations of

ownership. These obligations include maintenance and repair, real estate taxes, utilities, and insurance, although the company may be required to reimburse the lessor for some of these expenses. In the event of a minor casualty or condemnation, the rent will abate or be reduced. If there is a major casualty or condemnation, the company will ordinarily have the right to terminate the lease.

The advantages of this alternative are common to all leasing arrangements, in particular:

- In a properly structured transaction, the lease will be an off-balance sheet obligation of the company and will not have to be shown as debt or a long-term liability on its financial statements.
- The company will, for federal income tax purposes, be able to deduct the rent payments in full.

But there are several disadvantages to be considered:

- As with most of the leasing alternatives, the company will not own the property at the end of the lease term. The third-party lessor will be the owner, even though the company's rent payments will have substantially

repaid all of the lessor's investment with interest (including any debt financing that may have been obtained by the lessor).

- As compared to the two other leasing alternatives, the rental cost will be relatively high, and, frequently, materially higher than under a bond lease or synthetic lease arrangement. There are two reasons:
  - The lessor will be assuming material real estate risks, including casualty and condemnation. In return, it will demand compensation in the form of higher rents.
  - The lessor will be obtaining real estate mortgage financing. Unlike a bond net lease transaction, this type of financing will not be based upon the credit rating of the company but will be tied to the underlying real estate asset. Therefore, the mortgage rate will ordinarily be higher than the bond rate. This higher cost of capital will be passed on to the company in the form of higher rents.
- The company will be restricted in how it uses and operates the property. In particular, there will be serious

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constraints on any changes or improvements the company may want to make to the property.

Also important to be aware of is the FASB 13 restricts the operating lease designation (as opposed to a capital lease) to leases that meet four criteria:

- the present value of minimum rental payments during the primary lease term (including any terminal payments for nonrenewal) must be less than 90% of property market value
- when the lease is signed, the primary lease term must be less than 75% of remaining useful property life when the lease is signed,
- the lease cannot transfer property ownership to the lessee during the primary lease term,
- the lease cannot contain an option to purchase the property at a bargain price.

Some argue that this alternative is rarely a sensible choice for the company since the rent cost is simply too high. The

property risks being avoided are and can often be insured against at a relatively low cost. But, the cost to the company of passing these risks along to the lessor is prohibitively high and is not commensurate with the dangers being avoided or deflected by the company. Contrary to this however is the added flexibility that a traditional lease allows. Most companies do recognize the fact that traditional leasing is more expensive. For them the increased expense is seen as a cost or tradeoff for the increased flexibility which is afforded.

The real estate manager has many options as part of the real estate financial structuring strategy. The supply and demand of financing products varies with real estate and economic conditions. As a result, pricing, viability and financial impact will vary among the options at any given point in time. In order to manage the risk of focusing on just one strategy, the manager should consider at least two alternatives.



### QUANTITATIVE DECISION DRIVERS

*“Always fundamental to the well-being of our capital markets, reliable and transparent financial reporting is particularly important in this troubled environment. Financial reporting cannot forecast the strengths and weaknesses of the economy. However, financial statements and related information can provide useful information that allows users to make informed decisions and facilitates the continued efficient functioning of our capital markets.”*

-“Impact of the current economic and business environment on financial reporting”, Andersen, Deloitte & Touche, Ernst & Young, KPMG, PricewaterhouseCoopers and the American Institute of Certified Public Accounts. January 2002.

The discussion around quantitative decision drivers will revolve primarily around financial reporting issues. It is in a company’s financial reports that the results of strategic policies become public, where the financial consequences of the activities of the business are recorded for all to see. This chapter views company finances both from the view of the managers who want to improve their business performance and

from the view of inquisitive outsiders who want to assess how the business is performing and why.

The objective of this chapter is firstly to outline the importance of financial reporting as a means of communication between a company’s management and its investors. In order to establish some context on the issue the environmental factors currently affecting financial reporting will also be briefly discussed. “ABC Corporation” will then be introduced and the impact of the various financing alternatives as outlined in the previous chapter will then be examined through the analysis of a simple prepared scenario. The objective is to provide a comparative platform in order to assess the financial and accounting impact of the various financing alternatives which have already been introduced.

#### **Relevance:**

A focus in financial reporting issues is most relevant considering the current economic downturn in which recent business failures have combined to create a financial reporting environment unlike any in recent memory. Investor



confidence, already shaken by significant volatility in the capital markets, has been further unsettled by highly publicized restatements of financial statements, which have generated questions about the quality of financial reporting, the effectiveness of the independent audit process, and the efficacy of corporate governance. This environment is creating significant challenges for U.S. businesses and their management, boards of directors, audit committees, and auditors who not only must carry out their unique responsibilities in their respective areas, but also must work together to produce the high-quality financial reporting that is vital to our capital markets.

#### **A Focus on Accounting and Financial Analysis:**

Financial statements provide the most widely available data on public corporations' economic activities; investors and other stakeholders rely on them to assess the plans and performance of firms and corporate managers. Accrual accounting data in financial statements are typically noisy, and unsophisticated investors can assess firms' performance only imprecisely. Palepu et al (1996) outline a framework for doing business analysis with financial statements using four key steps:

- business strategy analysis
- accounting analysis
- financial analysis
- prospective analysis

It is within this context that the performance of a business is typically assessed in the open market place. The market's focus on these factors will motivate corporate managers to respond in a certain way. Within the context of this inquiry the objective will be to focus on corporate motivations as a reaction to the market's focus on:

- accounting analysis (evaluate the degree to which a firm's accounting captures the underlying business reality) and
- financial analysis (use financial data to evaluate the current and past performance of a firm and to assess its sustainability)

The fundamental objective of financial reporting is to provide useful information to investors, creditors, and others in making rational decisions. The information should be comprehensible to those who have a reasonable understanding of business and



economic activities and are willing to study the information with appropriate diligence. Financial reporting should provide investors with management's perspective on the historical and prospective financial condition and results of operations.

### **Overview of the institutional framework for financial reporting:**

There is typically a separation between ownership and management in public corporations. Financial statements serve as the vehicle through which owners keep track of their firms' financial situation. On a periodic basis, firms typically produce three financial reports:

1. an income statement that describes the operating performance during a time period,
2. a balance sheet that states the firm's assets and how they are financed, and
3. a cash flow statement that summarizes the cash flows of the firm.

These statements are then typically accompanied by several footnotes and a message and narrative discussion written by management.

One of the fundamental features of corporate financial reports is that they are prepared using accrual rather than cash accounting. Unlike cash accounting, accrual accounting distinguishes between the recording of costs and benefits associated with economic activities and the actual payment and receipt of cash. Net Income is the primary periodic performance index under accrual accounting. To compute net income, the effects of economic transactions are recorded on the basis of expected, not necessarily actual, cash receipts and payments.

The principles that define a firm's assets, liabilities, equities, revenues and expenses are as follows:

- Assets are economic resources owned by a firm that (a) are likely to produce future economic benefits and (b) are measurable with a reasonable degree of certainty. Real estate is an example of a fixed asset.
- Liabilities are economic obligations of a firm arising from benefits received in the past that are (a) required to be met with a reasonable degree of certainty and (b) at a reasonably well-defined time in the future.



- Equity is the difference between a firm's net assets and its liabilities.

These definitions lead to the fundamental relationship that governs a firm's balance sheet:

- $ASSETS = LIABILITIES + EQUITY$

While the balance sheet is a summary at one point in time, the income statement summarizes a firm's revenues and expenses and its gains and losses arising from changes in assets and liabilities in accord with the following definitions.

- Revenues are economic resources earned during a time period.
- Expenses are economic resources used up in a time period.
- Profit is the difference between a firm's revenues and expenses in a time period.

These definitions lead to the fundamental relationship that governs a firm's income statement:

- $PROFIT = REVENUES - EXPENSES$

### **Generally Accepted Accounting Principles:**

Given that it is difficult for outside investors to determine whether managers have used their accounting flexibility to signal their proprietary information or merely to disguise reality, a number of accounting conventions have evolved to mitigate the problem. Accounting conventions and standards established by the standard-setting bodies limit the potential distortions that managers can introduce into reported accounting numbers. In the United States, the Securities and Exchange Commission (SEC) has the legal authority to set the accounting standards. The SEC typically relies on private sector accounting bodies to undertake this task. Since 1973, accounting standards in the US have been set by the Financial Accounting Standards Board (FASB).

### **Financial Reporting as a Means of Communication:**

Financial reports are the least costly and the most popular format for management communication. Financial reports not only provide a record of past financial status and performance, they also reflect management estimates and forecasts of the future. For example, they include management estimates of bad debts, forecasts of the lives of tangible assets, and implicit

forecasts that outlays will generate future cash flow benefits that exceed their cost. Management is likely to be in a position to make forecasts of these future events that are more accurate than those of external investors.

**Environmental factors currently affecting financial reporting:**

In this section reference is made to a report prepared and distributed by the five largest accounting firms (Andersen, Deloitte & Touche, Ernst & Young, KPMG, and PricewaterhouseCoopers) and the American Institute of Certified Public Accountants in January 2002. The report summarized the particularly challenging factors affecting financial reporting today:

- **Difficult Economic Times**

The events of September 11 and their aftermath have only worsened already deteriorating economic conditions. This change in direction has created a growing sensitivity in the capital markets to bad news.

- **Pressures to Perform**

Businesses deal with pressures that arise from a variety of sources, both internal and external. External pressures come primarily from the capital markets, with many believing that Wall Street's expectations too often drive inappropriate myopic management behavior. Management often is under pressure to meet short-term performance indicators, such as earnings or revenue growth, financial ratios tied to debt covenants, or other measures.

- **Complexity and Sophistication of Business Structures and Transactions**

The increasing sophistication of the capital markets and the creativity of investment bankers and other financial advisers have fostered a wide variety of complex financial instruments and structured financial transactions. Some companies have transferred assets off-balance-sheet or arranged for units to be acquired by special purpose entities, retaining substantially all the risks and rewards of ownership but without "control". Synthetic leasing is a perfect example of this.



- **Complex and Voluminous Standards**

Adding to the challenges businesses face are the number of accounting standards, interpretations, and so on, that continue to expand the body of technical material that must be understood and applied in the financial reporting process. Understanding this vast body of literature can be a daunting task, even for large sophisticated companies. Furthermore, as transactions become more complex, the accounting rules for them become highly technical and detailed

Having established the context and importance of financial reporting in today's economic climate the remainder of this chapter will be dedicated to developing a comprehensive understanding of the financial statement impacts of the financing alternatives as described in Chapter Four. This will be done through the analysis of the following prepared scenario:

**Scenario Analysis: ABC Corporation**

The word has got around that the ABC corporation, a local widget manufacturer, is in the market for suburban R&D space.

ABC has just recently been approached by brokers representing XYZ corporation, a private family held toothbrush manufacturer which may be interested in disposing of a 112,500 sf R&D/flex facility on Pine Hill Street. Following the recent unexpected down turn in the demand for toothbrushes, XYZ has consolidated its R&D operations into a single facility just down the road. XYZ is now very uncertain about the future for their revolutionary ergonomic toothbrush design and management is divided on the issue as to whether the Pine Hill Street should be sold or leased. Some members of the management team argue that the asset should be sold, afterall "we're not in the real estate business". Others maintain that ownership of the facility will give XYZ the opportunity to participate in the residual appreciation of the asset, which in a market like this "can only go up" according to recent brokerage reports.

Furthermore, XYZ is privately held and, apart from reporting to their board, has no analyst or public market perception issues to be concerned about. From a financial reporting point of view, whether the asset remains on balance sheet is of little concern to XYZ management. With such a divided opinion as



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to what the company should do, XYZ approaches the ABC corporation with what it considers to be two competitive proposals: one an offer to buy, the other an offer to lease. ABC corp. is to consider both proposals and has one week in which to respond to XYZ's offer.

ABC is an "A" rated publicly traded company that has been in widget sales and marketing for years now. ABC knows the widget market like no one else and believes it has a firm understanding of what the future in widget technology will be. The company is thus looking to expand into the manufacturing business and has recently recruited a team of talented R&D engineers with the long term objective of developing its own manufacturing capabilities to take advantage of what it believes to be proprietary widget knowledge. Following its aggressive growth strategy, ABC has come to the conclusion that it needs space. The real estate operating decision has been made and now with the offers from XYZ a highly desirable asset has been identified. With the flexibility of alternative proposals offered by XYZ, ABC faces a dilemma: what financing alternative should it select in order to control the asset?

**ABC Enterprises Inc. - Consolidated Financial Statements without Real Estate:**

ABC Enterprises, Inc. Balance Sheet For Year Ended December 31, 2000 & 2001			ABC Enterprises, Inc. Income Statement Proforma For Year Ended December 31, 2001	
	Proforma 2001	2000		
<b>Assets</b>				
Cash	\$ 17,258	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating revenues/expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	20,000	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	30,000	30,000	Depreciation expense(building)	(600)
Less: Accumulated depreciation	(1,800)	\$ (1,200)	Amortization of patent	(500)
Patent	7,500	8,000	Interest earnings on cash	658
<b>Total Assets</b>	<b>\$ 98,958</b>	<b>\$ 88,800</b>	Operating Profit	\$ 19,058
<b>Liabilities &amp; Stockholders Equity</b>			Nonoperating revenues and expenses:	
Accounts payable	\$ 8,500	\$ 8,000	Loss on sale of machinery	(100)
Accrued payables	750	1,500	Interest Expense	(2,000)
Income Taxes payable	1,685	500	Net Income from continuing operations before taxes	\$ 16,958
Dividends payable	3,000	1,000	Less: Income tax expense	(5,935)
Bonds payable	24,000	25,000	<b>Net Income</b>	<b>\$ 11,023</b>
Less: Discount on bonds payable	(1,800)	(2,000)		
Common Stock	34,000	32,000		
Additional paid-in capital	18,800	16,800		
Retained earnings	10,023	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 98,958</b>	<b>\$ 88,800</b>		

Figure 5 ABC Enterprises Inc. Balance Sheet/Income Statement without real estate



**ABC Enterprises Inc. - Consolidated Financial Statements without Real Estate:**

<b>ABC Enterprises, Inc.</b> <b>Direct Statement of Cash Flows</b> Proforma For the year ended December 31, 2001		<b>ABC Enterprises, Inc.</b> <b>Indirect Statement of Cash Flows</b> Proforma For the year ended December 31, 2000	
Operating activities		Operating activities:	
Cash collections from sales and accounts receivables	37,500	<b>Net Income</b>	11,023
Cash paid to suppliers	(14,500)	Noncash charges to noncurrent accounts:	
Cash paid for miscellaneous expenses	(8,750)	Depreciation of machinery	1,000
Cash paid for interest	(1,800)	Depreciation of building	600
Cash paid for income taxes	(4,750)	Amortization of patent	500
Interest on cash	658	Loss on sale of machinery	100
<b>Net cash provided (used) by operating activities</b>	<b>\$ 8,358</b>	Decrease in discount on bonds payable	200
Investing Activities		Changes in current noncash accounts:	
Purchase of machinery	(2,500)	Increase in net accounts receivable	(3,000)
Sale of Machinery	1,400	Increase in inventory	(4,000)
<b>Net cash provided (used) by investing activities</b>	<b>(1,100)</b>	Decrease in accounts payable	500
Financing Activities		Increase in accrued payable and taxes payable	435
Cash dividends	(1,000)	Decrease in prepaid insurance	1,000
Principal payment on outstanding note payable	(1,000)	<b>Net Cash provided(used) by operating activities</b>	<b>\$ 8,358</b>
<b>Net cash provided (used) by financing activities</b>	<b>(2,000)</b>		
Net increase (decrease) in cash balance	<b>\$ 5,258</b>		
Beginning cash balance	12,000		
Ending cash balance	<b>\$ 17,258</b>		
		<b>ABC Enterprises, Inc.</b> <b>Statement of Retained Earnings</b> For the year ended December 31, 2000	
		<b>Beginning retained earnings balance</b>	6000
		Plus: Net Income	11023
		Less: Cash dividends	-3000
		Stock dividends	-4000
		<b>Ending retained earnings balance</b>	<b>\$ 10,023</b>

**Figure 6** ABC Enterprises Inc. Direct/Indirect Statement Cash Flows without real estate

**PINE HILL STREET - BUILDING ASSUMPTIONS:**

<b>Building Information:</b>	
Pine Hill Street is a 112,500 sf R&D/flex building that has recently received some substantial upgrades	
The building is situated in the highly desirable Route 495 - Mass Pike West market on 11.5 acres of land.	
Net Rentable Area:	112,500 square feet
Market rental growth rate:	3% per year
Operating expense growth rate	3% per year

<b>Operating Statement:</b>											
	<b>Proforma</b>										
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Variable Expenses*:</b>	164,000	168,920	173,988	179,207	184,583	190,121	195,825	201,699	207,750	213,983	220,402
<b>Fixed Expenses:</b>											
Property taxes	175,000	180,250	185,658	191,227	196,964	202,873	208,959	215,228	221,685	228,335	235,185
Insurance	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
<b>Total Operating Exp:</b>	<b>346,000</b>	<b>\$356,000</b>	<b>\$367,000</b>	<b>\$378,000</b>	<b>\$389,000</b>	<b>\$401,000</b>	<b>\$413,000</b>	<b>\$426,000</b>	<b>\$438,000</b>	<b>\$451,000</b>	<b>\$465,000</b>
(rounded to the nearest '000)											
*Includes utilities, security, repairs and maintenance, building services & supplies, grounds maintenance and payroll.											

Figure 7 Pine Hill Street – Buildings Assumptions

**Transaction Assumptions:**

<b>Proposed leasing agreement:</b>												
Assume tenant improvements	\$10.00 per square foot paid by tenant.					Escalation: 15% bump year 6 & 10						
Assume NNN market rents:	\$10.25 per square foot											
	<b>Proforma</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Triple Net:	\$1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000	1,518,000
Smoothed GAAP rent:	\$1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000	1,631,850
Deferred rent liability	\$85,000	85,000	85,000	85,000	85,000	85,000	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	113,850
Balance:	\$85,000	170,000	255,000	340,000	425,000	340,000	255,000	170,000	85,000	0	113,850	
Bond Net Lease*:	\$1,040,000	1,040,000	1,040,000	1,040,000	1,040,000	1,040,000	1,190,000	1,190,000	1,190,000	1,190,000	1,190,000	1,370,000
Smoothed GAAP rent:	\$1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000	1,472,750
Deferred rent liability	\$75,000	75,000	75,000	75,000	75,000	75,000	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	102,750
Balance:	\$75,000	150,000	225,000	300,000	375,000	300,000	225,000	150,000	75,000	0	102,750	
In both cases TI's =	\$1,125,000											
Useful life (tax) =	39 years			Useful life (book) =			10 years					
Annual depr. (tax) =	\$28,846			Annual depr.(book) =			\$112,500					
* Assume	10% discount to NNN lease rates due to ABC's "A" credit rating.											

Figure 8 Transaction assumptions – proposed leasing agreement

**Transaction Assumptions:**

<b>Synthetic Lease Alternative</b>			
Initial 5 year term with an option to renew for another 5 years. It is assumed that the option to renew in year 5 is exercised and that LIBOR remains constant at 2% over the life of the loan. Transactions costs are assumed at 5% and are included in the amount financed. At year 10 it is assumed that the property is sold to a third party at the same fair market value as in other scenarios.			
Purchase price =	\$8,800,000	Note: these transaction costs maybe be amortized over ten years and appear on-balance	
Trans. Cost @ 5%	\$440,000	sheet. In this case they are assumed part of the total financing.	
Total financing:	\$9,240,000	<b>Improvements:</b>	
3 month LIBOR @ say	2.00%	Est. improvements:	\$10.00 per sf funded by tenant
Basis Point Spread	1.50%	Depreciable basis	\$1,125,000
EAR Loan	3.50%	Useful life (tax)	39 Useful life (book)
Annual lease payment	\$323,400	Annual depr. (tax)	\$28,846 Annual depr. (book) \$112,500

**Note:**  
Transaction assumptions have been made in order to establish parameters for the five alternate financing options which are being assessed:

1. Direct corporate funding
2. Leveraged acquisition
3. Synthetic leasing
4. Bond net lease
5. Traditional operating lease

<b>Proposed Sale Agreement</b>			<b>Assumptions for Project Specific NPV's:</b>	
Purchase price	\$8,800,000	\$78 per sq foot	Disposition in year 10 @:	10% cap of 2011 market rents
Land allocation	\$1,936,000	78% building	10 Year treasuries	4.6%
Depreciable basis	\$6,864,000		ABC Corp risk premium	1.5%
Useful life (tax & book)	39 years		ABC before tax cost of de	6.1%
Annual depreciation	\$176,000		Taxes	35%
Estimated Improvements	\$10.00 per sf		ABC after tax cost of debt	4%
Depreciable basis	\$1,125,000			
Useful life (book/tax)	39 years			
Annual depreciation	\$28,846			
Trans costs @ 2% of purchase price	2%			
Transaction costs	\$176,000	assumed over 10 years		
Annual cost amortization	\$17,600			

<b>Leveraged acquisition: Financing parameters</b>				
Loan to value	80%	Mortgage constant	annual	0.0718
Loan Amount	7,040,000	10 Year Treasury		4.6%
Loan Point at	1% 70,400	Compounding periods/year		2
Assume points depreciated over	10 yrs	EAY 10 Year T-Bill		4.7%
Loan Point amortization cost	7,040	Basis Points on Loan		1.5%
Total Loan	7,110,400	EAR Loan		6.2%
Monthly Interest Rate	0.50%	EPR		0.5%
Amortization Term (Months)	360	Annual Nominal RATE		6.0%
Monthly Payment	(\$42,566)	<b>Lenders Effective Yield</b>		
Annual Payment	(\$510,793)	EAY with points		5.9%
Mortgage constant	monthly 0.0060	EAY without points		6.0%

**Figure 9** Transaction assumptions – proposed ownership and synthetic leasing alternatives

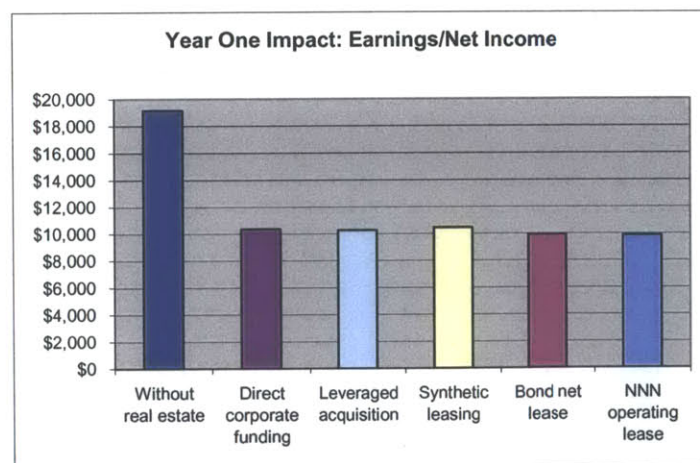
**Summary Output For 2001 (Year 1) Impact:**

	Without Real Estate	Own		Synthetics	Operating Lease	
		Direct Funding	Leveraged Acquisition	Synthetic Lease	Bond Net Lease	Trad. Oper. Lease
Earnings	\$19,158	\$10,341	\$10,254	\$10,461	\$9,925	\$9,843
Return on Equity	17.55%	16.64%	16.52%	16.80%	16.08%	15.97%
Return on Assets	11.14%	10.56%	9.79%	10.66%	10.20%	10.12%
Financial Leverage	1.58	1.58	1.69	1.58	1.58	1.58
Current Ratio	2.10	1.35	1.86	2.01	2.00	1.99
Market value @ 15%	\$15,877	\$5,043	\$5,311	\$13,484	\$12,178	\$11,980

Figure 10 Summary output illustrating year 1 impact

**Discussion:**

The above table summarizes the first year impact of the financing alternatives on a variety of financial ratios. These ratios allow the investor to assess how various line items in the firm’s financial statements relate to one another with the objective of evaluating the effectiveness of the firm’s decision. The emphasis here is on the short term impact of the financing decision. Such a short term perspective is perhaps appropriate to consider bearing in mind the fickleness and incredibly short sighted nature of the capital markets in the current economic context.

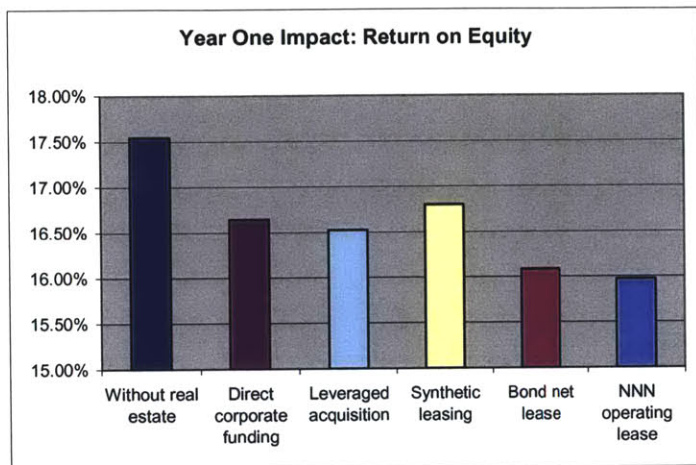


**Definition:**  
**Earnings:** The annual net income for the company. Net income is defined as the company’s total earnings, reflecting revenues adjusted for costs of doing business, depreciation, interest, taxes and other expenses.

**Discussion:**  
 All alternatives result in a significant decrease in earnings. The slightly reduced impact on the owning and synthetic alternatives is a result of the ‘cheaper’ impact of interest expense as opposed to lease expense under the leasing alternatives. The synthetic lease alternative tops the ownership options primarily since depreciation is considered only in tax reporting. In all cases operating expenses are assumed equal.

Figure 11 Year one impact to earnings

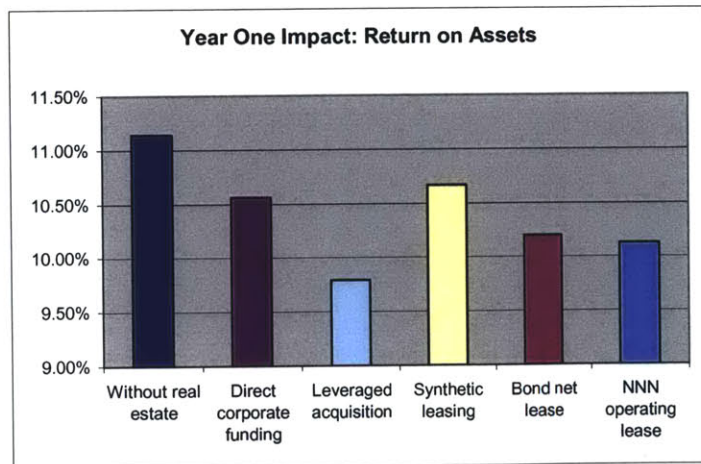
**Summary Outputs For 2001 (Year 1) Impact:**



**Figure 12** Year one impact to ROE

**Definition:**  
**Return on Equity (ROE):** Net Income/Shareholders Equity  
 A comprehensive indicator of a firm's performance because it provides an indication of how well managers are employing the funds invested by the firm's shareholders to generate returns.

**Discussion:**  
 This is a book return on equity and is therefore tied to a large degree on the impact that the alternatives have on net income (which is a non-cash accounting measure). The increased impact of the of the more 'expensive' leasing options therefore have a negative impact on the company's ROE.



**Figure 13** Year one impact to ROA, financial leverage & market value

**Definition:**  
**Return on Assets (ROA):** Net Income/Assets.  
 This metric indicates how much profit a company is able to generate for each dollar of assets invested.

**Discussion:**  
 Leveraged acquisitions appear to have a more significant impact on return on assets. This is a result of the real estate asset being capitalized as an asset and leveraged with debt. This results in a disproportionately higher book value of total assets.

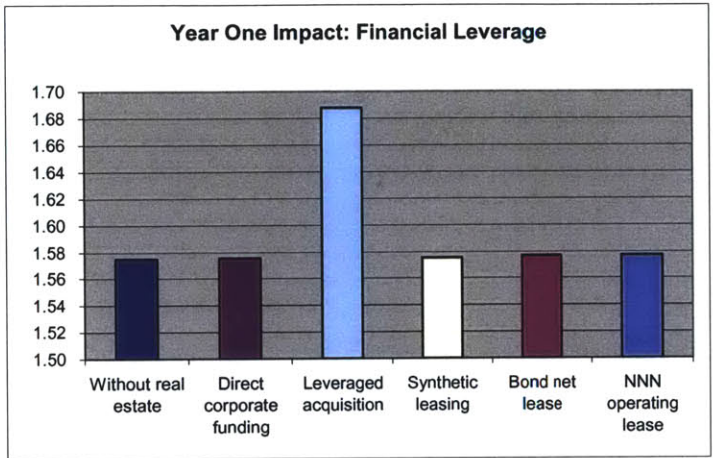


Figure 14 Year one impact to financial leverage

**Definition:**  
**Financial leverage:** Assets/Shareholders Equity. This indicates how many dollars of assets the firm is able to deploy for each dollar invested by its shareholders.

**Discussion:**  
 Since a substantial amount of debt is taken on as financing, leveraged acquisitions have a significant obvious impact on the overall financial leverage of the company.

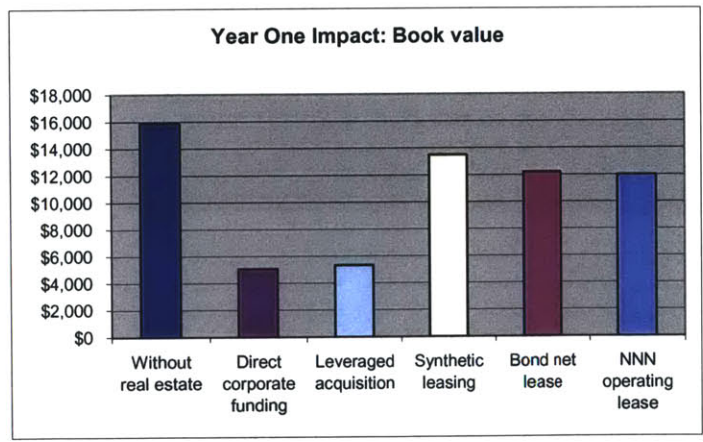


Figure 15 Year one impact to market value

**Definition:**  
**Market value:** based on a discounted free cash flow analysis. Free cash flows are defined as cash flows from operations after investment in working capital. Since this is cash flow available to all providers of capital – holders of short-term debt, long-term debt, and equity – FCF is expressed on a pre-interest but post-tax basis.

**Discussion:**  
 The book value of the company is significantly impacted by the on-balance sheet presence of the real estate asset. The substantial impact to free cash flow in year one appears to be the primary cause of this.

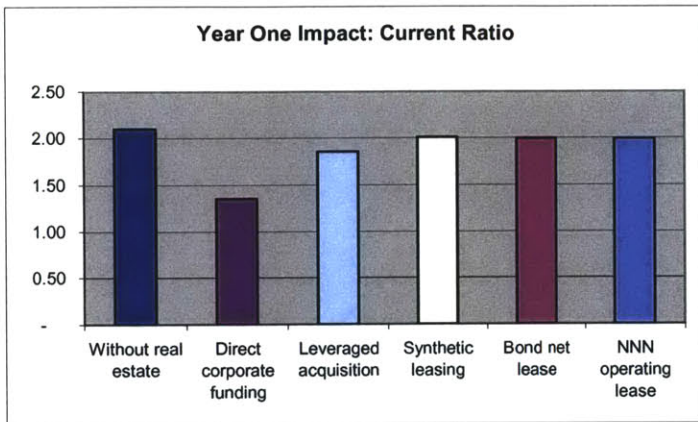


Figure 16 Year one impact to current ratio

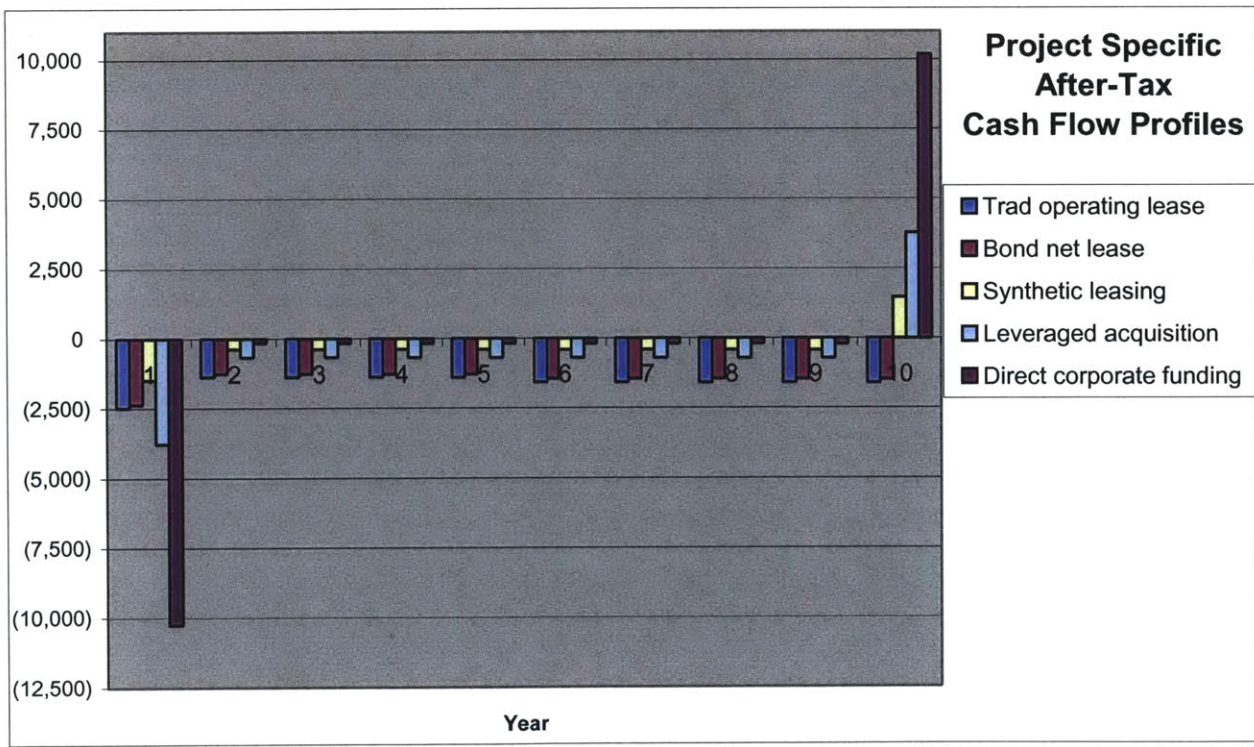
**Definition:**  
**Current ratio:** Current Assets/Current Liabilities. Useful in evaluating the risk related to a firm's current liabilities. The ratio is a measure of the firm's ability to repay its current liabilities.

**Discussion:**  
The primary driver of this metric is cash. In this case cash has been considered as a current asset, hence, with such a substantial outflow of cash in year one, the direct corporate funding alternative has the most significant impact.

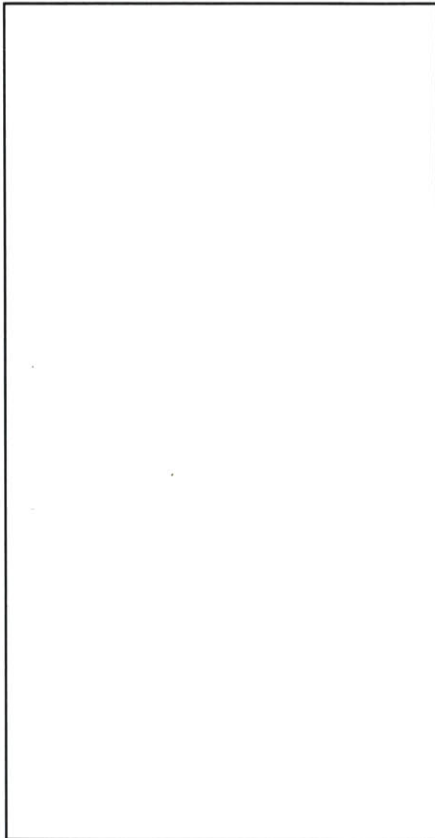
**Project Specific After-Tax Cash Flow Profiles:**

	NPV*	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Direct corporate funding</b>	(\$4,117)	(10,248)	(154)	(161)	(168)	(175)	(183)	(191)	(199)	(207)	10,171
<b>Leveraged acquisition</b>	(\$5,542)	(3,787)	(662)	(669)	(676)	(683)	(691)	(699)	(707)	(715)	3,764
<b>Synthetic leasing</b>	(\$2,998)	(1,488)	(370)	(377)	(384)	(391)	(399)	(407)	(415)	(423)	1,463
<b>Bond net lease</b>	(\$12,075)	(2,380)	(1,261)	(1,268)	(1,276)	(1,283)	(1,441)	(1,448)	(1,457)	(1,465)	(1,473)
<b>Trad operating lease</b>	(\$13,042)	(2,490)	(1,371)	(1,378)	(1,386)	(1,393)	(1,571)	(1,578)	(1,587)	(1,595)	(1,603)

\*NPV is after-tax @ 4%

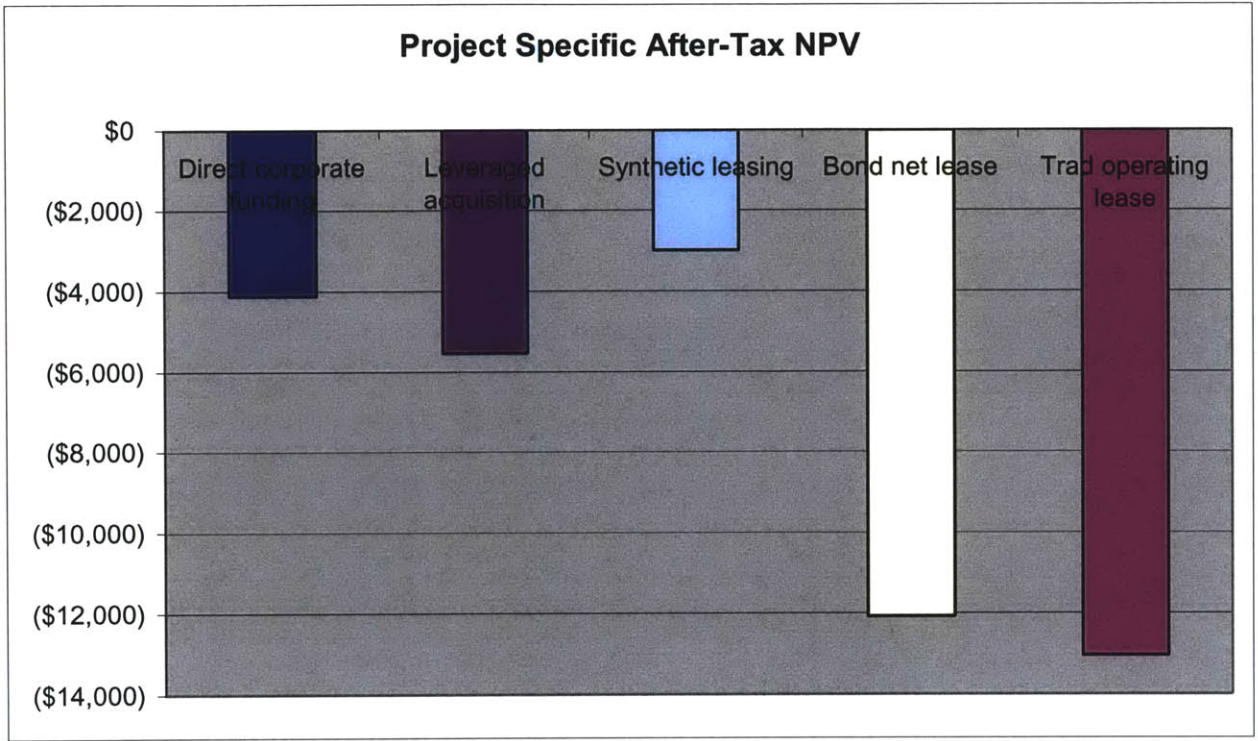


**Figure 17** Project specific cash flow profiles





**Project Specific After-Tax Net Present Value:**



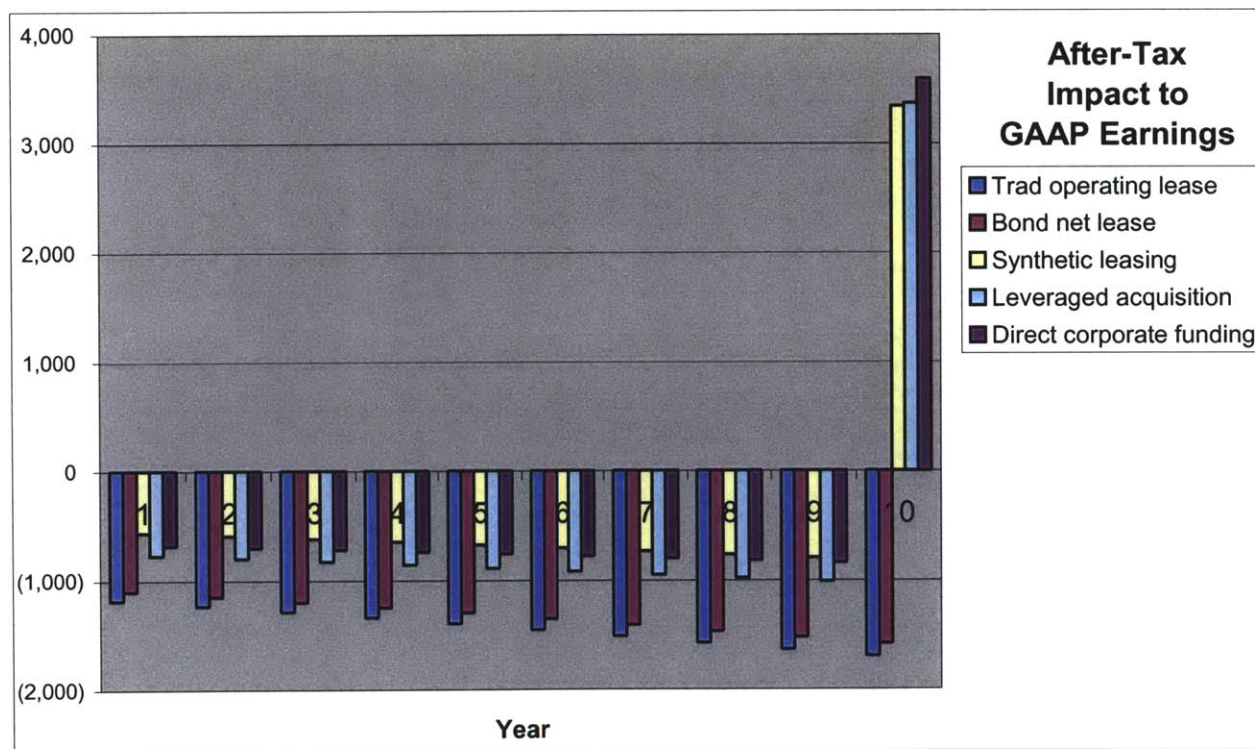
**Figure 18** Project Specific After-Tax NPV

**Discussion:**

The higher costs associated with leasing is clearly evident. In this case the corporation is paying a premium for the additional operational flexibility which is afforded through the more traditional forms of leasing. The apparent discount to direct corporate funding, leveraged acquisition and synthetic leasing is very much dependant on the assumed appreciation in the value of the underlying asset. In this, case synthetic leasing, which is basically a (97%) loan disguised as a lease, trumps all other forms of financing in terms of the NPV occupancy cost.

**Incremental Impact to After-Tax GAAP Earnings/Net Income:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Direct corporate funding</b>	(682)	(699)	(717)	(736)	(754)	(774)	(794)	(815)	(836)	3,593
<b>Leveraged acquisition</b>	(768)	(795)	(825)	(855)	(885)	(915)	(946)	(977)	(1,008)	3,366
<b>Synthetic leasing</b>	(562)	(589)	(616)	(645)	(673)	(703)	(732)	(763)	(794)	3,340
<b>Bond net lease</b>	(1,098)	(1,146)	(1,195)	(1,245)	(1,295)	(1,350)	(1,406)	(1,463)	(1,519)	(1,577)
<b>Trad operating lease</b>	(1,179)	(1,231)	(1,283)	(1,336)	(1,389)	(1,448)	(1,508)	(1,569)	(1,629)	(1,690)

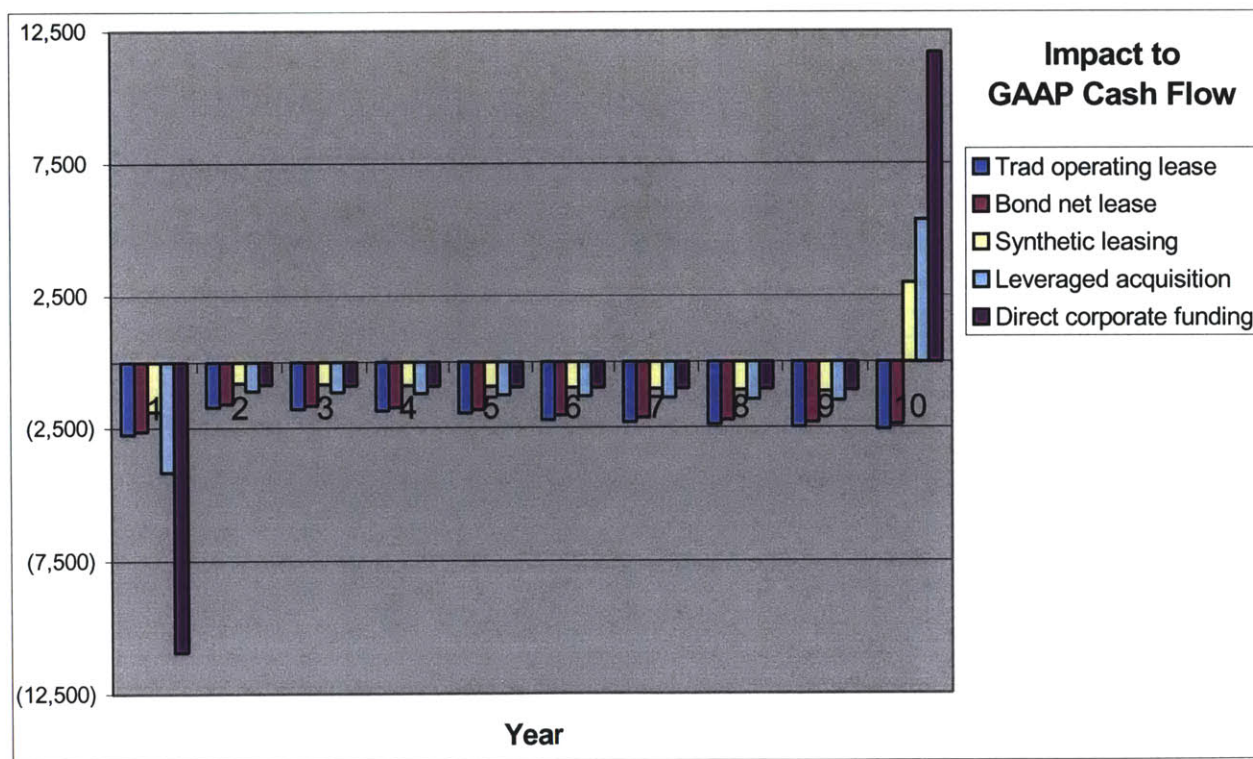


**Figure 19** Incremental impact to after-tax GAAP earnings

**Discussion:**  
 The impact to earnings is primarily an indication of occupancy ‘expense’. i.e. items which are being expensed on the balance sheet and therefore deducted from the net income of that period. The three broad groups of financing alternatives are clear. Both forms of leasing have a greater impact to net income which increases over time. Synthetic leasing has the smallest impact on earnings over time with a significant boost to earnings being realized in year ten. Both forms of ownership track the profile of the synthetic alternative very closely.

**Incremental Impact to GAAP Cash Flow:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Direct corporate funding	(10,928)	(853)	(881)	(909)	(938)	(969)	(1,000)	(1,032)	(1,064)	11,685
Leveraged acquisition	(4,172)	(1,087)	(1,138)	(1,190)	(1,243)	(1,296)	(1,351)	(1,407)	(1,463)	5,340
Synthetic leasing	(1,877)	(793)	(836)	(879)	(923)	(968)	(1,014)	(1,062)	(1,109)	2,980
Bond net lease	(2,627)	(1,576)	(1,651)	(1,728)	(1,804)	(2,040)	(2,125)	(2,213)	(2,300)	(2,388)
Trad operating lease	(2,742)	(1,696)	(1,777)	(1,858)	(1,940)	(2,201)	(2,293)	(2,386)	(2,479)	(2,573)



**Discussion:**  
 In this case the significant up front capital commitment required for both forms of ownership is clearly evident. The upfront commitment is made with the hope that appreciation in the residual value of the asset will be seen over time and result in a significant boost to cash from investment activities. With appreciation in the value of the underlying asset being assumed, synthetic leasing again outperforms the other alternatives. The cash flow impact of ownership is again highly dependant on the appreciation assumed.

Figure 20 Incremental impact to GAAP cash flow

**ABC Enterprises Inc. – Impact of Direct Corporate Funding on Consolidated Financial Statements**

ABC Enterprises, Inc. Balance Sheet For Year Ended December 31, 2000 & 2001			ABC Enterprises, Inc. Income Statement Proforma For Year Ended December 31, 2001	
	Proforma 2001	2000		
<b>Assets</b>				
Cash	\$ 6,330	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	21,936	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	38,147	30,000	Amortization of patent	(500)
Less: Accumulated depreciation	(2,005)	\$ (1,200)	Transaction cost amortization	(18)
Patent	7,500	8,000	Depreciation expense(building & imp.)	(805)
<b>Total Assets</b>	<b>\$ 97,909</b>	<b>\$ 88,800</b>	Building operating expenses	(346)
			Interest Earnings on cash	177
<b>Liabilities &amp; Stockholders Equity</b>			<b>Operating Profit</b>	<b>\$ 18,009</b>
Accounts payable	\$ 8,500	\$ 8,000	Nonoperating revenues and expenses:	
Accrued payables	750	1,500	Loss on sale of machinery	(100)
Income Taxes payable	1,318	500	Interest Expense	(2,000)
Dividends payable	3,000	1,000		(2,100)
Bonds payable	24,000	25,000	Net Income from continuing operations	
Less: Discount on bonds payable	(1,800)	(2,000)	before taxes	\$ 15,909
Common Stock	34,000	32,000	Less: Income tax expense	(5,568)
Additional paid-in capital	18,800	16,800	<b>Net Income</b>	<b>\$ 10,341</b>
Retained earnings	9,341	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 97,909</b>	<b>\$ 88,800</b>		

**Figure 21** ABC Enterprises Inc. - direct corporate funding impact on balance sheet & income statement

**Note:**

On these and all subsequent consolidated financial statements, the impact of the respective financing alternative is highlighted in order to give the reader a clear indication of what line items are added or affected by the financing decision. Full balance sheet equations from which the various consolidated statements are drawn have been included in the appendix.

**ABC Enterprises Inc. – Impact of Direct Corporate Funding on Consolidated Financial Statements**

<p><b>ABC Enterprises, Inc.</b>  <b>Direct Statement of Cash Flows</b>                  Proforma For the year ended December 31, 2001</p> <p>Operating activities</p> <table border="0"> <tr><td>Cash collections from sales and accounts receivables</td><td style="text-align: right;">37,500</td></tr> <tr><td>Cash paid to suppliers</td><td style="text-align: right;">(14,500)</td></tr> <tr><td>Cash paid for miscellaneous expenses</td><td style="text-align: right;">(8,750)</td></tr> <tr><td>Cash paid for interest</td><td style="text-align: right;">(1,800)</td></tr> <tr><td>Cash paid for income taxes</td><td style="text-align: right;">(4,750)</td></tr> <tr style="background-color: #cccccc;"><td>Cash paid for building operating expenses</td><td style="text-align: right;">(346)</td></tr> <tr style="background-color: #cccccc;"><td>Interest earnings on cash</td><td style="text-align: right;">177</td></tr> <tr><td><b>Net cash provided (used) by operating activities</b></td><td style="text-align: right;"><b>\$ 7,531</b></td></tr> </table> <p>Investing Activities</p> <table border="0"> <tr><td>Purchase of machinery</td><td style="text-align: right;">(2,500)</td></tr> <tr><td>Sale of Machinery</td><td style="text-align: right;">1,400</td></tr> <tr style="background-color: #cccccc;"><td>Purchase of R&amp;D facility</td><td style="text-align: right;">(8,800)</td></tr> <tr style="background-color: #cccccc;"><td>Transaction costs</td><td style="text-align: right;">(176)</td></tr> <tr style="background-color: #cccccc;"><td>Improvements</td><td style="text-align: right;">(1,125)</td></tr> <tr><td><b>Net cash provided (used) by investing activities</b></td><td style="text-align: right;"><b>(11,201)</b></td></tr> </table> <p>Financing Activities</p> <table border="0"> <tr><td>Cash dividends</td><td style="text-align: right;">(1,000)</td></tr> <tr><td>Principal payment on outstanding note payable</td><td style="text-align: right;">(1,000)</td></tr> <tr><td><b>Net cash provided (used) by financing activities</b></td><td style="text-align: right;"><b>(2,000)</b></td></tr> <tr><td>Net increase (decrease) in cash balance</td><td style="text-align: right;"><b>\$ (5,670)</b></td></tr> <tr><td>Beginning cash balance</td><td style="text-align: right;">12,000</td></tr> <tr><td>Ending cash balance</td><td style="text-align: right;"><b>\$ 6,330</b></td></tr> </table>	Cash collections from sales and accounts receivables	37,500	Cash paid to suppliers	(14,500)	Cash paid for miscellaneous expenses	(8,750)	Cash paid for interest	(1,800)	Cash paid for income taxes	(4,750)	Cash paid for building operating expenses	(346)	Interest earnings on cash	177	<b>Net cash provided (used) by operating activities</b>	<b>\$ 7,531</b>	Purchase of machinery	(2,500)	Sale of Machinery	1,400	Purchase of R&D facility	(8,800)	Transaction costs	(176)	Improvements	(1,125)	<b>Net cash provided (used) by investing activities</b>	<b>(11,201)</b>	Cash dividends	(1,000)	Principal payment on outstanding note payable	(1,000)	<b>Net cash provided (used) by financing activities</b>	<b>(2,000)</b>	Net increase (decrease) in cash balance	<b>\$ (5,670)</b>	Beginning cash balance	12,000	Ending cash balance	<b>\$ 6,330</b>	<p><b>ABC Enterprises, Inc.</b>  <b>Indirect Statement of Cash Flows</b>                  Proforma For the year ended December 31, 2000</p> <p>Operating activities:</p> <table border="0"> <tr><td><b>Net Income</b></td><td style="text-align: right;">10,341</td></tr> <tr><td>Noncash charges to noncurrent accounts:</td><td></td></tr> <tr><td>  Depreciation of machinery</td><td style="text-align: right;">1,000</td></tr> <tr style="background-color: #cccccc;"><td>  Depreciation of building</td><td style="text-align: right;">805</td></tr> <tr style="background-color: #cccccc;"><td>  Trans cost amortization</td><td style="text-align: right;">18</td></tr> <tr><td>  Amortization of patent</td><td style="text-align: right;">500</td></tr> <tr><td>  Loss on sale of machinery</td><td style="text-align: right;">100</td></tr> <tr><td>  Decrease in discount on bonds payable</td><td style="text-align: right;">200</td></tr> <tr><td>Changes in current noncash accounts:</td><td></td></tr> <tr><td>  Increase in net accounts receivable</td><td style="text-align: right;">(3,000)</td></tr> <tr><td>  Increase in inventory</td><td style="text-align: right;">(4,000)</td></tr> <tr><td>  Decrease in accounts payable</td><td style="text-align: right;">500</td></tr> <tr><td>  Increase in accrued payable and taxes payable</td><td style="text-align: right;">68</td></tr> <tr><td>  Decrease in prepaid insurance</td><td style="text-align: right;">1,000</td></tr> <tr><td><b>Net Cash provided(used) by operating activities</b></td><td style="text-align: right;"><b>\$ 7,531</b></td></tr> </table> <p><b>ABC Enterprises, Inc.</b>  <b>Statement of Retained Earnings</b>                  Proforma for the year ended December 31, 2001</p> <table border="0"> <tr><td><b>Beginning retained earnings balance</b></td><td style="text-align: right;">6,000</td></tr> <tr><td>Plus: Net Income</td><td style="text-align: right;">10,341</td></tr> <tr><td>Less: Cash dividends</td><td style="text-align: right;">-3000</td></tr> <tr><td>    Stock dividends</td><td style="text-align: right;">-4000</td></tr> <tr><td><b>Ending retained earnings balance</b></td><td style="text-align: right;"><b>\$ 9,341</b></td></tr> </table>	<b>Net Income</b>	10,341	Noncash charges to noncurrent accounts:		Depreciation of machinery	1,000	Depreciation of building	805	Trans cost amortization	18	Amortization of patent	500	Loss on sale of machinery	100	Decrease in discount on bonds payable	200	Changes in current noncash accounts:		Increase in net accounts receivable	(3,000)	Increase in inventory	(4,000)	Decrease in accounts payable	500	Increase in accrued payable and taxes payable	68	Decrease in prepaid insurance	1,000	<b>Net Cash provided(used) by operating activities</b>	<b>\$ 7,531</b>	<b>Beginning retained earnings balance</b>	6,000	Plus: Net Income	10,341	Less: Cash dividends	-3000	Stock dividends	-4000	<b>Ending retained earnings balance</b>	<b>\$ 9,341</b>
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**Figure 22** ABC Enterprises Inc. - direct corporate funding impact on direct & indirect statement of cash flows

## Direct Corporate Funding – Project Specific Cash Effects

Project Specific NPV:	
Net sales price in year 10 assumed at 10% cap of 2011 NNN market rents:	10.0%
10 Year treasuries	4.6%
ABC Corp risk premium	1.5%
ABC before tax cost of debt	6.1%
ABC after tax cost of debt	4.0%

Acq cost	8,800
+ Improvements	1,125
+ Trans costs	176
+ Loan points	0
<b>Cost basis</b>	<b>10,101</b>
- Acc depreciation	(2,048)
- Acc cost amort	(176)
<b>Adjusted Tax Basis</b>	<b>7,877</b>

Net sales price	15,180
Less comm @ 3%	(455)
Less adjusted basis	(7,877)
<b>Taxable gain on sale</b>	<b>6,848</b>
<b>Taxes due</b>	<b>2,397</b>
Net sales price	15,180
Less taxes due	(2,397)
<b>Net sales proceeds</b>	<b>12,783</b>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>PROJECT SPECIFIC CASH EFFECTS</b>										
Acquisition cost	(8,800)									
Transaction costs	(176)									
Improvements	(1,125)									
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Sale proceeds										12,783
<b>Before-Tax Cash Occupancy Costs</b>	<b>(10,447)</b>	<b>(356)</b>	<b>(367)</b>	<b>(378)</b>	<b>(389)</b>	<b>(401)</b>	<b>(413)</b>	<b>(426)</b>	<b>(438)</b>	<b>12,332</b>
<b>Before tax NPV @ 6.1%</b>	<b>(\$5,312)</b>									
Tax shield @ 35%	199	202	206	210	214	218	222	227	231	(2,161)
<b>After-Tax Cash Occupancy Costs</b>	<b>(10,248)</b>	<b>(154)</b>	<b>(161)</b>	<b>(168)</b>	<b>(175)</b>	<b>(183)</b>	<b>(191)</b>	<b>(199)</b>	<b>(207)</b>	<b>10,171</b>
<b>After-tax NPV @ 4.0%</b>	<b>(\$4,117)</b>									
<b>INCREMENTAL TAX EFFECTS</b>										
Schedule of tax deductions:										
Operating expenses	346	356	367	378	389	401	413	426	438	451
Depreciation										
Building	176	176	176	176	176	176	176	176	176	176
TI's	29	29	29	29	29	29	29	29	29	29
Cost Amortization										
Loan Points	-	-	-	-	-	-	-	-	-	-
Transaction Costs @ 3%	18	18	18	18	18	18	18	18	18	18
Taxable Gain on Sale										(6,848)
<b>Incr Impact on Taxable Income</b>	<b>568</b>	<b>578</b>	<b>589</b>	<b>600</b>	<b>611</b>	<b>623</b>	<b>635</b>	<b>648</b>	<b>660</b>	<b>(6,175)</b>
Tax shield @ 35%	199	202	206	210	214	218	222	227	231	(2,161)

Figure 23 Direct Corporate Funding – Project Specific Cash Effects

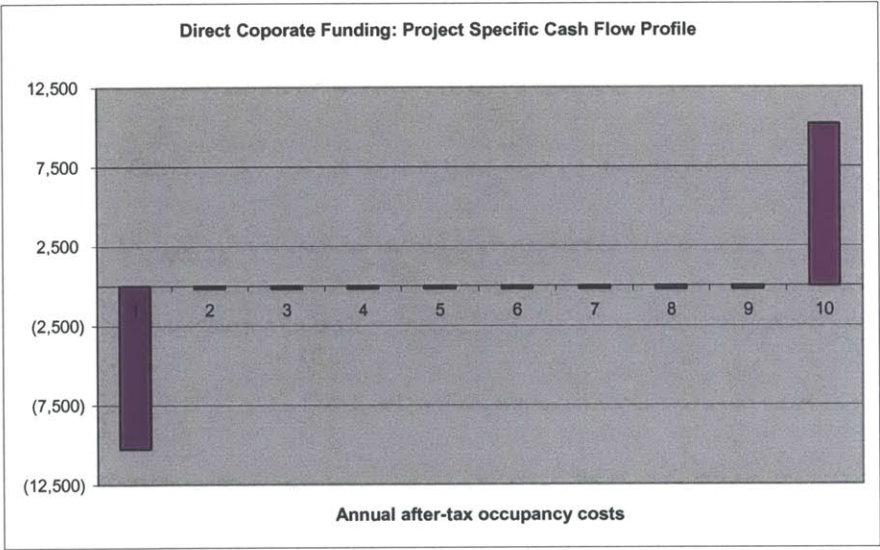
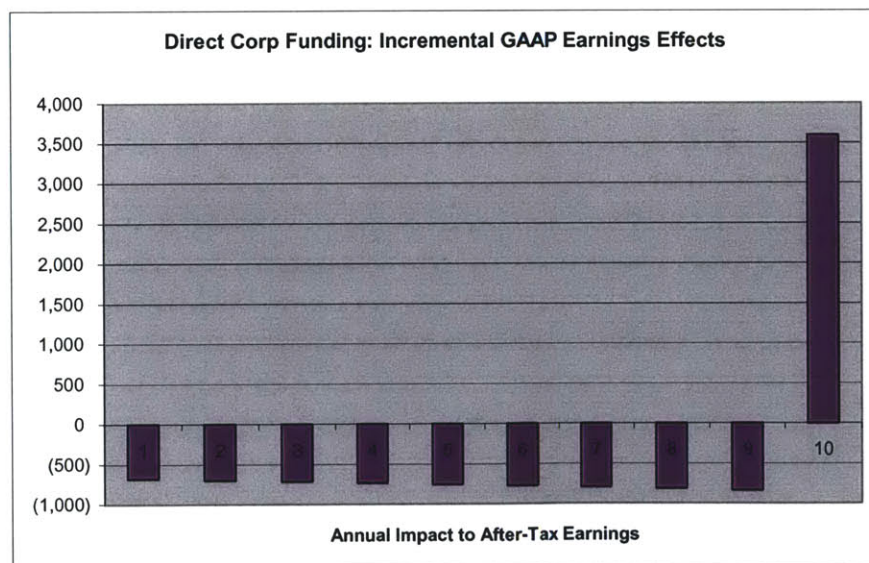


Figure 24 Direct Corporate Funding – Project Specific Cash Effects

### Direct Corporate Funding – Incremental Impact to GAAP Financial Statements

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
<b>INCREMENTAL GAAP EARNINGS/INCOME EFFECTS</b>											
Operating expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)	
Depreciation											
Building	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)	
TI's	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	
Cost Amortization											
Loan Points	-	-	-	-	-	-	-	-	-	-	
Transaction Costs @ 3%	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	
Foregone interest earnings	(481)	(497)	(514)	(531)	(549)	(568)	(587)	(606)	(626)	(647)	
Gain on Sale										6,848	
<b>Incr Impact to Before-Tax Earnings</b>	<b>(1,049)</b>	<b>(1,075)</b>	<b>(1,103)</b>	<b>(1,132)</b>	<b>(1,161)</b>	<b>(1,191)</b>	<b>(1,222)</b>	<b>(1,255)</b>	<b>(1,287)</b>	<b>5,528</b>	
Provision for taxes 35%	367	376	386	396	406	417	428	439	450	(1,935)	
<b>Incr Impact to After-Tax Earnings</b>	<b>(682)</b>	<b>(699)</b>	<b>(717)</b>	<b>(736)</b>	<b>(754)</b>	<b>(774)</b>	<b>(794)</b>	<b>(815)</b>	<b>(836)</b>	<b>3,593</b>	
Check Year 2001 numbers:				Without real estate Net Income '01 =	\$11,023	Difference		\$682	i.e. This is the incremental earnings impact of funding real estate directly		
				With real estate Net Income '01 =	\$10,341						



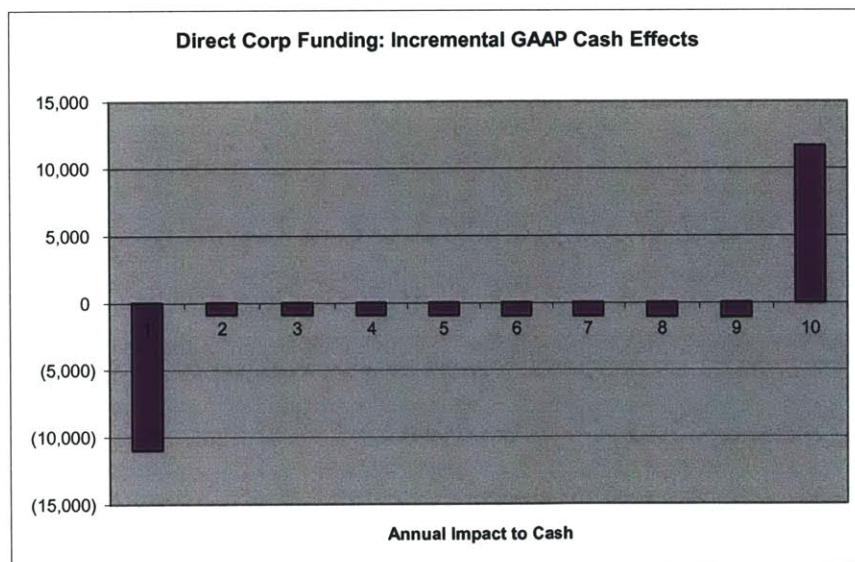
**Discussion:**  
 The incremental impact of direct corporate funding on GAAP earnings is based in the first nine years primarily on the depreciation of the asset. No initial significant impact is seen since the asset is capitalized on the balance sheet. Very important to realize though is that significant appreciation in terms of the residual value of the asset has been assumed over the ten years, which is reflected favorably with a substantial boost to earnings in year ten with the assumed disposition of the asset.

Figure 25 Direct corporate funding – incremental tax & GAAP earnings/income effects



### Direct Corporate Funding – Incremental Impact to GAAP Financial Statements

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP CASH FLOW EFFECTS</b>										
<b>Operating activities:</b>										
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Foregone interest earning	(481)	(497)	(514)	(531)	(549)	(568)	(587)	(606)	(626)	(647)
Debt service	-	-	-	-	-	-	-	-	-	-
<b>Investing activities:</b>										
Acquisition cost	(8,800)									
Transaction costs	(176)									
Improvements	(1,125)									
Sale proceeds										12,783
<b>Incremental Impact to Cash</b>	<b>(10,928)</b>	(853)	(881)	(909)	(938)	(969)	(1,000)	(1,032)	(1,064)	11,685
Check Year 2001 numbers: Without real estate Ending Cash Balance '01 = <b>\$17,258</b> With real estate Ending Cash Balance '01 = <b>\$ 6,330</b>										
Difference <b>\$10,928</b> i.e. This is the incremental cash impact of financing real estate directly										



**Discussion:**  
 The incremental GAAP cash effects allow us to closely monitor the actual cash flows associated with the asset. This gives a clearer indication of what really is going on. In this case the substantial up front capital commitment is clearly evident.

Figure 26 Direct corporate funding - incremental GAAP cash effects

## ABC Enterprises Inc. – Impact of a Leveraged Acquisition on Consolidated Financial Statements

ABC Enterprises, Inc. Balance Sheet For Year Ended December 31, 2000 & 2001			ABC Enterprises, Inc. Income Statement Proforma For Year Ended December 31, 2001	
	Proforma 2001	2000		
<b>Assets</b>				
Cash	\$ 13,086	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating revenues/expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	21,936	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	38,211	30,000	Depreciation expense(building)	(805)
Less: Accumulated depreciation	(2,005)	\$ (1,200)	Amortization of patent	(500)
Patent	7,500	8,000	Amortization of transaction costs	(18)
<b>Total Assets</b>	<b>\$ 104,728</b>	<b>\$ 88,800</b>	Amortization of loan points	(7)
<b>Liabilities &amp; Stockholders Equity</b>			Building operating expenses	(346)
Accounts payable	\$ 8,500	\$ 8,000	Interest earnings on cash	474
Accrued payables	750	1,500	<b>Operating Profit</b>	<b>\$ 18,299</b>
Income Taxes payable	1,271	500	Nonoperating revenues and expenses:	
Dividends payable	3,000	1,000	Loss on sale of machinery	(100)
Notes Payable	6,952	-	Interest Expense	(2,423)
Bonds payable	24,000	25,000	Net Income from continuing operations	
Less: Discount on bonds payable	(1,800)	(2,000)	before taxes	\$ 15,776
Common Stock	34,000	32,000	Less: Income tax expense	(5,521)
Additional paid-in capital	18,800	16,800	<b>Net Income</b>	<b>\$ 10,254</b>
Retained earnings	9,254	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 104,728</b>	<b>\$ 88,800</b>		

Figure 27 ABC Enterprises Inc. – leveraged acquisition impact on balance sheet & income statement

**ABC Enterprises Inc. – Impact of a Leveraged Acquisition on Consolidated Financial Statements**

<b>ABC Enterprises, Inc.</b> <b>Direct Statement of Cash Flows</b> Proforma For the year ended December 31, 2001		<b>ABC Enterprises, Inc.</b> <b>Indirect Statement of Cash Flows</b> Proforma For the year ended December 31, 2000	
Operating activities		Operating activities:	
Cash collections from sales and accounts receivables	37,500	<b>Net Income</b>	10,254
Cash paid to suppliers	(14,500)	Noncash charges to noncurrent accounts:	
Cash paid for miscellaneous expenses	(8,750)	Depreciation of machinery	1,000
Cash paid for interest	(2,223)	Depreciation of building	805
Cash paid for income taxes	(4,750)	Amortization of transaction costs	18
Cash paid for building operating expenses	(346)	Amortization of loan points	7
Interest earnings on cash	474	Amortization of patent	500
<b>Net cash provided (used) by operating activities</b>	<b>\$ 7,405</b>	Loss on sale of machinery	100
Investing Activities		Decrease in discount on bonds payable	200
Purchase of machinery	(2,500)	Changes in current noncash accounts:	
Sale of Machinery	1,400	Increase in net accounts receivable	(3,000)
Purchase of R&D facility	(1,760)	Increase in inventory	(4,000)
Transaction costs	(176)	Decrease in accounts payable	500
Loan Points	(70)	Increase in accrued payable and taxes payable	21
Improvements	(1,125)	Decrease in prepaid insurance	1,000
<b>Net cash provided (used) by investing activities</b>	<b>(4,231)</b>	<b>Net Cash provided(used) by operating activities</b>	<b>\$ 7,405</b>
Financing Activities		<b>ABC Enterprises, Inc.</b> <b>Statement of Retained Earnings</b> For the year ended December 31, 2000	
Cash dividends	(1,000)	<b>Beginning retained earnings balance</b>	6000
Principal payment on outstanding bond payable	(1,000)	Plus: Net Income	10254.1469
Principal payment on outstanding note payable	(88)	Less: Cash dividends	-3000
<b>Net cash provided (used) by financing activities</b>	<b>(2,088)</b>	Stock dividends	-4000 -7000
Net increase (decrease) in cash balance	<b>\$ 1,086</b>	<b>Ending retained earnings balance</b>	<b>\$ 9,254</b>
Beginning cash balance	12,000		
Ending cash balance	<b>\$ 13,086</b>		

**Figure 28** ABC Enterprises Inc. – leveraged acquisition impact on direct & indirect statement of cash flows

**Leveraged Acquisition – Project Specific Cash Effects:**

<b>Project Specific Net Present Value:</b>	
Net sales price in year 10 assumed at 5%	
cap of 2011 NNN market rents:	10.0%
10 Year treasuries	4.6%
ABC Corp risk premium	1.5%
ABC before tax cost of debt	6.1%
ABC after tax cost of debt	4.0%

Acq cost	8,800
+ Improvements	1,125
+ Trans costs	176
+ Loan points	70
<b>Cost basis</b>	<b>10,171</b>
- Acc depreciation	(2,048)
- Acc cost amort	(176)
<b>Adjusted tax basis:</b>	<b>7,947</b>

Net sales price	15,180
Less comm @ 3%	(455)
Less adjusted basis	(7,947)
<b>Taxable gain on sale</b>	<b>6,778</b>
<b>Taxes due</b>	<b>2,372</b>
Net sales price	15,180
Less OLB	(5,948)
Less taxes due	(2,372)
<b>Net sales proceeds</b>	<b>6,860</b>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>PROJECT SPECIFIC CASH EFFECTS</b>										
Equity	(1,760)									
Transaction costs	(176)									
Improvements	(1,125)									
Loan points	(70)									
Debt service	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Net sales proceeds										6,860
<b>Before-Tax Cash Occupancy Costs</b>	<b>(3,988)</b>	<b>(867)</b>	<b>(878)</b>	<b>(889)</b>	<b>(900)</b>	<b>(912)</b>	<b>(924)</b>	<b>(937)</b>	<b>(949)</b>	<b>5,898</b>
<b>Before tax NPV @ 6.1%</b>	<b>(\$5,762)</b>									
Tax shield @ 35%	201	205	209	213	216	221	225	229	234	(2,134)
<b>After-Tax Cash Occupancy Costs</b>	<b>(3,787)</b>	<b>(662)</b>	<b>(669)</b>	<b>(676)</b>	<b>(683)</b>	<b>(691)</b>	<b>(699)</b>	<b>(707)</b>	<b>(715)</b>	<b>3,764</b>
<b>After-tax NPV @ 4.0%</b>	<b>(\$5,542)</b>									
<b>INCREMENTAL TAX EFFECTS</b>										
Schedule of tax deductions:										
Interest expense	423	418	412	406	400	393	386	378	370	361
Operating expenses	346	356	367	378	389	401	413	426	438	451
Depreciation Building	176	176	176	176	176	176	176	176	176	176
TI's	29	29	29	29	29	29	29	29	29	29
Cost Amortization Loan Points	7	7	7	7	7	7	7	7	7	7
Transaction Costs @ 3%	18	18	18	18	18	18	18	18	18	18
Taxable Gain on Sale										(6,778)
<b>Incr Impact on Taxable Income</b>	<b>575</b>	<b>585</b>	<b>596</b>	<b>607</b>	<b>618</b>	<b>630</b>	<b>642</b>	<b>655</b>	<b>667</b>	<b>(6,097)</b>
Tax shield @ 35%	201	205	209	213	216	221	225	229	234	(2,134)

Figure 29 Leveraged acquisition – project specific cash effects

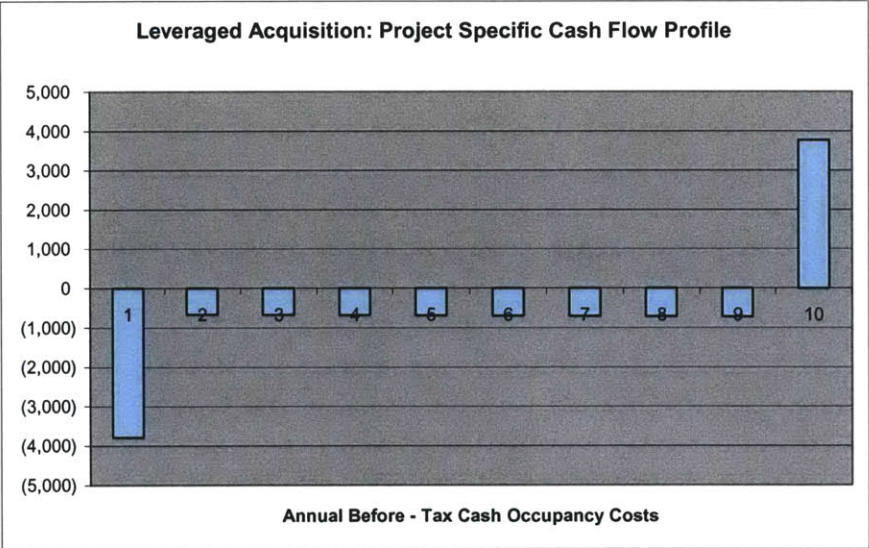


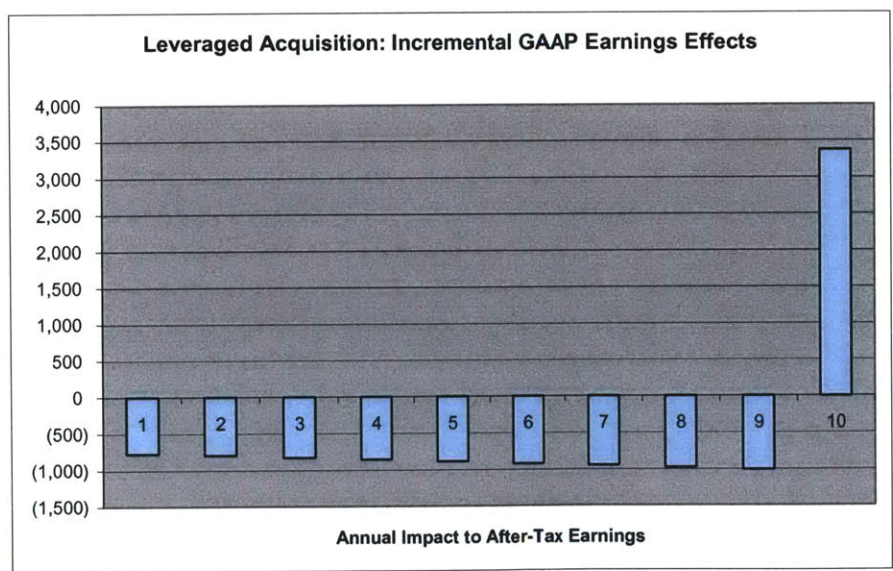
Figure 30 Leveraged acquisition – project specific cash effects

**Leveraged Acquisition – Incremental Impact to GAAP Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP EARNINGS/INCOME EFFECTS</b>										
Interest expense	(423)	(418)	(412)	(406)	(400)	(393)	(386)	(378)	(370)	(361)
Operating expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Depreciation	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)	(176)
Cost Amortization										
Building	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)
TI's	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Loan Points	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
Transaction Costs @ 3%	(183)	(220)	(260)	(301)	(343)	(385)	(427)	(470)	(514)	(558)
Foregone interest earnings										6,778
Gain on Sale										
<b>Incr Impact to Before-Tax Earnings</b>	<b>(1,182)</b>	<b>(1,223)</b>	<b>(1,269)</b>	<b>(1,315)</b>	<b>(1,361)</b>	<b>(1,408)</b>	<b>(1,455)</b>	<b>(1,504)</b>	<b>(1,551)</b>	<b>5,178</b>
Provision for taxes 35%	414	428	444	460	476	493	509	526	543	(1,812)
<b>Incr Impact to After-Tax Earnings</b>	<b>(768)</b>	<b>(795)</b>	<b>(825)</b>	<b>(855)</b>	<b>(885)</b>	<b>(915)</b>	<b>(946)</b>	<b>(977)</b>	<b>(1,008)</b>	<b>3,366</b>

Check Year 2001 numbers:	Without real estate Net Income '01 =	\$ 11,023	→	Difference	\$ 768	i.e. This is the incremental earnings impact of financing real estate with a leveraged acq.
	With real estate Net Income '01 =	\$ 10,254				

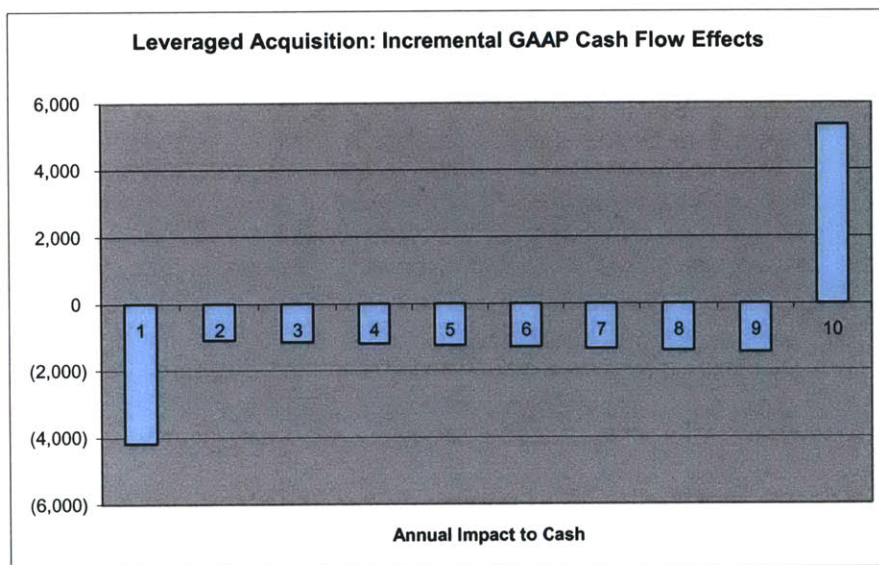


**Discussion:**  
 The incremental GAAP earnings effects of leveraged acquisition follow the profile of direct corporate funding. The only difference between the two profiles being driven by the interest expense and other costs associated with the debt financing. This difference is however largely offset by the substantial foregone interest earnings associated with direct corporate funding.

**Figure 31** Leveraged acquisition – incremental tax & GAAP earnings/income effects

**Leveraged Acquisition – Incremental Impact to GAAP Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP CASH FLOW EFFECTS</b>										
<b>Operating activities:</b>										
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Foregone interest earnings:	(183)	(220)	(260)	(301)	(343)	(385)	(427)	(470)	(514)	(558)
Debt service	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)	(511)
<b>Investing activities:</b>										
Acquisition cost	(1,760)									
Transaction costs	(176)									
Improvements	(1,125)									
Loan Points	(70)									
Sale proceeds										6,860
<b>Incremental Impact to Cash</b>	<b>(4,172)</b>	(1,087)	(1,138)	(1,190)	(1,243)	(1,296)	(1,351)	(1,407)	(1,463)	5,340
Check Year 2001 numbers:    Without real estate Ending Cash Balance '01 = <b>\$17,258</b> With real estate Ending Cash Balance '01 = <b>\$ 13,086</b> <b>Difference</b> <b>\$4,172</b> i.e. This is the incremental cash impact of financing real estate with a leveraged acq.										



**Figure 32** Leveraged acquisition - incremental GAAP cash flow effects

**Discussion:**  
 The incremental GAAP cash effects of leveraged acquisition also follow the basic profile of direct corporate funding. In this case however the up front capital commitment is reduced by the decreased \$1.7 million equity commitment that the company has to make.

**ABC Enterprises Inc. – Impact of Synthetic Leasing on Consolidated Financial Statements**

<b>ABC Enterprises, Inc. Balance Sheet</b> For Year Ended December 31, 2000 & 2001			<b>ABC Enterprises, Inc. Income Statement</b> Proforma For Year Ended December 31, 2001	
	<i>Proforma</i> 2001	2000		
<b>Assets</b>				
Cash	\$ 15,381	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	20,000	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	31,125	30,000	Depreciation expense(building)	(600)
Less: Accumulated depreciation	(1,913)	\$ (1,200)	Amortization of patent	(500)
Patent	7,500	8,000	Synthetic lease expense	(323)
<b>Total Assets</b>	<b>\$ 98,093</b>	<b>\$ 88,800</b>	Building operating expenses	(346)
<b>Liabilities &amp; Stockholders Equity</b>			Interest earnings on cash	575
Accounts payable	\$ 8,500	\$ 8,000	Depreciation expense TI's	(113)
Accrued payables	750	1,500	<b>Operating Profit</b>	<b>\$ 18,193</b>
Income Taxes payable	1,383	500	Nonoperating revenues and expenses:	
Dividends payable	3,000	1,000	Loss on sale of machinery	(100)
Bonds payable	24,000	25,000	Interest Expense	(2,000)
Less: Discount on bonds payable	(1,800)	(2,000)	Net Income from continuing operations before taxes	\$ 16,093
Common Stock	34,000	32,000	Less: Income tax expense	(5,633)
Additional paid-in capital	18,800	16,800	<b>Net Income</b>	<b>\$ 10,461</b>
Retained earnings	9,461	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 98,093</b>	<b>\$ 88,800</b>		

**Figure 33** ABC Enterprises Inc. – synthetic leasing impact on balance sheet & income statement



**ABC Enterprises Inc. – Impact of Synthetic Leasing on Consolidated Financial Statements**

<p><b>ABC Enterprises, Inc.</b>  <b>Direct Statement of Cash Flows</b>                  Proforma For the year ended December 31, 2001</p> <p>Operating activities</p> <table border="0"> <tr><td>Cash collections from sales and accounts receivables</td><td style="text-align: right;">37,500</td></tr> <tr><td>Cash paid to suppliers</td><td style="text-align: right;">(14,500)</td></tr> <tr><td>Cash paid for miscellaneous expenses</td><td style="text-align: right;">(8,750)</td></tr> <tr><td>Cash paid for interest</td><td style="text-align: right;">(1,800)</td></tr> <tr><td>Cash paid for income taxes</td><td style="text-align: right;">(4,750)</td></tr> <tr style="background-color: #e0e0e0;"><td>Cash paid for synthetic lease financing</td><td style="text-align: right;">(323)</td></tr> <tr style="background-color: #e0e0e0;"><td>Cash paid for building operating expenses</td><td style="text-align: right;">(346)</td></tr> <tr style="background-color: #e0e0e0;"><td>Interest earnings on cash</td><td style="text-align: right;">575</td></tr> <tr><td><b>Net cash provided (used) by operating activities</b></td><td style="text-align: right;"><b>\$ 7,606</b></td></tr> </table> <p>Investing Activities</p> <table border="0"> <tr><td>Purchase of machinery</td><td style="text-align: right;">(2,500)</td></tr> <tr><td>Sale of Machinery</td><td style="text-align: right;">1,400</td></tr> <tr style="background-color: #e0e0e0;"><td>Cash paid for TI's</td><td style="text-align: right;">(1,125)</td></tr> <tr><td><b>Net cash provided (used) by investing activities</b></td><td style="text-align: right;"><b>(2,225)</b></td></tr> </table> <p>Financing Activities</p> <table border="0"> <tr><td>Cash dividends</td><td style="text-align: right;">(1,000)</td></tr> <tr><td>Principal payment on outstanding note payable</td><td style="text-align: right;">(1,000)</td></tr> <tr><td><b>Net cash provided (used) by financing activities</b></td><td style="text-align: right;"><b>(2,000)</b></td></tr> </table> <table border="0"> <tr><td>Net increase (decrease) in cash balance</td><td style="text-align: right;"><b>\$ 3,381</b></td></tr> <tr><td>Beginning cash balance</td><td style="text-align: right;">12,000</td></tr> <tr><td>Ending cash balance</td><td style="text-align: right;"><b>\$ 15,381</b></td></tr> </table>	Cash collections from sales and accounts receivables	37,500	Cash paid to suppliers	(14,500)	Cash paid for miscellaneous expenses	(8,750)	Cash paid for interest	(1,800)	Cash paid for income taxes	(4,750)	Cash paid for synthetic lease financing	(323)	Cash paid for building operating expenses	(346)	Interest earnings on cash	575	<b>Net cash provided (used) by operating activities</b>	<b>\$ 7,606</b>	Purchase of machinery	(2,500)	Sale of Machinery	1,400	Cash paid for TI's	(1,125)	<b>Net cash provided (used) by investing activities</b>	<b>(2,225)</b>	Cash dividends	(1,000)	Principal payment on outstanding note payable	(1,000)	<b>Net cash provided (used) by financing activities</b>	<b>(2,000)</b>	Net increase (decrease) in cash balance	<b>\$ 3,381</b>	Beginning cash balance	12,000	Ending cash balance	<b>\$ 15,381</b>	<p><b>ABC Enterprises, Inc.</b>  <b>Indirect Statement of Cash Flows</b>                  Proforma For the year ended December 31, 2000</p> <p>Operating activities:</p> <table border="0"> <tr><td><b>Net Income</b></td><td style="text-align: right;">10,461</td></tr> <tr><td>Noncash charges to noncurrent accounts:</td><td></td></tr> <tr><td>    Depreciation of machinery</td><td style="text-align: right;">1,000</td></tr> <tr><td>    Depreciation of building &amp; TI's</td><td style="text-align: right;">713</td></tr> <tr><td>    Amortization of patent</td><td style="text-align: right;">500</td></tr> <tr><td>    Loss on sale of machinery</td><td style="text-align: right;">100</td></tr> <tr><td>    Decrease in discount on bonds payable</td><td style="text-align: right;">200</td></tr> <tr><td>Changes in current noncash accounts:</td><td></td></tr> <tr><td>    Increase in net accounts receivable</td><td style="text-align: right;">(3,000)</td></tr> <tr><td>    Increase in inventory</td><td style="text-align: right;">(4,000)</td></tr> <tr><td>    Decrease in accounts payable</td><td style="text-align: right;">500</td></tr> <tr><td>    Increase in accrued payable and taxes payable</td><td style="text-align: right;">133</td></tr> <tr><td>    Decrease in prepaid insurance</td><td style="text-align: right;">1,000</td></tr> <tr><td><b>Net Cash provided(used) by operating activities</b></td><td style="text-align: right;"><b>\$ 7,606</b></td></tr> </table> <p><b>ABC Enterprises, Inc.</b>  <b>Statement of Retained Earnings</b>                  For the year ended December 31, 2000</p> <table border="0"> <tr><td><b>Beginning retained earnings balance</b></td><td style="text-align: right;">6000</td></tr> <tr><td>Plus: Net Income</td><td style="text-align: right;">10461</td></tr> <tr><td>Less: Cash dividends</td><td style="text-align: right;">-3000</td></tr> <tr><td>    Stock dividends</td><td style="text-align: right;">-4000</td></tr> <tr><td><b>Ending retained earnings balance</b></td><td style="text-align: right;"><b>\$ 9,461</b></td></tr> </table>	<b>Net Income</b>	10,461	Noncash charges to noncurrent accounts:		Depreciation of machinery	1,000	Depreciation of building & TI's	713	Amortization of patent	500	Loss on sale of machinery	100	Decrease in discount on bonds payable	200	Changes in current noncash accounts:		Increase in net accounts receivable	(3,000)	Increase in inventory	(4,000)	Decrease in accounts payable	500	Increase in accrued payable and taxes payable	133	Decrease in prepaid insurance	1,000	<b>Net Cash provided(used) by operating activities</b>	<b>\$ 7,606</b>	<b>Beginning retained earnings balance</b>	6000	Plus: Net Income	10461	Less: Cash dividends	-3000	Stock dividends	-4000	<b>Ending retained earnings balance</b>	<b>\$ 9,461</b>
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<b>Ending retained earnings balance</b>	<b>\$ 9,461</b>																																																																												

**Figure 34** ABC Enterprises Inc. – synthetic leasing impact on direct & indirect statement of cash flows

### Synthetic Leasing – Project Specific Cash Effects:

Project Specific Net Present Value:	
Net sales price in year 10 assumed at 10% cap of 2011 NNN market rents:	10.0%
10 Year treasuries	4.6%
ABC Corp risk premium	1.5%
ABC before tax cost of debt	6.1%
ABC after tax cost of debt	4.0%

Acq cost	8,800
+ Improvements	1,125
+ Trans costs	440
<b>Cost basis</b>	<b>10,365</b>
- Acc depreciation	(2,048)
<b>Adjusted tax basis:</b>	<b>8,317</b>

Net sales price	15,180
Less comm @ 3%	(455)
Less adjusted basis	(8,317)
<b>Taxable gain on sale</b>	<b>6,408</b>
<b>Taxes due</b>	<b>2,243</b>
Net sales price	15,180
Less financing	(8,800)
Less taxes due	(2,243)
<b>Net sales proceeds</b>	<b>4,137</b>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>PROJECT SPECIFIC CASH EFFECTS</b>										
Improvements	(1,125)									
Synthetic financing interest expense	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Net sales proceeds										4,137
<b>Before-Tax Cash Occupancy Costs</b>	<b>(1,794)</b>	<b>(679)</b>	<b>(690)</b>	<b>(701)</b>	<b>(712)</b>	<b>(724)</b>	<b>(736)</b>	<b>(749)</b>	<b>(761)</b>	<b>3,363</b>
<b>Before tax NPV @ 6.1%</b>	<b>(\$4,004)</b>									
Tax shield @ 35%	306	309	313	317	321	325	329	334	338	(1,900)
<b>After-Tax Cash Occupancy Costs</b>	<b>(1,488)</b>	<b>(370)</b>	<b>(377)</b>	<b>(384)</b>	<b>(391)</b>	<b>(399)</b>	<b>(407)</b>	<b>(415)</b>	<b>(423)</b>	<b>1,463</b>
<b>After-tax NPV @ 4.0%</b>	<b>(\$2,998)</b>									
<b>INCREMENTAL TAX EFFECTS</b>										
Schedule of tax deductions:										
Interest expense	323	323	323	323	323	323	323	323	323	323
Operating expenses	346	356	367	378	389	401	413	426	438	451
Depreciation										
Building	176	176	176	176	176	176	176	176	176	176
TI's	29	29	29	29	29	29	29	29	29	29
Taxable Gain on Sale										(6,408)
<b>Incr Impact on Taxable Income</b>	<b>874</b>	<b>884</b>	<b>895</b>	<b>906</b>	<b>917</b>	<b>929</b>	<b>941</b>	<b>954</b>	<b>966</b>	<b>(5,429)</b>
Tax shield @ 35%	306	309	313	317	321	325	329	334	338	(1,900)

Figure 35 Synthetic leasing – project specific cash effects

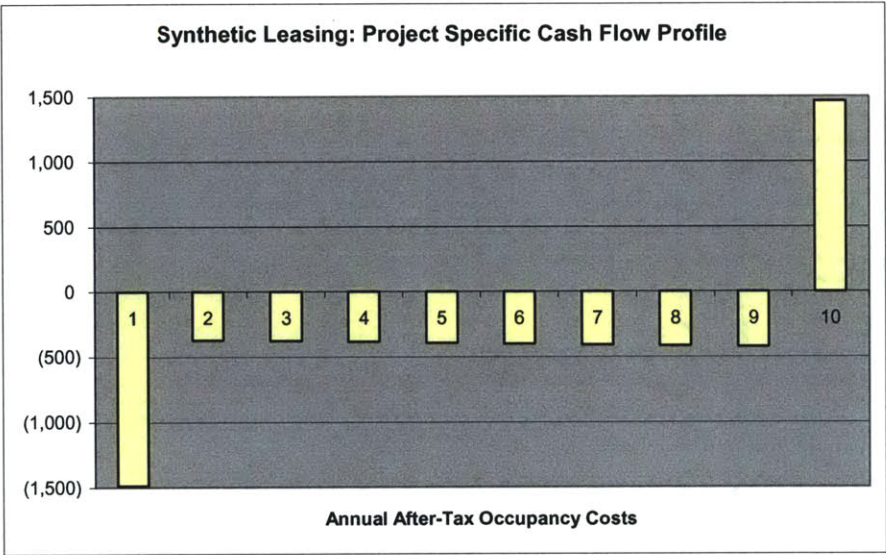


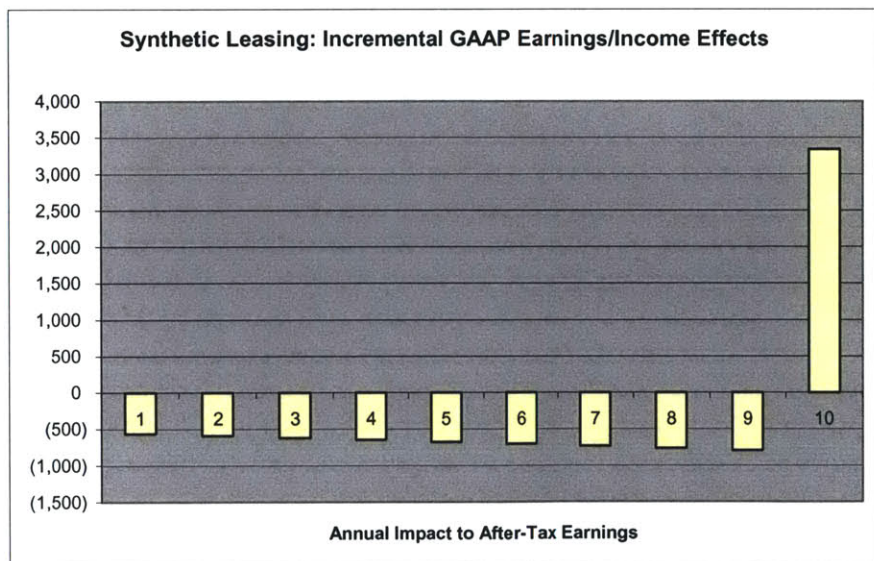
Figure 36 Synthetic leasing – project specific cash effects

**Synthetic Leasing – Incremental Impact to GAAP Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP EARNINGS/INCOME EFFECTS</b>										
Interest expense	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)
Operating expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Depreciation TI's	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)
Foregone interest earnings	(83)	(114)	(146)	(178)	(211)	(244)	(278)	(312)	(347)	(383)
Gain on sale										6,408
<b>Incr Impact to Before-Tax Earnings</b>	<b>(864)</b>	<b>(906)</b>	<b>(948)</b>	<b>(992)</b>	<b>(1,035)</b>	<b>(1,081)</b>	<b>(1,127)</b>	<b>(1,174)</b>	<b>(1,221)</b>	<b>5,138</b>
Provision for taxes 35%	303	317	332	347	362	378	394	411	427	(1,798)
<b>Incr Impact to After-Tax Earnings</b>	<b>(562)</b>	<b>(589)</b>	<b>(616)</b>	<b>(645)</b>	<b>(673)</b>	<b>(703)</b>	<b>(732)</b>	<b>(763)</b>	<b>(794)</b>	<b>3,340</b>

Check Year 2001 numbers:	Without real estate Net Income '01 =	\$11,023	Difference	\$562	i.e. This is the incremental earnings impact of financing real estate with a synthetic lease
	With real estate Net Income '01 =	\$ 10,461			



**Discussion:**  
 The incremental GAAP income effects associated with the synthetic leasing alternative clearly illustrate why this alternative is so appealing from a financial reporting point of view. The impact to earnings over the first nine years is less than any other form of financing and yet the potential boost to earnings resulting from the sale of the asset is slightly more than the other traditional forms of ownership. The reason: this is the most highly levered ownership format.

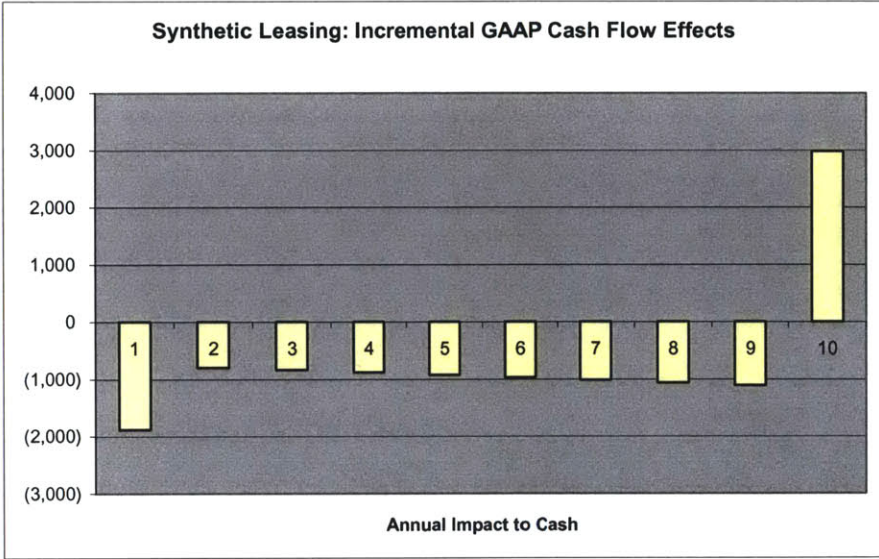
**Figure 37** Synthetic leasing – incremental tax & GAAP earnings/income effects

**Synthetic Leasing – Incremental Impact to Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP CASH FLOW EFFECTS</b>										
<b>Operating activities:</b>										
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Foregone interest earnings:	(83)	(114)	(146)	(178)	(211)	(244)	(278)	(312)	(347)	(383)
Interest expense	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(323)
<b>Investing activities:</b>										
Improvements	(1,125)									
Sales proceeds										4,137
<b>Incremental Impact to Cash</b>	<b>(1,877)</b>	(793)	(836)	(879)	(923)	(968)	(1,014)	(1,062)	(1,109)	2,980

Check Year 2001 numbers:	Without real estate Ending Cash Balance '01 =	\$17,258	→	Difference	\$1,877	i.e. This is the incremental cash impact of financing real estate with a synthetic lease
	With real estate Ending Cash Balance '01 =	\$ 15,381				



**Discussion:**  
 The cash flow profile of the synthetic leasing alternative is equally appealing. Since in this case the transaction costs of structuring the deal are assumed to be included in the amount financed, the up front capital commitment is mainly limited to the cost of improvements. These relatively insignificant up front costs are then supported at the back end with significant upside potential, assuming appreciation in the residual value of the asset. Again, this profile is reflective of the highly levered (97%) nature of the synthetic lease alternative.

**Figure 38** Synthetic leasing - incremental GAAP cash flow effects

**ABC Enterprises Inc. – Impact of a Bond Net Lease on Consolidated Financial Statements**

<b>ABC Enterprises, Inc. Balance Sheet</b> For Year Ended December 31, 2000 & 2001			<b>ABC Enterprises, Inc. Income Statement</b> Proforma For Year Ended December 31, 2001	
	<i>Proforma</i> 2001	2000		
<b>Assets</b>				
Cash	\$ 14,631	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	20,000	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	31,125	30,000	Depreciation expense(building)	(600)
Less: Accumulated depreciation	(1,913)	\$ (1,200)	Amortization of patent	(500)
Patent	7,500	8,000	Bond net lease expense	(1,115)
<b>Total Assets</b>	<b>\$ 97,344</b>	<b>\$ 88,800</b>	Building operating expenses	(346)
<b>Liabilities &amp; Stockholders Equity</b>			Interest earnings on cash	542
Accounts payable	\$ 8,500	\$ 8,000	Depreciation TI's	(113)
Accrued payables	750	1,500	<b>Operating Profit</b>	<b>\$ 17,369</b>
Income Taxes payable	1,094	500	Nonoperating revenues and expenses:	
Dividends payable	3,000	1,000	Loss on sale of machinery	(100)
Bonds payable	24,000	25,000	Interest Expense	(2,000)
Less: Discount on bonds payable	(1,800)	(2,000)	Net Income from continuing operations before taxes	\$ 15,269
Common Stock	34,000	32,000	Less: Income tax expense	(5,344)
Additional paid-in capital	18,800	16,800	<b>Net Income</b>	<b>\$ 9,925</b>
Retained earnings	8,925	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 97,269</b>	<b>\$ 88,800</b>		

**Figure 39** ABC Enterprises Inc. – bond net lease impact on balance sheet & income statement

### ABC Enterprises Inc. – Impact of a Bond Net Lease on Consolidated Financial Statements

ABC Enterprises, Inc. Direct Statement of Cash Flows Proforma For the year ended December 31, 2001	ABC Enterprises, Inc. Indirect Statement of Cash Flows Proforma For the year ended December 31, 2000
Operating activities	Operating activities:
Cash collections from sales and accounts receivables	<b>Net Income</b>
Cash paid to suppliers	9,925
Cash paid for miscellaneous expenses	Noncash charges to noncurrent accounts:
Cash paid for interest	Depreciation of machinery
Cash paid for income taxes	1,000
Cash paid for bond net lease obligation	Depreciation of building & TI's
Cash paid for building operating expenses	713
Interest earnings on cash	Amortization of patent
542	500
<b>Net cash provided (used) by operating activities</b>	Loss on sale of machinery
<b>\$ 6,856</b>	100
Investing Activities	Decrease in discount on bonds payable
Purchase of machinery	200
Sale of Machinery	<b>Increase in deferred rent liability</b>
Cash paid for tenant improvements	75
<b>Net cash provided (used) by investing activities</b>	Changes in current noncash accounts:
<b>(2,225)</b>	Increase in net accounts receivable
Financing Activities	(3,000)
Cash dividends	Increase in inventory
Principal payment on outstanding note payable	(4,000)
<b>Net cash provided (used) by financing activities</b>	Decrease in accounts payable
<b>(2,000)</b>	500
Net increase (decrease) in cash balance	Increase in accrued payable and taxes payable
2,631	(156)
Beginning cash balance	Decrease in prepaid insurance
12,000	1,000
Ending cash balance	<b>Net Cash provided(used) by operating activities</b>
<b>\$ 14,631</b>	<b>\$ 6,856</b>
	<b>ABC Enterprises, Inc.</b>
	<b>Statement of Retained Earnings</b>
	For the year ended December 31, 2000
	<b>Beginning retained earnings balance</b>
	6000
	Plus: Net Income
	9925
	Less: Cash dividends
	-3000
	Stock dividends
	-4000
	-7000
	<b>Ending retained earnings balance</b>
	<b>\$ 8,925</b>

Figure 40 ABC Enterprises Inc. – bond net lease impact on direct & indirect statement of cash flows

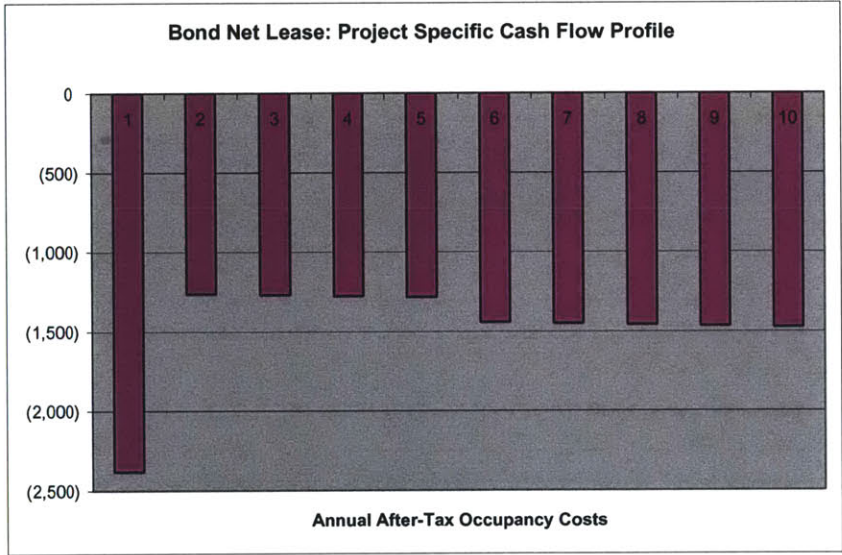
### Bond Net Lease – Project Specific Cash Effects:

Project Specific Net Present Value:	
Net sales price in year 10 assumed at 10%	
cap of 2011 NNN market rents:	10.0%
10 Year treasuries	4.6%
ABC Corp risk premium	1.5%
ABC before tax cost of debt	6.1%
ABC after tax cost of debt	4.0%

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>PROJECT SPECIFIC CASH EFFECTS</b>										
Improvements	(1,125)									
Lease payments	(1,040)	(1,040)	(1,040)	(1,040)	(1,040)	(1,190)	(1,190)	(1,190)	(1,190)	(1,190)
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
<b>Before-Tax Cash Occupancy Costs</b>	<b>(2,511)</b>	<b>(1,396)</b>	<b>(1,407)</b>	<b>(1,418)</b>	<b>(1,429)</b>	<b>(1,591)</b>	<b>(1,603)</b>	<b>(1,616)</b>	<b>(1,628)</b>	<b>(1,641)</b>
<b>Before tax NPV @ 6.1%</b>	<b>(\$12,010)</b>									
Tax shield @ 35%	131	135	139	142	146	150	155	159	163	168
<b>After-Tax Cash Occupancy Costs</b>	<b>(2,380)</b>	<b>(1,261)</b>	<b>(1,268)</b>	<b>(1,276)</b>	<b>(1,283)</b>	<b>(1,441)</b>	<b>(1,448)</b>	<b>(1,457)</b>	<b>(1,465)</b>	<b>(1,473)</b>
<b>After-tax NPV @ 4.0%</b>	<b>(\$12,075)</b>									
<b>INCREMENTAL TAX EFFECTS</b>										
Schedule of tax deductions:										
Lease payments	1,040	1,040	1,040	1,040	1,040	1,190	1,190	1,190	1,190	1,190
Operating expenses	346	356	367	378	389	401	413	426	438	451
Depreciation TI's	29	29	29	29	29	29	29	29	29	29
<b>Incr Impact on Taxable Income</b>	<b>375</b>	<b>385</b>	<b>396</b>	<b>407</b>	<b>418</b>	<b>430</b>	<b>442</b>	<b>455</b>	<b>467</b>	<b>480</b>
Tax shield @ 35%	131	135	139	142	146	150	155	159	163	168

Figure 41 Bond net lease – project specific cash effects





**Figure 42** Bond net lease – project specific cash effects

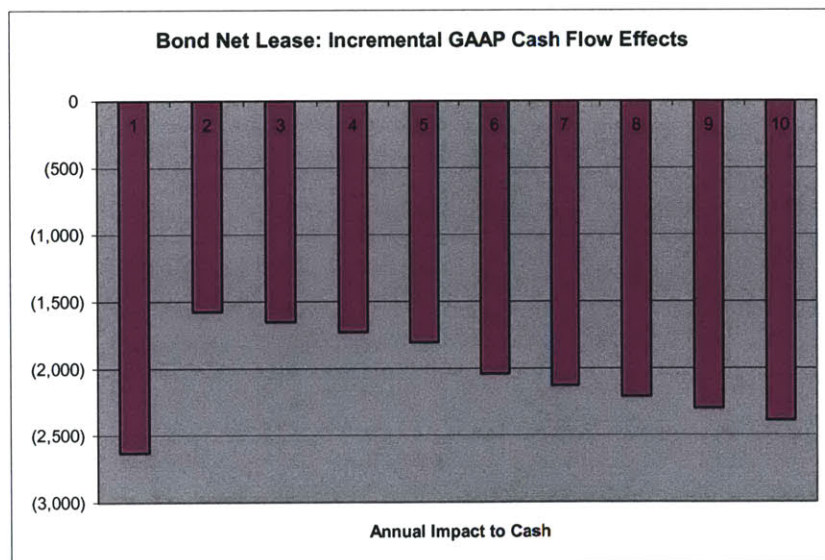


**Bond Net Lease – Incremental Impact to GAAP Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL GAAP CASH FLOW EFFECTS</b>										
<b>Operating activities:</b>										
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Foregone interest earnings	(116)	(180)	(244)	(310)	(375)	(449)	(522)	(597)	(672)	(747)
Lease payments	(1,040)	(1,040)	(1,040)	(1,040)	(1,040)	(1,190)	(1,190)	(1,190)	(1,190)	(1,190)
<b>Investing activities:</b>										
Improvements	(1,125)									
<b>Incremental Impact to Cash</b>	<b>(2,627)</b>	(1,576)	(1,651)	(1,728)	(1,804)	(2,040)	(2,125)	(2,213)	(2,300)	(2,388)

Check Year 2001 numbers:	Without real estate Ending Cash Balance '01 =	\$17,258	→	<b>Difference</b> \$2,627	i.e. This is the incremental cash impact of financing real estate with a bond net lease
	With real estate Ending Cash Balance '01 =	\$ 14,631			



**Discussion:**  
 The incremental GAAP cash flow impacts follow very much the same profile as the earnings impacts, except however in this case the upfront capital commitment required for tenant improvements can be clearly seen.

**Figure 44** Bond net lease - incremental GAAP cash flow effects

**ABC Enterprises Inc. – Impact of a Traditional Operating Lease on Consolidated Financial Statements**

<b>ABC Enterprises, Inc. Balance Sheet</b> For Year Ended December 31, 2000 & 2001			<b>ABC Enterprises, Inc. Income Statement</b> Proforma For Year Ended December 31, 2001	
	<i>Proforma</i> 2001	2000		
<b>Assets</b>				
Cash	\$ 14,631	\$ 12,000	Sales	\$ 42,000
Accounts Receivable	13,700	10,000	Cost of goods sold	(11,000)
Less: Allowance for doubtful accounts	(1,700)	(1,000)	Gross Profit	\$ 31,000
Inventory	7,000	\$ 3,000	Operating expenses:	
Prepaid Insurance	1,000	2,000	Miscellaneous expenses	\$ (8,000)
Land	20,000	20,000	Insurance expense	(1,000)
Machinery	8,500	\$ 8,000	Bad debt expense	(1,500)
Less: Accumulated depreciation	(2,500)	(2,000)	Depreciation expense(machinery)	(1,000)
Buildings	31,125	30,000	Depreciation expense(building)	(600)
Less: Accumulated depreciation	(1,913)	\$ (1,200)	Amortization of patent	(500)
Patent	7,500	8,000	Bond net lease expense	(1,115)
<b>Total Assets</b>	<b>\$ 97,344</b>	<b>\$ 88,800</b>	Building operating expenses	(346)
<b>Liabilities &amp; Stockholders Equity</b>			Interest earnings on cash	542
Accounts payable	\$ 8,500	\$ 8,000	Depreciation TI's	(113)
Accrued payables	750	1,500	<b>Operating Profit</b>	<b>\$ 17,369</b>
Income Taxes payable	1,094	500	Nonoperating revenues and expenses:	
Dividends payable	3,000	1,000	Loss on sale of machinery	(100)
Bonds payable	24,000	25,000	Interest Expense	(2,000)
Less: Discount on bonds payable	(1,800)	(2,000)	Net Income from continuing operations before taxes	\$ 15,269
Common Stock	34,000	32,000	Less: Income tax expense	(5,344)
Additional paid-in capital	18,800	16,800	<b>Net Income</b>	<b>\$ 9,925</b>
Retained earnings	8,925	6,000		
<b>Total Liabilities and stockholders equity</b>	<b>\$ 97,269</b>	<b>\$ 88,800</b>		

**Figure 45** ABC Enterprises Inc. – traditional operating lease impact on balance sheet & income statement

**ABC Enterprises Inc. – Impact of a Traditional Operating Lease on Consolidated Financial Statements**

<b>ABC Enterprises, Inc.</b> <b>Direct Statement of Cash Flows</b> Proforma For the year ended December 31, 2001		<b>ABC Enterprises, Inc.</b> <b>Indirect Statement of Cash Flows</b> Proforma For the year ended December 31, 2000	
Operating activities Cash collections from sales and accounts receivables 37,500 Cash paid to suppliers (14,500) Cash paid for miscellaneous expenses (8,750) Cash paid for interest (1,800) Cash paid for income taxes (4,750) Cash paid for bond net lease obligation (1,040) Cash paid for building operating expenses (346) Interest earnings on cash 542 <b>Net cash provided (used) by operating activities \$ 6,856</b>		Operating activities: <b>Net Income</b> 9,925 Noncash charges to noncurrent accounts: Depreciation of machinery 1,000 Depreciation of building & TI's 713 Amortization of patent 500 Loss on sale of machinery 100 Decrease in discount on bonds payable 200 <b>Increase in deferred rent liability 75</b> Changes in current noncash accounts: Increase in net accounts receivable (3,000) Increase in inventory (4,000) Decrease in accounts payable 500 Increase in accrued payable and taxes payable (156) Decrease in prepaid insurance 1,000 <b>Net Cash provided(used) by operating activities \$ 6,856</b>	
Investing Activities Purchase of machinery (2,500) Sale of Machinery 1,400 <b>Cash paid for tenant improvements (1,125)</b> <b>Net cash provided (used) by investing activities (2,225)</b>		<b>ABC Enterprises, Inc.</b> <b>Statement of Retained Earnings</b> For the year ended December 31, 2000	
Financing Activities Cash dividends (1,000) Principal payment on outstanding note payable (1,000) <b>Net cash provided (used) by financing activities (2,000)</b> Net increase (decrease) in cash balance \$ 2,631 Beginning cash balance 12,000 <b>Ending cash balance \$ 14,631</b>		<b>Beginning retained earnings balance</b> 6000 Plus: Net Income 9925 Less: Cash dividends -3000 Stock dividends -4000 -7000 <b>Ending retained earnings balance \$ 8,925</b>	

**Figure 46** ABC Enterprises Inc. – traditional operating lease impact on direct & indirect statement of cash flows

**Traditional Operating Lease – Project Specific Cash Effects:**

<b>Project Specific Net Present Value:</b>	
Net sales price in year 10 assumed at 10%	
cap of 2011 NNN market rents:	10.0%
10 Year treasuries	4.6%
ABC Corp risk premium	1.5%
ABC before tax cost of debt	6.1%
ABC after tax cost of debt	4.0%

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>PROJECT SPECIFIC CASH EFFECTS</b>										
Improvements	(1,125)									
Lease payments	(1,150)	(1,150)	(1,150)	(1,150)	(1,150)	(1,320)	(1,320)	(1,320)	(1,320)	(1,320)
Operating Expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
<b>Before-Tax Cash Occupancy Costs</b>	<b>(2,621)</b>	<b>(1,506)</b>	<b>(1,517)</b>	<b>(1,528)</b>	<b>(1,539)</b>	<b>(1,721)</b>	<b>(1,733)</b>	<b>(1,746)</b>	<b>(1,758)</b>	<b>(1,771)</b>
<b>Before tax NPV @ 6.1%</b>	<b>(\$12,879)</b>									
Tax shield @ 35%	131	135	139	142	146	150	155	159	163	168
<b>After-Tax Cash Occupancy Costs</b>	<b>(2,490)</b>	<b>(1,371)</b>	<b>(1,378)</b>	<b>(1,386)</b>	<b>(1,393)</b>	<b>(1,571)</b>	<b>(1,578)</b>	<b>(1,587)</b>	<b>(1,595)</b>	<b>(1,603)</b>
<b>After-tax NPV @ 4.0%</b>	<b>(\$13,042)</b>									
<b>INCREMENTAL TAX EFFECTS</b>										
Schedule of tax deductions:										
Lease payments	1,150	1,150	1,150	1,150	1,150	1,320	1,320	1,320	1,320	1,320
Operating expenses	346	356	367	378	389	401	413	426	438	451
Depreciation TI's	29	29	29	29	29	29	29	29	29	29
<b>Incr Impact on Taxable Income</b>	<b>375</b>	<b>385</b>	<b>396</b>	<b>407</b>	<b>418</b>	<b>430</b>	<b>442</b>	<b>455</b>	<b>467</b>	<b>480</b>
Tax shield @ 35%	131	135	139	142	146	150	155	159	163	168

**Figure 47** Traditional operating lease – project specific cash effects

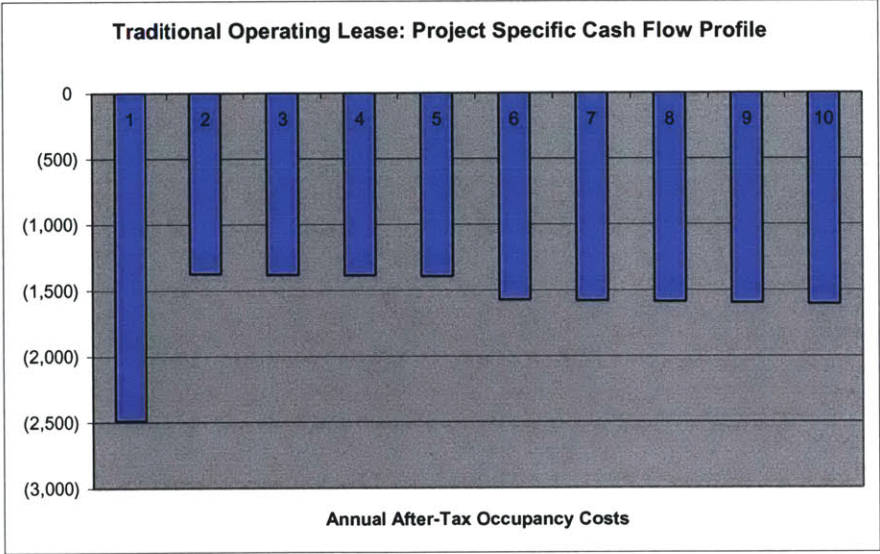


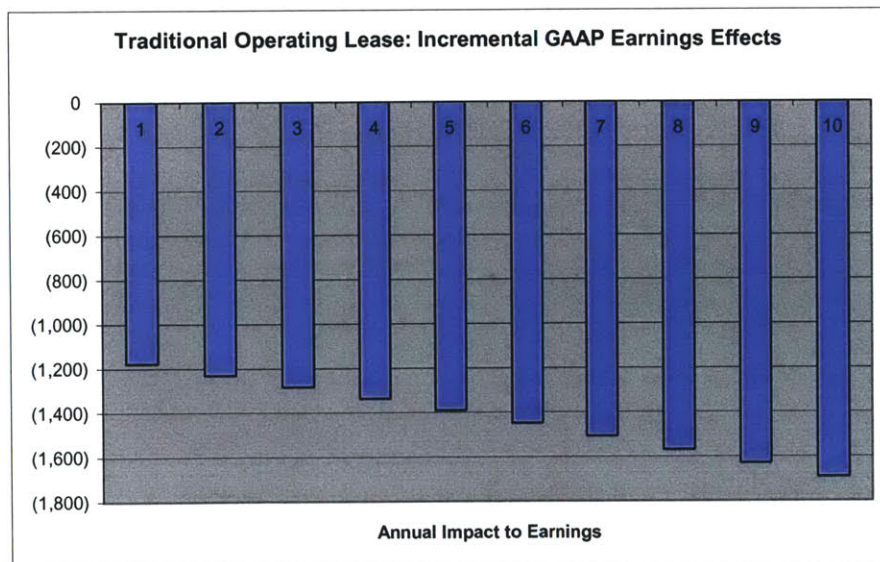
Figure 48 Traditional operating lease – project specific cash effects

**Traditional Operating Lease – Incremental Impact to GAAP Financial Statements:**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>INCREMENTAL EARNINGS/INCOME EFFECTS</b>										
Lease payments	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)	(1,235)
Operating expenses	(346)	(356)	(367)	(378)	(389)	(401)	(413)	(426)	(438)	(451)
Depreciation TI's	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)	(113)
Foregone interest earnings	(121)	(190)	(260)	(330)	(401)	(480)	(560)	(640)	(721)	(802)
<b>Incr Impact to Before-Tax Earnings</b>	<b>(1,814)</b>	<b>(1,893)</b>	<b>(1,974)</b>	<b>(2,055)</b>	<b>(2,137)</b>	<b>(2,228)</b>	<b>(2,320)</b>	<b>(2,413)</b>	<b>(2,506)</b>	<b>(2,601)</b>
Provision for taxes 35%	635	663	691	719	748	780	812	845	877	910
<b>Incr Impact to After-Tax Earnings</b>	<b>(1,179)</b>	<b>(1,231)</b>	<b>(1,283)</b>	<b>(1,336)</b>	<b>(1,389)</b>	<b>(1,448)</b>	<b>(1,508)</b>	<b>(1,569)</b>	<b>(1,629)</b>	<b>(1,690)</b>

Check Year 2001 numbers:	Without real estate Net Income '01 =	\$11,023	Difference	\$1,179	i.e. This is the incremental earnings impact of financing real estate with an operating lease
	With real estate Net Income '01 =	\$ 9,843			



**Discussion:**  
 The incremental GAAP earnings effects associated with the traditional operating lease follow almost exactly the same profile as the bond net lease, except in this case the impact is slightly greater as security for the lease agreement is not tied to the company's overall credit rating.

**Figure 49** Traditional operating lease – incremental tax & GAAP earnings/income effects





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## Chapter Conclusion:

From a financial reporting point of view, it is clear as to why synthetic leasing is such an attractive alternative. In terms of occupancy cost, earnings and cash flow impact, synthetic leasing and both forms of ownership outperform the traditional leasing alternatives. It should be emphasized however that this is very much a function of the fact that significant growth has been assumed in terms of the residual value of the underlying asset from a capital budgeting standpoint. The performance and impact of the ownership alternatives is very much governed by the reversion value assumed for the disposition of the asset in year ten. It follows that since occupancy costs and asset values can vary so dramatically depending on the fundamentals of the local real estate market, business units need to evaluate this cost impact not only in terms of financial reporting effects but also within the broader context of the operational and strategic impact of the asset.

The following matrix summarizes the findings of this chapter. Firstly, it outlines which alternatives are considered on-balance sheet or off-balance sheet. The following three drivers are then presented in the order as investigated the 'ABC Corp' analysis.

Each financing alternative is then ranked one to five in terms of its performance relative to the other alternatives (one being the optimal solution with regards to that specific driver). Considering the:

- **After-tax net present value cost** (project specific occupancy cost). The higher costs associated with leasing are clearly evident. In this case the corporation is basically paying a premium for the additional operational flexibility which is afforded through the more traditional forms of leasing. The apparent discount to direct corporate funding, leveraged acquisition and synthetic leasing is very much dependant on the assumed appreciation in the value of the underlying asset. In this, case synthetic leasing, which is basically a (97%) loan disguised as a lease, trumps all other forms of financing in terms of the NPV occupancy cost.
- **After-tax impact to GAAP earnings.** The three broad groups of financing alternatives are clear. Both forms of leasing have a greater impact to net income which increases over time. Synthetic leasing has the most insignificant impact on earnings over time with a

significant boost to earnings being realized in year ten. Both forms of ownership track the profile of the synthetic alternative very closely and result in a very slightly higher positive impact being realized in year ten.

- **After-tax impact to GAAP cash flow.** In this case the significant up front capital commitment required for both forms of ownership is clearly evident. The upfront

commitment is made with the hope that appreciation in the residual value of the asset will seen over time and result in a significant boost to cash from investment activities. With appreciation in the value of the underlying asset being assumed, synthetic leasing outperforms the other alternatives. The cash flow impact of ownership is again highly dependant on the appreciation assumed.

Decision Matrix		Basic spectrum of financing alternatives				
		OWN		LEASE		
		Own	Synthetics	Lease		
Quantitative Decision Drivers		Direct Corporate Funding	Leveraged Acquisition	Synthetic Lease	Bond Net Lease	Traditional Operating Lease
<b>Decision Drivers:</b>	<b>Motivation:</b>					
<b>On/Off Balance sheet</b>	Keep debt off the balance Sheet	On	On	Off	Off	Off
<b>After-Tax Net Present Value Cost</b>	Minimize occupancy costs	2	3	1	4	5
<b>After-Tax Impact to GAAP Earnings</b>	Satisfy capital markets	2	3	1	4	5
<b>After-Tax Impact to GAAP Cash Flow</b>	Maintain cash reserves to remain agile	3	2	1	4	5

Figure 51 Decision matrix – quantitative drivers

### QUALITATIVE DECISION DRIVERS

Financial implications are just one of many decision drivers that are considered in assessing the overall suitability and effectiveness of the specific contractual arrangement adopted in exercising control over real estate assets. The purpose of this section is to outline what appear to be the primary qualitative decision drivers:

- **Flexibility**
- **Strategic importance and control**
- **Allocation of capital**
- **Risk management**
- **Other considerations**

#### **Flexibility:**

The Gartner/MIT Research Consortium met in July 2000 to identify the issues, trends and themes that underscore the evolving workplace industry. A key long term trend which evolved from the discussion was the theme of “flexibility”: perhaps the greatest challenge in the workplace industry today is to provide a degree of flexibility to the constant changes in user needs and business operations. Real estate is an inherently

inflexible asset, yet corporate real estate managers increasingly need to find ways in which flexibility can be achieved. Facilities are generally acquired on relatively long term contracts; capital assets are amortized over three or more years. Yet, enterprises need to change, adjust and contract on a moment’s notice to remain competitive. Shorter planning horizons, increasing corporate experimentation and growth through mergers and acquisitions are but a few of the influences which have led to the need for more flexible resources.

Gibson (2000) suggests that there are numerous reasons why flexibility has become so important:

- Organizations are faced with an environment which is changing rapidly and which is increasingly difficult to predict.
- The way in which senior managers are dealing with this increasing uncertainty is by experimenting and setting up pilot projects.
- Organizations are constantly reinventing themselves.
- The trend for growth through merger and acquisition is posing new challenges for organizations.

- 
- Even at the most mundane level, corporate real estate managers must find ways to facilitate the less strategic changes.

From the point of the CRE manager, the physical, functional and financial aspects of a property are those over which they have control or influence. Gibson (2000) suggests one way in which corporate real estate managers can gain a greater insight into the problem is by recognizing that real estate is often considered from a variety of perspectives, as a:

- Physical asset: CRE managers are concerned with aspects of design including floorplate sizes, column placement and building services.
- Functional asset: CRE managers consider what activities can actually be undertaken inside a building.
- Financial asset. CRE managers examine the terms of contract and the ability to terminate those obligations.

Each of these perspectives in turn leads to a different source of flexibility and it is clear that flexibility is very much a multidimensional issue with different types of flexibility

required for different situations. The content of this discussion will however focus on the perspective of real estate as a financial asset.

It has been traditionally argued that financial flexibility was only possible through freehold ownership – it was maintained that only by owning the asset did a corporate occupier have total control over what could happen to the property, such as sell or sublet. In this context a lease was typically seen as having both financial and contractual constraints which impede overall flexibility. Contrary to this however, many corporate users would argue that a lease actually gives more flexibility in terms of operational commitments in that it affords easier disposition and essentially also means limiting the company's liability in terms of exposure to residual value of the asset. The case studies conducted as part of this investigation would certainly support the standing that corporate real estate managers regard leasing as more flexible to ownership –the primary reason being that in such a dynamic business context space needs are extremely volatile. Leasing gives the corporation the flexibility to meet this constantly changing need. Many felt that ownership often would end up in an over-

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commitment on behalf of the company. Furthermore, many also suggested that a comfortable level of “control”, as opposed to the flexibility needed, could be negotiated through the structuring of a lease agreement. This debate on financial flexibility has also recently included a number of financial re-engineering possibilities such as the total outsourcing of an organization’s real estate portfolio. The problem with much of the literature appears to be in the lack of differentiation between flexibility within a single building and flexibility across a property portfolio as a whole.

What is clear however, is that the physical, functional and financial flexibility as discussed above is only achievable at extra cost. For instance, establishing standardized office layouts throughout a large office building often means substantial investment in new furniture and equipment. Using serviced office accommodation has a much higher cost over a long-term period than renting an office on a standard lease. If the flexibility within the building is not required for the current or future organizational activities then the extra investment or cost will be unnecessary.

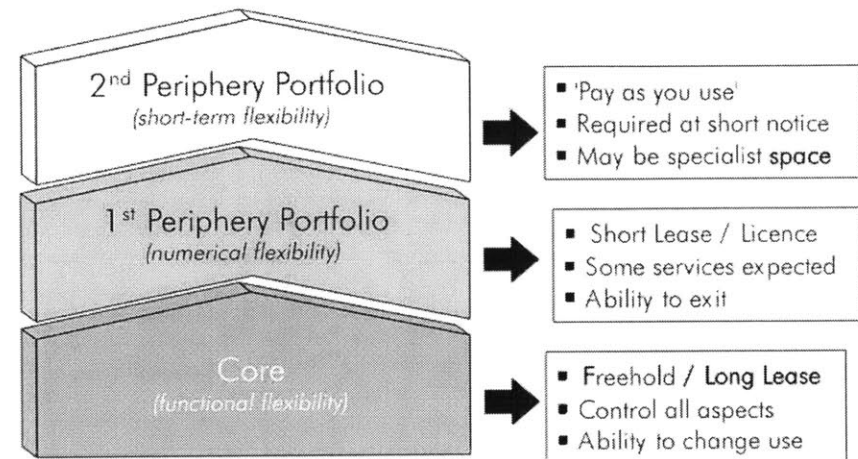
### **Strategic importance and control:**

The notion of flexibility tied very closely to the strategic importance of the asset being considered. i.e. from a strategic perspective corporate real estate managers must consider when flexibility is necessary and when is it non-essential. The strategic importance of an asset appears to establish the level of control that is desirable from the corporate real estate manager’s perspective. Referring back to our discussion of corporate real estate as a raw material, control in this context can be considered the degree to which the firm has the right, but not necessarily the obligation, to occupy space. This control can then be measured in terms of duration and is equal to the sum of commitment duration and the term of any options (Deeble, 1999).

Possibly the most appropriate way to look at the issue of strategic importance is on a portfolio-wide basis, considering what are an organization’s core and periphery real estate requirements. This will then provide the CRE manager with a firm base for working towards the elusive goal of flexible real estate. In this way, the strategic importance determines the comfortable degree of control which the company desires to

maintain over the asset. This will in turn establish certain parameters within which the CRE manager will have the objective of maximizing the company's flexibility to react to the often volatile economic environment.

Reference has been made in some sources (Gibson, 2000) to other resource literature. For instance in human resource management, the focus on core business and the delaying of organizations led to an examination of the employment contracts across the workforce. The concept of a core and peripheral workforce to underpin a business was developed to try and articulate where labor-force flexibility was needed (Institute of Personnel Management, 1986). This concept has been applied to an organization's corporate real estate portfolio in order to gain a greater understanding of how overall flexibility might be managed across a portfolio. Following this, Gibson & Lizieri (2000) developed a three-tiered approach to examining a corporate office portfolio in terms of what might be seen as core and periphery real estate requirements:



**Figure 52 “The core-periphery property portfolio” (Source: Gibson, 2000)**

At the centre of an organization's requirements would be the core portfolio. This is not intended to map onto core activities or core staff, but to reflect an assessment by the corporate real estate manager of buildings within the portfolio which are considered to be needed by the organization for the long term. This could include facilities which are strategically located (manufacturing facilities), landmark buildings which embody the history and culture of the organization (headquarters

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buildings) and space relating specifically to the organization's source of competitive advantage (research and development facilities). These are the buildings the organization would be willing to invest in but would also want a high degree of control to adapt them as the organization changes. The key flexibility issue would relate to functional flexibility, the ability to change the use of the building, and by implication some physical flexibility. Financial flexibility in terms of the ability to exit quickly is less important.

The first level of periphery property is that where 'numerical flexibility' is required. As the demand for products or services fluctuates over the business cycle, the organization will want to be able to service that demand in times of boom but to reduce the costs in times of recession. The key issue here is having some functional flexibility in order to allow for marginal growth within the building but more importantly the ability to exit the financial contract at particular points in time.

The second level of periphery portfolio relates to the requirement organizations have for very short-term space. Speed of entry and exit are paramount and therefore financial

flexibility is the most important. There are two types of space which appear to fall into this category: first, specialist spaces like training facilities which are used infrequently throughout the year by the organization. Secondly, there is a growing need for generic office space to house overflow activities on a short-term basis or entry into new markets prior to establishing a more permanent presence.

Although in practice there is no clear divide between the three levels, the model does provide a framework for examining the organization's property portfolio in a different way. The balance between the layers will be different for every company, depending on the sector and competitive situation. Gibson & Lizieri (2000) estimate 60 per cent core supported by 40 per cent peripheral.

A similar framework of analysis is suggested by Krzysko & Marciniak (2001). Through an examination of a Fortune 100 company portfolio with more than 10,000 properties, consisting of 50 million square feet, Krzysko & Marciniak (2001) showed that:



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- More than 9,000 properties (48%) are considered “specialized” in supporting business units whose real estate needs are stable. These properties were therefore owned.
  - Only 228 properties (less than 1%) are small and subject to variable business needs. These properties were therefore best structured as leases.
  - The remaining 979 properties (51%) are subject to changing internal corporate needs and widespread real estate industry investment. According to the CRE management they are not clear-cut lease-or-own decisions.

Krzysko & Marciniak (2001) found a similar distribution and trend across the real estate portfolios of numerous other Fortune 500 companies such as DaimlerChrysler, Xerox Corporation, Delphi Automotive, Ameritech Corporation and Square D. Unique, long-term assets were generally owned; generic spaces were typically leased.

### **Allocation of Capital:**

A debate has emerged as to whether it is harmful to companies to commit much of their scarce capital to investments outside their core competencies (Linneman, 1998). Linneman and others also suggest that high cost of capital firms in particular should avoid committing to ownership or relatively low return buildings, thus creating a negative arbitrage situation. On the other hand however, capital budgeting principles do not support this argument. For instance, Brealey & Myers (2000) argue that each investment project considered by the firm should be evaluated at its own opportunity cost of capital: the cost of capital thus depends upon the use (and risk) to which the capital is put. A company with a highly cyclical product line and a relatively high cost of capital that owns its real estate thus has less risk exposure than an equivalent firm that leases its space short term.

Deng & Gyourko (1998) elaborate on Linneman’s ideas by suggesting that there are a variety of reasons as to why companies that commit relatively large amounts of capital to real estate could underperform:

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1. The companies may tend to sub-optimally utilize their real estate. In other words, as inefficient real estate users they may not be earning a high enough risk adjusted return on their real property assets. Following this we would expect all firms with relatively high real estate concentrations to suffer return penalties, not just riskier firms with high costs of capital.
  2. Investors in such companies may not want them to change their risk profiles by committing substantial capital to real estate resources. The primary reason for this being the notion that diversification of risk occurs more cheaply at the investor level than at the corporate level. There is thus incentive for investors to desire “pure play” corporations that focus on their core competencies. Following this, one would expect hybrid profile companies to underperform the pure players. Since the beta of commercial real estate is in the 0.8-0.9 range (Gyourko & Keim, 1992), most of the impact would then fall on the relatively risky, higher cost of capital firms.
  3. Investors do not fully comprehend that ownership of a significant proportion of real estate assets lowers the

risk profile of high risk firms. With the lowering of risk not being perceived investors effectively discount the real estate investments at too high a rate. It is hard to believe that such ignorance on behalf of the investor is likely to be sustained for a prolonged period of time.

In their report prepared for the Corporate Real Estate Portfolio Alliance, Deng & Gyourko (1999) examined firm level returns for 717 companies in 57 different non-real estate industries to see whether more real property ownership really is associated with lower returns. More specifically they tested for whether the idiosyncratic component of firm return is less for firms with relatively high levels of real estate ownership. The results showed a statistically and economically significant negative relation between the idiosyncratic component of firm return and the degree of real estate ownership for firms with greater systematic risk than that associated with commercial real estate. Hence the results indicated that the negative impact on return occurs only for firms with relatively high costs of capital.

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For the purpose of this inquiry the overall capital commitment required for each alternative will be assumed to be a function of the after-tax net present value cost of the project over time, with an emphasis being placed on the commitment required in the first year (see figure 16)

**Risk Management:**

*“You are where you are today as a result of your reaction to the risks that you faced. Where you go tomorrow depends on the how well you adapt to the changing risk environment. How well you adapt depends on whether you react to risks as they occur or strategically position yourself by using proactive risk management as a competitive advantage.”*

- “Managing risk in the 21<sup>st</sup> century”, Global Real Estate Now, Spring 2001

There seems little doubt that significant value can be recognized through proactive risk management practices. Unfortunately though most risk management platforms are limited to crisis management and insurance based techniques which are often driven by the lack of focused risk relevant information about the company’s investments. In order to holistically understand the nature of this dilemma within the

context of corporate real estate it would be necessary to consider the full universe of risks that a company is exposed to in maintaining some form of control over its real estate assets. How can this risk then be categorized in a way that helps the corporate real estate manager understand the level of risk as it effects the enterprise on both an asset specific and portfolio wide basis? Also, from a strategic perspective, what are the risks associated with an organization’s corporate real estate portfolio? How can corporate real estate managers assess these risks in order to decide which risks might be transferred?

A detailed investigation of the full spectrum of risks that a company exposes itself to in the corporate real estate context is beyond the scope of this investigation. However, with the hope of at least addressing some of the above questions, what will be presented is a framework proposed by Louargand & Gibson (2002). This will serve to define the broad categories of risk that CRE managers should be concerned about.

Any transfer of risk implies that the workplace fully understands the types and sources of workplace risk. If organizations are attempting to manage the corporate real

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estate risk, then they need a framework to identify the sources of risk in a similar way to that developed for strategic business risk by Simons (1999). Louargand & Gibson (2002) suggest that there are three general categories of risk associated with corporate property: financial risk, property market risk and business risk. Although there is some overlap, each of these need to be understood and managed:

- Financial Risks

Currently, few organizations can predict their on-going workplace costs with any degree of certainty and therefore this exposes them to financial risks. Additionally, they do not know when they are likely to require more or less accommodation and therefore this adds another layer of financial risk as both the cost of entry and exit from space are unknown. The financial risks are both direct and indirect. They potentially affect both the shortrun cash flow events and have long-run impact on total enterprise value. In this element of risk the focus relates to the impact of real estate on both the income statement and the balance sheet. These are

risks associated primarily with the quantitative drivers issues highlighted in Chapter Five. For example:

- the resulting impact on the income statement of a decision to use floating rate debt for capital investment programs if unanticipated inflation occurs,
- the impact on the firm's financial ratios or credit rating due to a change in the accounting treatment of long-term leasehold obligations.

- Property Market Risks

Related to the general financial risk is the property market risk to which all occupiers are exposed. Firstly as an owner-occupier, a corporation is exposed to the same risk as any other property investor, both in terms of the rate of return and the volatility of those returns. As a tenant, they are also exposed to the property market both at the time of initially signing a lease, and at every review period. Corporations cannot align their expansion and contraction requirements to the property cycle and therefore can get trapped signing leases at the

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top of a market, only to find that rents fall from this peak.

- sharp increases in occupancy costs due to rent escalation as seen in U.S. markets in the year 2000;
- deteriorating location quality due to a shift in external agglomeration generators such as transport nodes or neighborhood deterioration or a shift in the types of sub-market occupancies;

- Business Risks

The final type of risk is that linked back to the business. If an organization is either unable to function or can only function inefficiently, then there is a risk of financial loss in terms of lower business revenues or increased costs. These latter business risks, although much more common, are more difficult to predict or even estimate. These may include:

- risks such as a failure of the heating or air conditioning systems, halting work temporarily or the inability to acquire contiguous space thus impeding operations.

- lack of flexibility in the physical structure hampering business operations.

A company's exposure to business risk is considered to be primarily a function of amount of control the company has over the asset. A higher degree of control and commitment will mean an ability and desire to customize the space to a greater degree, thus minimizing business risk.

All three of these types of risks need to be reviewed in order to assess the overall risk profile of the assets. Furthermore, it is important to realize the different role that financing alternatives can play in either mitigating or exposing these risks. For instance, direct corporate funding, leveraged acquisitions and synthetic leasing all expose the company to significant property market risk in the specific form of residual risk. On the other hand, bond net leases and traditional operating leases will expose the company to property market risk in the form of renewal risk. Synthetic leasing and leveraged acquisitions will expose the company to interest rate risk. In carrying out such an assessment, the company should also assess which risks are possible to transfer and which can best be managed by the

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organization itself? Which properties are more vulnerable to certain risks and how should these be treated?

**Other considerations may include:**

**Taxes:**

It is less clear today than it was prior to 1986 whether corporations or individuals are tax-favored owners of real estate. Simple rule of thumb on taxes in lease-versus-buy decisions: if the lessor is in a higher tax bracket than the lessee, then leasing puts “ownership” of the asset in the hands of the party that can most benefit from the tax shelter provided by depreciation. According to Brueggeman & Fisher (1997) the Tax Reform Act of 1986 substantially reduced the incentive for individuals to lease to corporations in several ways. First, it lengthened tax depreciation lives, thus lowering the tax shield. Second, the highest marginal tax rate for corporations (34%) is now slightly higher than that of wealthy individuals (31%). Third, individuals are subject to limitations on “passive” losses that restrict their ability to use accounting losses from real estate to offset other income. These tax law changes have significantly leveled the playing field of among partnerships, corporations, and tax-exempt entities such as pension funds as

owners of real estate. For this reason, taxes are far less likely today to be the deciding factor in corporate own-versus-lease decisions.

**Existing management expertise:**

Since owning and managing real estate is not typically a primary part of a corporation’s business activity, the corporation may not have the in-house expertise to actually manage the assets. Thus the corporation can be at a competitive disadvantage when it comes to owning real estate. It is often difficult for inexperienced managers to assess the true cost of using the space, leading to inefficient use of real estate. Leasing is typically favored when the company does not have a comparative advantage relative to developers and other investors in managing property and eventually selling it.

**Access to Capital Markets:**

Real estate is very capital intensive and the cost of owning real estate is typically a function of the cost of obtaining debt and equity capital. Companies with a high credit rating may be able to obtain unsecured corporate debt and equity at a cost less than the cost of capital for the individual or institutional

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investor that would be willing to own and lease the real estate to the corporation. This would tend to make owning preferable because the lease rate must cover the owner's cost of capital. Conversely, the corporation that for some reason has a higher cost of capital relative to a potential lessor might find leasing more attractive.

If a property is mortgaged, we might expect the rate to be the same for the corporation or the investor, assuming the rate is based on the risk of the real estate rather than the risk of the borrower. If the loan is made with recourse to the borrower, however, the mortgage for corporations and investors could differ.

**Lifecycle issues:**

Where the corporation is in terms of its life cycle and development will have an impact on the decision. For instance, a newly formed software company will have difficulty securing a loan to construct a building, since it has a limited credit history and needs to plough scarce capital into core business development. For many start-up companies, space needs also grow exponentially and therefore cannot be accurately

predicted. On the other hand, more established companies with predictable revenue streams, deep pockets and access to vast amounts of capital will have the ability, capital and resources to dedicate to perhaps purchasing core assets at competitive market rates.

**Third party involvement:**

The ability and availability of third party organizations to more efficiently bear the risks associated with real estate ownership may be a driver considered in making the financing decision. Certain synergies may exist between the corporation and risk-bearing third parties. Third party organizations may also have an affinity for real estate related exposure in order to diversify their portfolio interests.

**Chapter Conclusion:**

It is clear that despite the typical focus on primarily occupancy cost related issues, there is a wide spectrum of qualitative drivers that motivate various financing alternatives. Some drivers appear to have a significant impact on the decision and are easily modeled in the process. Other less obvious drivers are however, more difficult to incorporate explicitly in the decision analysis, and yet certainly affect the final outcome.

The following matrix serves to summarize the perspectives which have been established in this chapter. Unlike the quantitative drivers considered in the previous chapter, these qualitative drivers are obviously far more difficult to measure empirically and some would certainly argue against such a strict definition. The matrix is perhaps most valuable as a basis for discussion.

Decision Matrix		Basic spectrum of financing alternatives				
		OWN		LEASE		
		Own	Synthetics	Lease		
Qualitative Decision Drivers		Direct Corporate Funding	Leveraged Acquisition	Synthetic Lease	Bond Net Lease	Traditional Operating Lease
<b>Decision Drivers:</b>	<b>Motivation:</b>					
<b>Operational Flexibility</b>	Adaption to constantly changing user needs and business operations	Low	Low	Moderate	High	High
<b>Strategic Importance and Control</b>	Maintain control over strategically core assets	Core				Periphery
<b>Allocation of Capital</b>	Invest shareholder's capital in higher yielding core business	5	4	1	2	3
<b>Risk Management</b>	Financial/interest rate risk exposure	3	4	5	2	1
	Residual property market risk exposure	5	4	3	1	2
	Business risk exposure	1	2	3	4	5

Figure 52 Decision matrix – qualitative drivers



## CASE STUDIES

Prior to conducting a series of case studies and interviews, a rigorous and comprehensive case study protocol (see Appendix) was established in order to give the discussion structure and ensure that appropriate information was extracted from the sources. Beginning with an effort to understand the context and competitive environment of the corporation through to gaining a deeper understanding of what decision drivers the company considered in making its financing decisions, the protocol is based on the following outline:

### **1. Understanding the context:**

- Overall corporate strategy
- Corporate real estate strategy
- Real Estate operating decisions

### **2. Establishing the financing spectrum**

### **3. Considering the decision drivers**

## CASE STUDY 1: WHIRLPOOL CORPORATION

*“Our vision is to be one company worldwide.”*

- David Whitwam, Whirlpool’s CEO, Harvard Business Review, 1994

With the help of Jones Lange LaSalle, the Whirlpool Corporation kindly granted access to:

- Carl Nedderman, Director, Corporate Real Estate,
- Lee Utke, Real Estate Asset Manager – Global Assets,
- Frank Luongo, Director, Treasury Operations The Americas.

The following case study focuses primarily on two stages of Whirlpool’s corporate real estate evolution: the decision process prior and then post the implementation of a decision-making model that reflects and responds to certain corporate priorities that was developed with the help of Jones Lange LaSalle (JLL). Important to emphasize is that although the model was generated with the assistance of JLL, the identification and articulation of the various drivers was accomplished primarily by representatives of Whirlpool’s

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Treasury, Real Estate, Finance and Tax and Accounting functions. Given the magnitude of the company's global real estate portfolio and the increased pressure on all corporations to enhance balance-sheet performance, the objectives were clearly focused on attaining strategic corporate goals and not on implementing tactical real estate solutions.

The case is illustrative of a company struggling to deal with rapidly expanding global operations with the clear need to centralize the analysis of and decision-making process for real estate financing, thus ensuring that the decisions not only reflect the optimal balance-sheet structure but also address critical operational requirements.

**Company Overview:**

Whirlpool Corporation is one of the world's leading manufacturers and marketers of major home appliances. The company manufactures in 13 countries and markets products in more than 170 countries around the globe. Whirlpool is also the principal supplier to Sears, Roebuck and Co. of many major home appliances marketed under the Kenmore brand name.

**Industry:**

Approximately 120 million home appliances are sold in developed countries each year (Weiss, D.D. & Gross, A.C., 1995). The appliance industry is generally classified into four categories: laundry, refrigeration, cooking, and other appliances. Appliances are constructed in capital intensive plants, and design usually varies among countries and regions.

For years, almost all appliance industry participants were executing similar strategies that focused on lowering the cost and improving the quality of products, while expanding distribution and increasing the competitive share of display space on the retail floor. In a Harvard Business Review article in 1994 called "The Right Way to Go Global," David Whitwam, Whirlpool's CEO, described the competitive situation that existed in the early 1990s:

*"Even though we had dramatically lowered costs and improved product quality, our profit margins in North America had been declining because everyone in the industry was pursuing the same course and the local market was mature. The four main players—Whirlpool, General Electric, Maytag,*

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*and White Consolidated, which had been acquired by Electrolux—were beating one another up everyday.”*

**Current Context:**

As a response to this, in 1989, the company embarked on a vision to globalize Whirlpool, with the objective of becoming the world market leader in home appliances. The company now considers itself a truly global integrated enterprise with an impressive global market position – apparently 40% larger than the closest competitor with over 60,000 employees worldwide. The globalization process however has come at a cost.

Beginning with the purchase of a majority stake in an appliance company owned by Philips, the Dutch electronics firm, Whirlpool purchased a majority stake in an Indian firm, established four joint ventures in China, and made significant new investments in its Latin America operations. However, by the mid-1990s, serious problems had emerged in the company’s international operations. In 1995, Whirlpool’s European profit fell by 50% and in 1996, the company reported a \$13 million loss in Europe. In Asia, the situation was even worse. Although the region accounted for only 6% of corporate

sales, Whirlpool lost \$70 million in Asia in 1996 and \$62 million in 1997. Despite the company’s investments of hundreds of millions of dollars throughout the 1990s to modernize operations in Brazil, appliance sales plummeted there by 25% in 1998. Whirlpool expected that 1999 would be the third straight year of declining sales for the Brazilian subsidiary (Martin, Algar & Kumar, 2000). In response to these problems, Whirlpool began a global restructuring effort. In September 1997, the company announced that it would cut 10% of its global workforce over the next two years and pull out of two joint ventures in China. In announcing the cuts, Whirlpool’s CEO David Whitwam said, *“We are taking steps to align the organization with the marketplace realities of our industry.”* (Quintanilla & Carlton, 1997) Entering the year of 2001, the company faced difficult economic circumstances and weakening markets around the world. In December 2000, Whirlpool announced a \$300 million to \$350 million restructuring effort to improve the competitive position of our global operations, given the new realities within these markets. (Annual report 2001)

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Following the optimism of the early 1990s, something clearly went wrong with Whirlpool's global strategy, some suggesting that perhaps the company was overly ambitious. Despite Whitwam's insightful and optimistic comments to the Harvard Business Review (March/April, 1994), perhaps there was really a lack of understanding about how to create an integrated global strategy. Others suggest that the problems were the result of changes in the competitive and economic environments in Europe, Asia, and Latin America.

Given Whirlpool's poor showing in the earlier phases of its globalization plan, it still has far to go in convincing the many skeptics and disappointed shareholders that globalization was the best strategy. Many analysts were unsure whether Whirlpool's self-confidence was actually deserved or if it was little more than self-delusion.

#### **Company Profile:**

- **Overall corporate strategy:**

*"to be one company worldwide"*

- David Whitwam, Whirlpool's CEO, Harvard Business Review, 1994

The company's overarching objective is to drive the company to world-class performance in terms of delivering shareholder value, which we define as being in the top 25% of publicly held companies in total returns through a given economic cycle. This is supported by a market philosophy which suggests that the only way to deliver such value over the long term is by focusing on the customer. The company believes that only prolonged, intensive effort to understand and respond to genuine customer needs can lead to the innovative products and services that earn long-term customer loyalty.

- **Corporate real estate strategy:**

*"to maximize shareholder value and align the real estate portfolio as efficiently as we can to the operational needs of the corporation"*

- Carl Nedderman, interview

This basis drives the company to identify what properties are core vs non core and be sure that an exit strategy is in place for those that are non core. The strategic focus appears to be primarily dynamic in nature with the identification and disposal of excess properties in a timely fashion also important. The company's strategy is also primarily related to business unit

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requirements, with cost competitiveness and worker requirements being emphasized. The corporate real estate team is also seen as an integral part of the capacity planning process and work very closely with individual business units in order to assess real estate needs. The team challenges many of the assumptions determined by a specific business unit

Other real estate related business objectives: (Source: Jones Lang LaSalle)

- Optimize (from the perspective of shareholders) the balance-sheet impact of real estate decisions
- Minimize debt rating impact
- Reduce corporate tax rates
- Unlock capital (to reinvest in the business, reduce debt, etc.) sooner rather than later
- Support corporate objectives of higher growth and improved returns
- Resolve differences between business unit
- P&L impacts and the EVA business model
- Maximize occupancy flexibility while addressing asset-specific control issues

- **Real Estate Operating Decisions:**

*“We try and actively participate in the business planning process to verify and challenge various assumptions as to why/where the business unit needs the space”*

- Lee Utke, Real Estate Asset Manager – Global Assets

Once the space need has been established by the business unit and this has been approved by senior management, the real estate group takes full control of the process, again working very closely with the business unit to establish the details of their requirements within the broader space need envelope. With the aid of real estate advisory firm Jones Lang LaSalle a review is then conducted of various potential regions in order to determine which has the most appropriate demographic characteristics and real estate risk profile in relation to the specific operation. Other issues which are also considered include logistics transportation models in order to determine the cost effectiveness of one location versus another. In reviewing the competitiveness of various location alternatives, state and provincial incentive programs are also considered before work is pursued with a variety of different developers.

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One slightly atypical aspect of the Whirlpool approach is the fact that all development projects are done on a typical lease structure with a purchase option. The option being exercisable within 60 days of the completion of construction, giving the group more opportunity to fully research the dynamics of the local market, to evaluate the residual risk profile that is established for the particular asset and to ensure that the quality of the construction is consistent with the company's high standards.

- **Financial structuring alternatives:**

*“Off balance sheet financing is not something that we go after or are willing to pay a premium for...we have looked at and used synthetic leasing, but in today's environment all of that is a nasty word. We are really down to a traditional operating lease or a buy, recognizing that the traditional operating lease is going to cost us money.”*

- Frank Luongo, Director, Treasury Operations The Americas.

Despite the apparent bias by Whirlpool in favor of direct ownership from a cost point of view, in market value terms the company's portfolio is divided 50/50 between ownership and leasing. In terms of square footage that metric changes to

approximately 60% owned and 40% leased. The ability to lease an asset is certainly considered favorable when an asset is considered non-core and flexibility is paramount. Luongo goes further to suggest that this weighting between ownership and leasing is highly correlated to the company's core/non core asset metric.

What also became apparent though is that the weighting is very much dependant on two issues: one, on the competitive environment specific to the company's industry, and two, the level of the company's overall development or maturity. For instance, a portfolio weighted 80/20 in favor of ownership may be appropriate in one industry while not the other, depending primarily on the nature of the business and its immediate competitive environment. Also, a growing company with unpredictable space needs and a relatively higher beta will most likely place an emphasis on leasing. What is clear from this is that apples to apples comparisons across industries and companies are therefore very difficult.

Following this discussion it was clear that Whirlpool considers itself a well established organization with relatively stable cash

flows. Discussion suggested that the approximate 50/50 portfolio mix of ownership to leasing (in market value terms) is appropriate for their line of business at this specific point in time. This is a dynamic metric and though should change in the immediate future depending mainly on competitive demands of the overall and industry specific environment.

The spectrum of financing alternatives are primarily viewed by the company as different cost structure alternatives, with the company basically paying a premium for operational flexibility afforded by leasing. The interviewees did not recognize the alternatives as a means for the company to control the amount of risk that it is exposing itself to. What did appear to be clearly understood however is the ability of different alternatives to transfer or mitigate different types of risk.

**The decision drivers:**

The discussion of these drivers will be focused in primarily two parts: those that were considered prior to the implementation of the JLL model and those considered post. The JLL/Whirlpool Model:

<b>Quantitative Measures:</b>	<b>Qualitative Measures:</b>
<b>Cash flow:</b> <ul style="list-style-type: none"> <li>• Net Present Value after tax</li> </ul>	<b>Strategic Importance:</b> <ul style="list-style-type: none"> <li>• Core</li> <li>• Non-core</li> </ul>
<b>Balance-Sheet Impact:</b> <ul style="list-style-type: none"> <li>• Total debt to capital</li> <li>• Capital requirement</li> </ul>	<b>Property Considerations:</b> <ul style="list-style-type: none"> <li>• Facility Size</li> <li>• Replacement cost</li> <li>• Degree of Company Specific TI's</li> <li>• Market Value/Replacement Cost</li> </ul>
<b>P&amp;L Impact</b> <ul style="list-style-type: none"> <li>• Earnings impacts</li> <li>• Five year average GAAP income</li> </ul>	<b>Operations Issues</b> <ul style="list-style-type: none"> <li>• Length of Commitment</li> <li>• Certainty of Occupancy</li> <li>• Flexibility</li> </ul>
<b>Credit Risk</b> <ul style="list-style-type: none"> <li>• EBIT/EBITDA Interest Coverage</li> <li>• Free Cash Flows</li> <li>• Funds from operations/Total debt</li> </ul>	<b>Market Issues</b> <ul style="list-style-type: none"> <li>• Market Size</li> <li>• Supply &amp; Demand</li> <li>• Value and rent trends</li> <li>• Economic growth</li> </ul>
<b>Profitability Ratios</b> <ul style="list-style-type: none"> <li>• EPS on a diluted basis</li> <li>• Operating Profit/Net Sales</li> <li>• ROA</li> <li>• ROE</li> <li>• Return on Total Capital</li> </ul>	<b>Other considerations</b>

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Prior to the development of the model only one driver was primarily used in assessing the merit of various financing alternatives: the net present value cost. This inevitably resulted in an ownership position being favored but with a very high dependency on the assumptions that were made going into the calculation. Assumptions such as the appropriate cost of capital, exchange rate assumptions and residual value assessment also varied widely depending on what region the analysis was being carried out in. As Lee Utke suggested, “You would see results, but you didn’t have comfort in the assumptions that were used to produce the results”. The actual mechanics of the own vs lease decision are seen as simple to teach but of utmost importance is the assumptions made in developing that model.

The company also faced global consistency issues with their previous decision making process:

*“Prior to the implementation of the Jones Lange LaSalle model, decisions were made more regionally than on a global basis, so you had no homogenous way of running the models”* - Carl Nedderman, interview.

From JLL’s perspective the decision making process prior to the implementation of the model also supported this notion: *“The analysis of fixed-asset financing varied widely, producing certain inconsistencies around the world. Analysis conducted in one market was likely to be different from that completed in another, often with different assumptions employed. Consequently, comparing individual decisions was difficult, thus limiting the collective impact of real estate decisions on the financial and strategic health of the company.”*

The relative importance or weighting of the drivers is a dynamic metric which changes according to business conditions. The actual determination of the weighting is however seen as having the important functional objective of gaining consensus from senior management as to what is really important. What was agreed is that the financing decision making process is essentially a trade off between cost and flexibility.



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This was elaborated on by Utke:

*“the speed at which real estate requirements are changing and balancing those needs against a longer term real estate solution representing the least amount of cost.”*

For the perspective of the business unit there was a general tendency to drive the solution towards the absolute lowest operating cost structure that they can find with the full knowledge that from an operating point of view in 4-5 years time might need to be in something totally different.

What is clear is that the individual role players do place an emphasis on different drivers. For instance:

- Frank Luongo, Director, Treasury Operations The Americas: cost is still the primary concern. However the decision would not be made without looking at the “type” of asset under consideration. For instance for a non-core asset the cost would not necessarily be the driver. In this case the treasury is thinking in terms of what premium the company should be willing to pay for a non core asset – since leasing is more expensive than owning. Important to realize however is the view that the notion of core vs non core assets should not be

defined by the length of the need, but related to the strategic importance of the asset relative to the company’s core competency.

- Lee Utke, Real Estate Asset Manager – Global Assets: a similar focus to the interests of the treasury, however a more significant emphasis is placed on the residual value issues tied to the particular asset. Before any decisions are made, the goal is to understand the residual risks associated with the asset both from an investors perspective and from a corporate perspective.
- Carl Nedderman, Director, Corporate Real Estate: determining whether the asset is core or non core and thinking carefully about how much flexibility is required appeared to be a major emphasis. In this case the notion of “flexibility” however is primarily tied to the exit strategy related to the asset and is of particular importance if the asset is non core.

Once consensus is reached, the consistency of the output from the model can be used to track, historically and going forward, how different alternatives are being measured thus allowing an apples-to-apples comparison.

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The company's perspective on financial reporting issues was very interesting:

*"On-balance-sheet vs off-balance-sheet: that has never been important thing for us."* - Frank Luongo.

It was felt that the emphasis placed on financial reporting issues will obviously vary from company to company and is primarily a function of how clean the company's balance sheet already is and the company's ability to handle additional balance sheet "explosion". Whirlpool regards itself as a conservative company and off-balance sheet funding is not something that the group is willing to pay a premium for.

In terms of sourcing funding for both lease and ownership obligations the company's cost of debt is considered to be the appropriate cost of capital. For valuation purposes the company makes the assumption on the front end that whatever capital commitment will be required is match funded in the capital markets. For instance, a 10 year capital commitment will be assessed in terms of the 10yr cost of capital to the corporation. In reality however the commitment is funded through short term commercial paper since this is currently viewed as a very cheap source of funding. From the treasury's point of view the

extent of short term funding is essentially governed by the ratio of fixed rate debt to floating rate debt on the company's books. Luongo reiterated that it is really immaterial whether the floating rate debt is supporting a new building, product or payroll:

*"we are managing the fixed:floating ratio and not the underlying asset."*

Should company's be disgorging their real estate assets since it is harmful to commit scarce capital to investments outside their core competencies? Well that depends on your view of capital according to the team at Whirlpool. A lease that the company has committed itself to for 15 years is still capital – it is still regarded as a long term capital commitment. While some make the argument that the company should look to minimize the amount of real estate on the balance sheet in order to make it look cleaner, according to Frank Luongo:

*"the reality is that you have off balance sheet activity that you internally do know about, and it's just as ugly."*

The shareholder may not see those commitments, but given what has recently happened with Worldcom and Enron, there is clearly a move today towards minimizing information which is

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'hid' from the shareholder creating pressure for corporations to disclose more and more information.

One of the interesting issues raised which has not been addressed previously in this inquiry was the idea of “limiting factors”. This was well framed by Frank Luongo:

*“There could be limiting factors outside everything which makes common sense which may upset the decision.....we will make a non-economic decision because of the limiting factor, which really is then destroying shareholders value and not adding to it.”*

So even though it may make total sense in every way for the company to select a specific financing alternative, they may not actually have the choice. Certain externalities to the immediate decision process may in fact govern what is possible and what is not. For Whirlpool one of the biggest limiting factors is the company's capital budget. Comparing the merits of various alternatives through the use of their model is all well and good, however the bottom line is if there is no capital available the model simply indicates what the premium will be to lease. This was one of the primary motivations for developing the model:

to fully understand what specific premium the company was paying to lease space in a particular situation.

As the company evolved into a major global business, the acquisition of fixed assets —particularly real estate, one of the company's largest categories of capital assets— became a major balance-sheet component. Given the magnitude of these assets and increased pressure on all corporations to enhance balance-sheet performance, Whirlpool looked for ways to elevate its already leading edge financial processes to ensure that decisions about the financing of real estate not only reflect the optimal balance-sheet structure but also address critical operational requirements.

### CASE STUDY 2: SUN MICROSYSTEMS

***“Sun, another pursuer of agility...on an average day,  
12,000 Sun employees do not ‘show up’ for work”***

- MIT Gartner documenting Sun’s iWork initiative

With the help of Jones Lange LaSalle, Sun Microsystems, Inc. kindly granted access to Bob Cooke, Manager of Strategic and Financial Planning.

This case outlines the decision making process of a company whose phenomenal growth strategy over the past decade has now given way to a more complex, thoughtful, value-based strategy, as scale and market certainty have increased and forecasting horizons lengthened.

Perhaps most remarkable about the Sun case is the company’s drive to enable agility through its *iWork* concept stemmed from its realization that the work that needed to be done was not easily housed in geographically designated, discrete facilities, no matter how adaptive those facilities might be. The company recognized that its notion of the workplace was limited: people

were working where the work demanded they should be. The anytime/anywhere mantra of *iWork* is essentially about creating a support system that takes advantage of both the work that needs doing and the tools available to do it.

#### **Company Overview:**

Sun was founded with one driving vision: a vision of computers that talk to each other no matter who built them. Since its inception in 1982, their singular vision - The Network is The Computer[tm] - has propelled Sun Microsystems, Inc. to its position as a leading provider of industrial-strength hardware, software, and services for establishing enterprise-wide intranets and expanding the Internet. A vision focused on making technology work for the customer, not the other way around. While others protected proprietary, stand-alone architectures, Sun focused on taking companies into the network age, providing systems and software with the scalability and reliability needed to drive the electronic marketplace.

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**Industry:**

Sun faces strong competition from HP and IBM in the high end of the microelectronics, software and service market, and from the Wintel camp in lower end servers and Internet standards but its strong corporate identity, technologies and alliances (AOL/Netscape, IBM) are competitive advantages, particularly in the Internet market. Sun believes that its strength in core industries, coupled with its strong platform technology is expanding its opportunities in new markets related to the Internet such as ecommerce, digital media management, internet service providers and application service providers.

**Current Context:**

Founded in 1982 by three Stanford University graduate students, Sun Microsystems, Inc. (SMI), the company has grown from designing and assembling UNIX-based networked workstations and servers to the development of operating system software, silicon designs, and other technologies, as well as providing services to its growing customer base. Sun's first product was a new kind of computer known as a technical workstation. It could outperform personal computers in speed, capacity, and the ability to display graphics. Most importantly

however, the workstations could be networked together to produce as much computing power as a mainframe at significantly lower cost.

Initially, Sun licensed its technology, for little or no cost, to encourage selection by the widest range of vendors. The company also targeted aggressive growth based on best-of-breed products rather than first-to market offerings. By 1988, Sun's open-system strategy had established new software industry standards and annual sales reached \$1 billion. By 1991, the company had captured nearly 40 percent of the worldwide workstation and server market, expanding to \$3.2 billion in revenues. (Lambert & Poteete, 2000)

By 1995, annual sales revenues had reached \$6 billion, with enterprise users purchasing \$2 billion of products, 75 percent of new sales that year. (Lambert & Poteete, 2000) Sun maintained leadership in the dynamic microelectronics industry, where extremely short product cycle times were the norm, by offering a continual stream of innovative products. JAVA, Sun's new programming language, heightened

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company visibility when it emerged as the de facto standard for corporate open network computing.

Sun's motto of "*the network is the computer*" which has guided the company for a decade, was joined by a new slogan "*we put the dot on 'dot.com'*". This slogan emphasizes Sun's strategy of providing core technologies (servers, Solaris, Java) and setting standards (Java and Jini) to run the Internet. Sun has repositioned itself away from the slow-growth workstation market and toward the high-growth Internet market, and its servers run high-profile web sites such as AOL, Amazon.com and e-bay. With offices in 170 countries, Sun is now a \$18.25 billion global leader in network computing solutions that "Take it to the nth."

### **Company Profile:**

- **Overall corporate strategy:**

*"Sun is a relentless innovator. Sun has a 19-year history of bringing innovative ideas to market with practical results for our customers. Because we build forward-thinking technology, we enable our customers to get the most out of*

*their existing network environments and take advantage of future opportunities."* - Sun homepage.

Sun sees itself as one of the world's top providers of network computing solutions--not only to the networked enterprise, but to networked consumers and to networked customers, suppliers and partners. The company has been described by a board member as "*the last standing, fully integrated computing company.*" (Schlender, 1997) It is a vertically integrated computer company that does everything from manufacture of microprocessors to operating systems, to computer systems to applications to distribution to customer service and support.

Sun reportedly strives to differentiate its products on two or three key dimensions on which it is leading edge and to compete on cost and quality on all others. Although these vary over time, Sun pursues three product differentiators: Open systems, scalability & proprietary Sun technologies.

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- **Corporate real estate strategy:**

*“Moving towards a total solution to provide workplaces to our people”*

- Bob Cooke, interview.

Central to this strategy is an initiative called “iwork” which in its purest form involves providing a series of work places for employees to allow them the flexibility of working anywhere at any point in time. The notion of place has thus been separated from work with many of the employees not being assigned to a particular workplace. The employee is given the flexibility to work in a variety of spaces within a particular campus or around the world. The corporate real estate strategy is thus focused on providing the company’s workers with this flexibility to work wherever and whenever they may need to work.

- **Real estate operating decisions:**

The workplace resources group helps the individual business units in assessing their expected future need for space. This is done comprehensively around the world, for all business units. This demand forecast, which typically goes out around three

years, is then compared to what resources exist in the particular geographies with the hope of identifying where the needs are most likely to be. The workplace resources group then develops a plan with the objective of bridging those expected needs. This is not a business unit specific process – the portfolio is seen as providing a complete workplace solution within which the business units have the freedom to operate. However the specific business units involved do need to formally approve the proposed workplace plans because ultimately each unit is charged for its real estate usage. The workplace resources group itself does not hold any budget – all costs are charged through to the business units and the group works with the business units as their main client.

The primary players involved in the process of making the decision to own an asset is the vice president of workplace resources who essentially proposes a course of action which is then endorsed by the CFO and passed to the CEO and senior management for approval. Since the campus strategy is to provide a total workplace solution which will serve the common community, the business units themselves are typically not involved in this specific part of the decision

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making process. The entire real estate portfolio is seen as a single solution focusing on providing flexibility to the various business units within which they have freedom to operate.

- **Financing alternatives:**

In vast majority of cases Sun chooses to lease its sales and service offices. In this case leasing is seen as really the only practical alternative since the company is in 180 cities around the world and in most cases the specific space requirement is just not large enough to consider owning the asset. Furthermore business requirements have historically been extremely uncertain, particularly when the company was in its high growth stage. The local market typically determines the specific terms of the leasing agreement, but there is the overall tendency for the lease to be structured as triple net.

Sun does however consider owning assets in locations where there is a significant space need which is certain for some time. In order to accommodate these growing needs the company initiated a self-development program about 6 or 7 years ago which was an aggressive strategy to acquire sites and build campuses. Sun believes that it has benefited from this program

of buying large pieces of land and growing into them over time to form large consolidated campuses in the region of 1 million to 1.5 million square feet. Had the company relied on the market to provide leased space, growth would have been very expensive and operations would now be very scattered. The consolidation of space in the form of campuses has yielded significant agglomeration benefits in terms of communication and the provision of workforce amenities. Cooke also suggested that the campuses had certainly given Sun a competitive advantage in attracting highly talented employees.

On the ownership side, assets have typically been directly funded through cash. The use of cash being primarily motivated by leverage concerns. Sun, particularly during its growth phase, generates vast amounts of cash so scarcity of capital is not a major concern. The company believes that since it is in a highly volatile industry it is very important to maintain a conservative balance sheet in terms of leverage. To give an indication, the company currently has approximately only \$1 billion in debt and \$6 billion in cash! Bearing in mind that this is a tech company, the total real estate holdings are however seen as being too insignificant to alter the overall riskiness



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associated with the company's cash flows. Following on from this, how does the company feel about investing shareholder's cash in lower yielding real estate assets? Well, for now cash isn't scarce and they would prefer putting it in real estate as opposed to say buying back stock. Sun has never made use of the synthetic leasing alternative. This choice was driven primarily by the already complex nature of the IT industry and also a desire to avoid any doubts being cast over the integrity of the company's financial statements.

In terms of the actual number of locations, the company predominantly leases its space. However, in terms of square footage, the overall portfolio is split 50/50 between ownership and leasing.

- **Decision drivers:**

It is clear that size plays a major role in determining the appropriate financing alternative. The decision to own the campuses was however not only driven by their sheer size. Again the idea of core and non-core assets was mentioned. The fact that the campuses are seen as being crucial to providing long term support to the company's core competency is also a

significant driver in making the decision to own. Another interesting issue raised was the idea that leasing such large premises would result in an owner/investor factoring in a premium to compensate him/her for the additional default risk of leasing to a large single tenant. So from an economic efficiency point of view it certainly makes more sense for Sun to own.

Financial reporting has become more of an issue in the recent past but still is not considered a major driver in making the decision. Reporting issues are certainly considered subordinate to the incremental cash effects tied to the occupancy costs associated with a specific alternative. It is recognized that ownership typically is the lower cost option – depending to a large extent on the residual value which is assumed in the calculation.

Sun does make use of a designated financial analysis methodology which assesses the quantitative implications of various financing alternatives. This however does not consider the qualitative drivers implicit in the process. The financial model is used as a screen to determine what the possibilities

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are. These are then considered relative to their qualitative merit.

It appears that for Sun the major issue driving the financing decision is in fact size. Bob Cooke tied this directly to the fact that large assets representing significant infrastructure investments are likely to be core to Sun's primary business. The smaller sales and service offices which are spread around the world are leased primarily since it is impractical to pursue anything otherwise. The assets are seen as being too small and their needs are also constantly changing.

**CASE STUDY 3: CHARLES SCHWAB**

*“To provide the most useful and ethical financial services in the world”*

- Charles Schwab homepage.

Patrick Walt, Director of Corporate Real Estate Transactions, kindly agreed to be interviewed and provide input to this discussion.

**Company Overview:**

The Charles Schwab Corporation is one of the nation’s largest financial services firms engaged, through its subsidiaries, in providing securities brokerage and related financial services for over 7.9 million active accounts. The company’s clients include domestic and international individual investors, independent investment managers, institutions, broker-dealers and 401(k) plan sponsors.

**Industry:**

*“Financial services is a particularly competitive industry and we need to run exceptionally lean.*

*We needed a more complete solution to reach our cost reduction targets.”*

–Beverly Mackey Vice President of Procurement

Today's financial services industry is being shaped dramatically by globalization, changing demographics, new competition and the use of technology. These forces combined with extraordinary merger and acquisition activity, mean financial institutions must move quickly to harness technology to operate more efficiently, reduce costs, leverage their combined assets and communicate effectively with business partners. To remain ahead of the competition, they must anticipate and meet client demand for new products and services.

**Current Context:**

Charles R. Schwab founded the company bearing his name in California in 1971 as a brokerage firm helping individual investors trade stocks and bonds. Schwab understood that the bundling of transaction services and advice increased the costs

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to savvy investors who felt comfortable making their own investment decisions. Following the deregulation of brokerage commissions, Schwab decided that unlike full-service firms, his company would not sell advice to customers on what and when to trade. Instead, Schwab focused on providing investors low-cost execution services, becoming the first broker to discount commissions.

In the mid-90's, Schwab's mission started to broaden. First, the firm adopted a global orientation, revising its original mission "to provide customers with the most useful and ethical financial services in the world." (Schwab Annual Report, 1995) By 2000, Schwab operated in Australia, Canada, the U.K., Hong Kong, Japan and Brazil. Second, Schwab realized that a new generation of investors was in need of help in making investment decisions. Whereas in 1987, only 5% of Schwab's customers did not have prior investment experience, in the 1990's this figure grew to about 50%. To serve this new market and to improve its services, Schwab started to develop new tools, products and services. This strategy also helped the firm to retain its existing customer base: as investors age and grow wealthier, they demand more attention and service.

On December 28, 1998, the market capitalization of Charles Schwab Corporation topped that of brokerage giant Merrill Lynch, soaring on market enthusiasm about the Internet. The company had come a long way from its early years, when founder Charles R. "Chuck" Schwab "bet the company" on information technology (IT), spending two million dollars - equivalent to the company's entire net worth - to buy an IBM mainframe. Early and large IT investments gave Schwab a technological edge in an industry that thrives on information. Schwab took advantage of its San Francisco location, just a few miles north of Silicon Valley, which was inventing the future of technology, and of management.

Schwab now considers itself a full service brokerage company, as opposed to just a discount broker. By the end of 2000, the company had captured over half of the discount brokerage market, having amassed 7.5 million active customer accounts with \$872 billion in assets through 384 domestic branch offices, and net income of \$718 million on revenues of \$5.79 billion

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## Company Profile:

- **Overall corporate strategy:**

*“We are a technology company in the brokerage business.”*

—David S. Pottruck, President & Co-Chief Executive Officer, Charles Schwab

Schwab’s primary focus is on serving individual investors, providing them a wide selection of brokerage and investment services at prices that are substantially lower than those of full-service firms. Since the seventies, Schwab’s primary mission has been “to provide investors with the most useful and ethical brokerage services in America.” (Schwab Annual Report, 1991) Traditionally, Schwab has appealed to “take-charge” investors who are highly educated, technology-literate, comfortable trading securities without advice, and in search of low prices.

Since day one, Schwab has been focused on demystifying investing. In doing so, the company has defined a simple approach: *“no sales pressure, no high commissions, no hidden fees, and no conflict of interest because our representatives’ compensation doesn’t depend on which product is sold.”* Rather, the company focuses on providing unbiased guidance

and advice. *“We objectively evaluate a client’s investment goals, and suggest sound solutions to meet those goals.”*

- **Corporate real estate strategy:**

*“Our overarching goal is to make sure that we met the corporate objective of always being able to provide service to our customers...particularly our online customers.”*

- Patrick Walt, Director of Corporate Real Estate Transactions

To accommodate tremendous growth in sales and service staff, both domestically and abroad, Charles Schwab & Company’s CRE unit developed rolling global real estate master plans. (Lambert & Poteete, 2000) Because information about future company growth is by its nature imprecise, corporate real estate plans were based on three-year business growth projections and included alternative scenarios reflecting cost minimization strategies tied to variable space demand forecasts. This strategic focus is supported by interviews comments made by Patrick Walt:

*“Since Schwab’s growth was expected to be very dramatic for the coming years, our main concern became how do we*

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*continue to provide that level of service...we need to make sure that we continue have the capabilities to support that growth."*

The company thus adopted the strategy of securing entire campuses through a series of rights (options) but not obligations to support their expected growth. Prior to having command of an entire campus the company is extremely careful about ensuring that this commitment is well supported by and coordinated with the perceived demographics of the area. Selection of campus locations is thus primarily driven by demographic concerns. The group seems to clearly understand the need for an absolute cross section of all demographic factors. This commitment to demographics is supported by a four-point framework, developed by real estate and facilities in 1996 to help ensure quality and responsiveness in its core business services. This involved focusing on: 1) the cost of doing business, such as taxes, real estate costs, and available economic incentives; 2) the available talent pool, including its size and educational profile; 3) the quality of life at the location; and 4) specific business drivers, among them time zone differentials, customer proximity, competitor locations, and direct air links. (Lambert & Poteete, 2000)

In Lambert & Poteete's project "Managing Global Real Estate", Parkash Ahuja, senior vice president of corporate administrative services, is quoted:

*"Every square inch of space costs money to the company. We don't want any vacant space. But we also don't want space to become a critical item in terms of the company's growth. We must balance these two extremes through the process of planning which helps us analyze space demand and supply categorically."*

It seems that, similar to the objectives of the Whirlpool Corporation, creating and maintaining a corporate infrastructure to optimize operational effectiveness is a primary focus of the Schwab's real estate strategy.

- **Real estate operating decisions:**

In terms of the process underlying the origin of space needs, the individual business units will generally have a coordinated message which is established with the help of people such as Parkash Ahuja. This message is then passed onto the Senior Vice President of Real Estate and transferred to the vice presidents. The various players within corporate real estate will

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then be expected to accommodate the overall space needs and growth of the company. Within the group, the Vice President of Planning maintains constant communication with the business units to determine what their growth needs are, this may involve tweaking a requirement locally or adding a strategic play in a new market place which again based on primarily on demographics. Once the space need has been determined, this is passed onto Walt for implementation.

- **Financing alternatives:**

With respect to the ownership percentage in Schwab inventory, approximately 13.7% (1,249,389 Rentable Square Feet owned/9,117,282 Total Schwab inventory) is owned. Almost all of this owned space is for Data Centers across the country. Apart from the data centers Schwab does not own many of its assets at all. The company does however currently hold a synthetic lease on a 380,000 square foot office premises in San Francisco. The reason however for structuring the financing of the particular asset in this was primarily as a function of the overpriced nature of the booming market at the time of the acquisition. Rental rates had risen to more than \$100 per square foot and the synthetic alternative was seen as a way to lock in

an acceptable short term rental rate, obviously benchmarked to LIBOR. The company chose not to cap its exposure to LIBOR and with the recent fall in LIBOR the company is now only paying 40% to 60% of the financing cost that was initially budgeted. The company also controls one of its primary office assets through a bond net lease, locked in at a very favorable rental rate which has worked out well for the company.

By far the majority of the portfolio is therefore leased. The company takes great care to ensure that the leases are operating and not capital leases in order to maintain a clean balance sheet.

- **Decision drivers:**

*“Our overall goal is to control real estate...coming and going  
we want to have absolute maximum control...  
..we will try and have it every which way that we can”*

– Patrick Walt, interview

In order to maximize control, when structuring a lease agreement, the company typically aims to have as longer control over the asset as FASB 13 will allow. This typically involves a series of options to either renew or purchase. The

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exit strategy is then ensured through with certain termination and cancellation rights being negotiated. The company generally wants to avoid the obligations of title and ownership. What they are interested in is the option of ownership via a long term lease with options to purchase. "Ownership" at the end of the day is important to the company purely from a control point of view. Again control appears to be paramount, yet the company believes that through careful negotiation it can gain comfort in the amount of control that they have over a particular asset structuring the terms of a long term lease agreement.

Another reason for favoring leasing to such an extent?

*"It has a lot to do with optimizing our balance sheet – we just do not want to carry all this real estate on our financials.....we don't want to be seen to be putting our money in the wrong place."* – Patrick Walt, interview

So, the idea of capital allocation is also a big part of the reason. Beyond financial reporting and capital allocation concerns once various alternatives have passed the rigorous demographics and other screening processes it is about finding

the asset that offers the most flexibility and is competitive from a cost point of view. i.e.:

*"what is going to give us the biggest bang for our buck and what will allow the most operational flexibility...our operational flexibility needs to be commensurate with our overall corporate objectives for staying as lean and as mean as possible."* – Patrick Walt, interview

From a cost point of view however, ownership is not seen as being typically cheaper than leasing. Walt suggested that an apples to apples comparison in their case is very difficult to make since the lease agreements are normally structured with various forms of options to renew. So there is uncertainty with regards to the term of the capital commitment. On the issue of core vs non-core Schwab does have a rating system which determines the reliability required for the support of various systems. i.e. call centers and data centers will require substantially more reliability than an administrative function which will feature lower on the spectrum. On the leasing side it is felt that many landlords have been very slow to really understand Schwabs space, technology and infrastructure needs.



### CONCLUSION

Despite Modigliani & Miller's assertion that financing decisions are irrelevant, this thesis has clearly illustrated that companies do face real trade-offs in deciding how they finance these real estate investments. This certainly implies a belief in relatively inefficient markets on behalf of senior management. For reasons of focus, the financing decision has been viewed as separate from the space need or real estate operating decision. Notwithstanding the need to customize these operating decisions on behalf of the business unit customers and to ensure that the decisions are economically sound within a given region, a wide spectrum of factors that drive real estate financing decisions have thus been explored. These decision drivers were divided into quantitative and qualitative factors and analyzed in relation to the broad spectrum of financing alternatives available. A comprehensive framework of drivers was then derived in order to assist real estate decisionmakers in gathering the relevant information needed to evaluate the overall effectiveness and trade-offs associated with each alternative.

This framework of thought was then applied to series of case studies in order to assess its relevance. From a broader perspective it was clear that optimal financing decisions:

- Clearly reflect the financial and operational requirements of both the company and business units;
- Are very much a function of the larger portfolio wide corporate real estate strategy, which is in turn closely allied to the company's overall corporate strategy;
- Take into account the perspectives of other role players (IT,HR, Finance) in the decision making process.

In terms of the relative importance of the specific drivers themselves it is clear that:

- The strategic importance of an asset to the company's core business is often the overriding concern in making the financing decision. This is seen as a way in which to maintain a comfortable degree of control over the asset.
- Once the strategic importance of an asset is established and a required level of control thus ascertained, decision makers typically seek to then maximize of the amount of flexibility within these strategic/control parameters. This

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typically involves a simple trade off: “we understand that leasing is more expensive than owning for the primary reason that it affords us more operational flexibility. The decision that we are thus essentially faced with is how much of a premium are we willing to pay for that additional flexibility?”

- The importance of financial reporting in the context of the real estate financing decision is very much tied to the overall importance placed on reporting in the broader corporate context. It is not real estate specific. For some companies, financial reporting appears to be a major issue, for some apparently not. These perspectives appear to be primarily a function of the companies ability to effectively ‘manage’ it’s balance sheet.
- The idea of “limiting factors” was also mentioned. To quote the Whirlpool team:

*“There could be limiting factors outside everything which makes common sense which may upset the decision.....we will make a non-economic decision because of the limiting factor, which really is then destroying shareholders value and not adding to it.”*

There certainly does exist the possibility of random and unexpected ‘limiting factors’ which will determine the financing outcome despite all other logical parameters suggesting the contrary. In this case maybe M&M are right afterall – maybe the financing decision is irrelevant? This would however appear to be more the exception than the rule.

Despite such a limited sample size, it is resoundingly clear that companies do recognize significant trade-offs in making the financing decision. Recognition of these trade-offs certainly does imply a belief in inefficient markets and a belief that corporate real estate financing decisions are indeed relevant.



**APPENDIX**

**ABC Enterprises Inc. – Impact of Direct Corporate Funding on Consolidated Financial Statements**  
**Balance Sheet Equation:**

	Cash	A/R	- ADA	INV	PPINS	Land	Machinery	- Acc Dep	Bdg	- Acc Dep	Patent	= A/P	Acc/P	Inc Tax/P	Div/P	Bonds/P	- Disc B/P	Com Stock	Add P-4 Cap	RE	
<b>Beginning Balance</b>	12,000	10,000	(1,000)	3,000	2,000	20,000	8,000	(2,000)	30,000	(1,200)	8,000	=	8,000	1,500	500	1,000	25,000	(2,000)	32,000	16,800	6,000
<b>Opt Act</b>												=									
Cash from sales & A/R		42,000										=									42,000
Bad debts			(1,500)									=									(1,500)
Write off			(800)	800								=									
Cash	37,500	(37,500)										=									
COGS				(11,000)								=									(11,000)
				15,000								=	15,000								
Cash paid to suppliers	(14,500)											=	(14,500)								
												=		8,000							(8,000)
Cash paid on misc exp	(8,750)											=		(8,750)							
Ins Exp					(1,000)							=									(1,000)
Cash paid for int	(1,800)											=					200				(2,000)
												=			5,568						(5,568)
Cash paid for inc tax	(4,750)											=		(4,750)							
Cash paid for operating exp	(346)											=									(346)
Interest earnings on cash	177											=									177
<b>Inv Act</b>												=									
Purchase of machinery	(2,500)						2,500					=									
Sale of machinery	1,400						(2,000)	500				=									(1,000)
Depr Exp Mach								(1,000)				=									
Depr Exp Building										(600)		=									(600)
Purchase of R&D facility	(8,800)					1,936			6,864			=									
Transaction costs	(176)								158			=									(18)
Improvements	(1,125)								1,125			=									
Depreciation Expense										(205)		=									(205)
<b>Fin Act</b>												=									
Amort of widget patent										(500)		=									(500)
Princ Pmt on N/P	(1,000)											=				(1,000)					
Cash dividends	(1,000)											=			2,000						(3,000)
Stock dividend												=						2,000	2,000		(4,000)
<b>Ending Balance</b>	6,330	13,700	(1,700)	7,000	1,000	21,936	8,500	(2,500)	38,147	(2,005)	7,500	=	8,500	750	1,318	3,000	24,000	(1,800)	34,000	18,800	9,341

**Market Value: Discounted Free Cash Flow Analysis:**

	"g"	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EBIT	5%		18,109	19,014	19,965	20,963	22,011	23,112	24,268	25,481	26,755	28,093	29,497
Taxes:	35%		6,338	6,655	6,988	7,337	7,704	8,089	8,494	8,918	9,364	9,832	10,324
<b>EBIT (1-t)</b>			<b>11,771</b>	<b>12,359</b>	<b>12,977</b>	<b>13,626</b>	<b>14,307</b>	<b>15,023</b>	<b>15,774</b>	<b>16,563</b>	<b>17,391</b>	<b>18,260</b>	<b>19,173</b>
<b>Depreciation</b>	3%		<b>-2,305</b>	<b>-2,374</b>	<b>-2,445</b>	<b>-2,519</b>	<b>-2,594</b>	<b>-2,672</b>	<b>-2,752</b>	<b>-2,835</b>	<b>-2,920</b>	<b>-3,007</b>	<b>-3,098</b>
PPE	3%	58,000	68,583	70,641	72,760	74,943	77,191	79,507	81,892	84,349	86,879	89,486	92,170
ΔPPE			10,583	2,058	2,119	2,183	2,248	2,316	2,385	2,457	2,530	2,606	2,685
<b>CAPX</b>			<b>8,279</b>	<b>-316</b>	<b>-326</b>	<b>-336</b>	<b>-346</b>	<b>-356</b>	<b>-367</b>	<b>-378</b>	<b>-389</b>	<b>-401</b>	<b>-413</b>
Net A/R	3%	9,000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127
Inventory	3%	3,000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
A/P	3%	8,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423
Other C/Liab	3%	2,000	2,068	2,130	2,194	2,260	2,328	2,397	2,469	2,543	2,620	2,698	2,779
NWC		2,000	8,432	8,685	8,945	9,214	9,490	9,775	10,068	10,370	10,681	11,002	11,332
<b>ΔNWC</b>			<b>6,432</b>	<b>253</b>	<b>261</b>	<b>268</b>	<b>276</b>	<b>285</b>	<b>293</b>	<b>302</b>	<b>311</b>	<b>320</b>	<b>330</b>
<b>Free Cash Flow</b>			<b>-5,245</b>	<b>10,049</b>	<b>10,597</b>	<b>11,175</b>	<b>11,783</b>	<b>12,422</b>	<b>13,095</b>	<b>13,804</b>	<b>14,549</b>	<b>15,333</b>	<b>16,159</b>
<b>Terminal value (end 2009) @ 10%</b>												<b>161,586</b>	
Assume ABC cost of capital =	15.0%												
<b>Market Value @ Dec 2000</b>													<b>\$5,043</b>



## ABC Enterprises Inc. – Impact of a Leverage Acquisition on Consolidated Financial Statements

### Balance Sheet Equation:

	Cash	A/R	-ADA	INV	PPINS	Land	Machinery	- Acc Dep	Bdg	- Acc Dep	Patent	= A/P	Acc/P	Inc Tax/P	Div/P	Note/P	Bond/P	- Disc B/P	Com Stock	Add P-I Cap	RE								
<b>Beginning Balance</b>	12,000	10,000	(1,000)	3,000	2,000	20,000	8,000	(2,000)	30,000	(1,200)	8,000	=	8,000	1,500	500	1,000	-	25,000	(2,000)	32,000	16,800	6,000							
<b>Opt Act</b>												=																	
Cash from sales & A/R		42,000										=										42,000	Sales						
Bad debts			(1,500)									=											(1,500)	Bad Debt Exp					
Write off		(800)	800									=																	
Cash	37,500	(37,500)										=																	
COGS				(11,000)								=											(11,000)	COGS					
				15,000								=	15,000																
Cash paid to suppliers	(14,500)											=	(14,500)																
												=		8,000										(8,000)	Misc Exp				
Cash paid on misc exp	(8,750)											=		(8,750)															
Ins Exp					(1,000)							=												(1,000)	Ins Exp				
Cash paid for int	(1,800)											=							200					(2,000)	Int Exp				
												=												(5,521)	Tax Exp				
Cash paid for inc tax	(4,750)											=			5,521														
Mortgage payment	(511)											=						(88)							(423)	Int Exp			
Cash paid for operating exp	(346)											=													(346)	Bdg oprting exp			
Interest earnings on cash	474											=													474	Int on cash			
<b>Inv Act</b>												=																	
Purchase of machinery	(2,500)						2,500					=													(100)	Loss on sale			
Sale of machinery	1,400						(2,000)	500				=													(1,000)	Depr Exp Mach			
Depr Exp Mach								(1,000)				=														(600)	Depr Exp Building		
Depr Exp Building										(600)		=																	
Purchase of R&D facility	(1,760)					1,936			6,864			=						7,040								(18)	Trans cost amort		
Transaction costs	(176)								158			=															(7)	Loan point amort	
Loan Points	(70)								63			=																	
Improvements	(1,125)								1,125			=																	
Depreciation Expense										(205)		=																(205)	Depr Exp
<b>Fin Act</b>												=																	
Amort of widget patent											(500)	=																(500)	Amort of patent
Princ Pmt on N/P	(1,000)											=						(1,000)											
Cash dividends	(1,000)											=																(3,000)	cash dividends
Stock dividend												=																(4,000)	stock dividends
<b>Ending Balance</b>	13,086	13,700	(1,700)	7,000	1,000	21,936	8,500	(2,500)	38,211	(2,005)	7,500	=	8,500	750	1,271	3,000	6,952	24,000	(1,800)	2000	2000	18,800	9,254						

### Market Value: Discounted Free Cash Flow Analysis:

	"g"	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EBIT	5%		18,399	19,319	20,285	21,299	22,364	23,482	24,656	25,889	27,183	28,543	29,970
Taxes:	35%		6,440	6,762	7,100	7,455	7,827	8,219	8,630	9,061	9,514	9,990	10,489
<b>EBIT (1-t)</b>			<b>11,959</b>	<b>12,557</b>	<b>13,185</b>	<b>13,844</b>	<b>14,537</b>	<b>15,263</b>	<b>16,027</b>	<b>16,828</b>	<b>17,669</b>	<b>18,553</b>	<b>19,480</b>
Depreciation	3%		-2,305	-2,374	-2,445	-2,519	-2,594	-2,672	-2,752	-2,835	-2,920	-3,007	-3,098
PPE	3%	58,000	68,647	70,706	72,827	75,012	77,263	79,580	81,968	84,427	86,960	89,568	92,256
ΔPPE			10,647	2,059	2,121	2,185	2,250	2,318	2,387	2,459	2,533	2,609	2,687
<b>CAPX</b>			<b>8,342</b>	<b>-315</b>	<b>-324</b>	<b>-334</b>	<b>-344</b>	<b>-354</b>	<b>-365</b>	<b>-376</b>	<b>-387</b>	<b>-399</b>	<b>-410</b>
Net A/R	3%	9,000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127
Inventory	3%	3,000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
A/P	3%	8,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423
Other C/Liab	3%	2,000	2,021	2,082	2,145	2,209	2,275	2,343	2,414	2,486	2,561	2,638	2,717
NWC		2,000	8,479	8,733	8,995	9,265	9,543	9,829	10,124	10,428	10,740	11,063	11,394
<b>ΔNWC</b>			<b>6,479</b>	<b>254</b>	<b>262</b>	<b>270</b>	<b>278</b>	<b>286</b>	<b>295</b>	<b>304</b>	<b>313</b>	<b>322</b>	<b>332</b>
<b>Free Cash Flow</b>			<b>-5,166</b>	<b>10,243</b>	<b>10,802</b>	<b>11,390</b>	<b>12,008</b>	<b>12,659</b>	<b>13,344</b>	<b>14,065</b>	<b>14,824</b>	<b>15,622</b>	<b>16,461</b>
<b>Terminal value (end 2009) @ 10%</b>												<b>164,614</b>	
Assume ABC cost of capital =			<b>15.0%</b>										
<b>Market Value @ Dec 2000</b>				<b>\$5,311</b>									



## ABC Enterprises Inc. – Impact of a Synthetic Lease on Consolidated Financial Statements

### Balance Sheet Equation:

	Cash	A/R	- ADA	INV	PPINS	Land	Machinery	- Acc Dep	Bdg	- Acc Dep	Patent	=	A/P	Acc/P	Inc Tax/P	Div/P	Bonds/P	- Disc B/P	Com Stock	Add P-I Cap	RE	
<b>Beginning Balance</b>	12,000	10,000	(1,000)	3,000	2,000	20,000	8,000	(2,000)	30,000	(1,200)	8,000	=	8,000	1,500	500	1,000	25,000	(2,000)	32,000	16,800	6,000	
<b>Opt Act</b>												=										
Cash from sales & A/R		42,000										=										42,000 Sales
Bad debts			(1,500)									=										(1,500) Bad Debt Exp
Write off		(800)	800									=										
Cash	37,500	(37,500)										=										
COGS				(11,000)								=	15,000									(11,000) COGS
				15,000								=	(14,500)									
Cash paid to suppliers	(14,500)											=										
												=		8,000								(8,000) Misc Exp
Cash paid on misc exp	(8,750)											=		(8,750)								
Ins Exp					(1,000)							=										(1,000) Ins Exp
Cash paid for int	(1,800)											=						200				(2,000) Int Exp
												=			5,663							(5,663) Tax Exp
Cash paid for inc tax	(4,750)											=			(4,750)							
Cash paid for syn lease	(240)											=										(240) Synth lease exp
Cash paid for operating exp	(346)											=										(346) Bdg oprting exp
Interest earnings on cash	579											=										579 Int on cash
<b>Inv Act</b>												=										
Purchase of machinery	(2,500)						2,500					=										(100) Loss on sale
Sale of machinery	1,400						(2,000)	500				=										(1,000) Depr Exp Mach
Depr Exp Mach								(1,000)				=										(600) Depr Ext Building
Depr Existing Building									1,125		(600)	=										(113) Depr TI's
Tenant Improvements	(1,125)											=										
Depreciation TI's											(113)	=										
<b>Fin Act</b>												=										
Amort of widget patent											(500)	=										(500) Amort of patent
Princ Pmt on N/P	(1,000)											=						(1,000)				
Cash dividends	(1,000)											=										(3,000) cash dividends
Stock dividend												=							2000	2000		(4,000) stock dividends
<b>Ending Balance</b>	15,468	13,700	(1,700)	7,000	1,000	20,000	8,500	(2,500)	31,125	(1,913)	7,500	=	8,500	750	1,413	3,000	24,000	(1,800)	34,000	18,800	9,517	

### Market Value: Discounted Free Cash Flow Analysis:

	"g"	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EBIT	5%		18,293	19,208	20,168	21,177	22,236	23,347	24,515	25,741	27,028	28,379	29,798
Taxes:	35%		6,403	6,723	7,059	7,412	7,782	8,172	8,580	9,009	9,460	9,933	10,429
<b>EBIT (1-t)</b>			<b>11,891</b>	<b>12,485</b>	<b>13,109</b>	<b>13,765</b>	<b>14,453</b>	<b>15,176</b>	<b>15,935</b>	<b>16,731</b>	<b>17,568</b>	<b>18,446</b>	<b>19,369</b>
Depreciation	3%		-2,100	-2,163	-2,228	-2,295	-2,364	-2,434	-2,508	-2,583	-2,660	-2,740	-2,822
PPE	3%	58,000	59,625	61,414	63,256	65,154	67,108	69,122	71,195	73,331	75,531	77,797	80,131
ΔPPE			1,625	1,789	1,842	1,898	1,955	2,013	2,074	2,136	2,200	2,266	2,334
<b>CAPX</b>			<b>-475</b>	<b>-374</b>	<b>-385</b>	<b>-397</b>	<b>-409</b>	<b>-421</b>	<b>-434</b>	<b>-447</b>	<b>-460</b>	<b>-474</b>	<b>-488</b>
Net A/R	3%	9,000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127
Inventory	3%	3,000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
A/P	3%	8,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423
Other C/Liab	3%	2,000	2,133	2,197	2,263	2,330	2,400	2,472	2,547	2,623	2,702	2,783	2,866
NWC		2,000	8,367	8,618	8,877	9,143	9,417	9,700	9,991	10,291	10,599	10,917	11,245
<b>ΔNWC</b>			<b>6,367</b>	<b>251</b>	<b>259</b>	<b>266</b>	<b>274</b>	<b>283</b>	<b>291</b>	<b>300</b>	<b>309</b>	<b>318</b>	<b>328</b>
<b>Free Cash Flow</b>			<b>3,898</b>	<b>10,445</b>	<b>11,009</b>	<b>11,601</b>	<b>12,224</b>	<b>12,880</b>	<b>13,570</b>	<b>14,296</b>	<b>15,059</b>	<b>15,862</b>	<b>16,707</b>
Terminal value (end 2009) @ 10%												<b>167,072</b>	
Assume ABC cost of capital =		15.0%											
<b>Market Value @ Dec 2000</b>			<b>\$13,484</b>										



## ABC Enterprises Inc. – Impact of a Bond Net Lease on Consolidated Financial Statements

### Balance Sheet Equation:

	Cash	A/R	- ADA	INV	PPINS	Land	Machinery	- Acc Dep	Bdg	- Acc Dep	Patent	= A/P	Acc/P	Inc Tax/P	Def Rent	Div/P	Bonds/P	- Disc B/P	Com Stock	Add P-I Cap	RE	
<b>Beginning Balance</b>	12,000	10,000	(1,000)	3,000	2,000	20,000	8,000	(2,000)	30,000	(1,200)	8,000	= 8,000	1,500	500		1,000	25,000	(2,000)	32,000	16,800	6,000	
<b>Opt Act</b>																						
Cash from sales & A/R		42,000																				##### Sales
Bad debts			(1,500)																			(1,500) Bad Debt Exp
Write off		(800)	800																			
Cash	37,500	(37,500)																				##### COGS
COGS				(11,000)																		
				15,000									15,000									
Cash paid to suppliers	(14,500)												(14,500)									
Cash paid on misc exp	(8,750)												8,000									(8,000) Misc Exp
Ins Exp						(1,000)							(8,750)									(1,000) Ins Exp
Cash paid for int	(1,800)																	200				(2,000) Int Exp
Cash paid for inc tax	(4,750)													5,344								(5,344) Tax Exp
Cash paid for lease obligation	(1,040)													(4,750)		75						(1,115) Rent expense
Cash paid for operating exp	(346)																					(346) Bdg oprting exp
Interest earnings on cash	542																					542 Int on cash
<b>Inv Act</b>																						
Purchase of machinery	(2,500)						2,500															(100) Loss on sale
Sale of machinery	1,400						(2,000)	500														(1,000) Depr Exp Mach
Depr Exp Mach								(1,000)														(600) Depr Exp Bdg
Depr Existing Building									1,125		(600)											(113) Depr TI's
Tenant Improvements	(1,125)																					
Depreciation TI's											(113)											
<b>Fin Act</b>																						
Amort of widget patent											(500)											(500) Amort of patent
Princ Pmt on N/P	(1,000)																	(1,000)				
Cash dividends	(1,000)															2000			2000	2000		(3,000) cash dividends
Stock dividend																						(4,000) stock dividends
<b>Ending Balance</b>	14,631	13,700	(1,700)	7,000	1,000	20,000	8,500	(2,500)	31,125	(1,913)	7,500	= 8,500	750	1,094		3,000	24,000	(1,800)	34,000	18,800	8,925	

### Market Value: Discounted Free Cash Flow Analysis:

	"g"	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EBIT	5%		17,469	18,342	19,259	20,222	21,233	22,295	23,410	24,580	25,809	27,100	28,455
Taxes:		35%	6,114	6,420	6,741	7,078	7,432	7,803	8,193	8,603	9,033	9,485	9,959
<b>EBIT (1-t)</b>			<b>11,355</b>	<b>11,922</b>	<b>12,519</b>	<b>13,145</b>	<b>13,802</b>	<b>14,492</b>	<b>15,216</b>	<b>15,977</b>	<b>16,776</b>	<b>17,615</b>	<b>18,496</b>
Depreciation	3%		-2,100	-2,163	-2,228	-2,295	-2,364	-2,434	-2,508	-2,583	-2,660	-2,740	-2,822
PPE	3%	58,000	59,625	61,414	63,256	65,154	67,108	69,122	71,195	73,331	75,531	77,797	80,131
ΔPPE			1,625	1,789	1,842	1,898	1,955	2,013	2,074	2,136	2,200	2,266	2,334
<b>CAPX</b>			<b>-475</b>	<b>-374</b>	<b>-385</b>	<b>-397</b>	<b>-409</b>	<b>-421</b>	<b>-434</b>	<b>-447</b>	<b>-460</b>	<b>-474</b>	<b>-488</b>
Net A/R	3%	9,000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127
Inventory	3%	3,000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
A/P	3%	8,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423
Other C/Liab	3%	2,000	1,844	1,899	1,956	2,015	2,076	2,138	2,202	2,268	2,336	2,406	2,478
NWC		2,000	8,656	8,916	9,183	9,459	9,742	10,035	10,336	10,646	10,965	11,294	11,633
<b>ΔNWC</b>			<b>6,656</b>	<b>260</b>	<b>267</b>	<b>275</b>	<b>284</b>	<b>292</b>	<b>301</b>	<b>310</b>	<b>319</b>	<b>329</b>	<b>339</b>
<b>Free Cash Flow</b>			<b>3,074</b>	<b>9,874</b>	<b>10,409</b>	<b>10,971</b>	<b>11,563</b>	<b>12,186</b>	<b>12,842</b>	<b>13,531</b>	<b>14,257</b>	<b>15,020</b>	<b>15,823</b>
<b>Terminal value (end 2009) @ 10%</b>												<b>158,229</b>	
Assume ABC cost of capital =		15.0%											
<b>Market Value @ Dec 2000</b>			<b>\$12,178</b>										

### ABC Enterprises Inc. – Impact of a Traditional Operating Lease on Consolidated Financial Statements

#### Balance Sheet Equation:

	Cash	A/R	- ADA	INV	PPINS	Land	Machinery	- Acc Dep Bdg	- Acc Dep Patent	= A/P	Acc/P	Inc Tax/P	Def Rent L Div/P	Bonds/P	- Disc B/P	Com Stock	Add P-I Cap	RE			
<b>Beginning Balance</b>	12,000	10,000	(1,000)	3,000	2,000	20,000	8,000	(2,000)	30,000	(1,200)	8,000	1,500	500	-	1,000	25,000	(2,000)	32,000	16,800	6,000	
<b>Opt Act</b>																					
Cash from sales & A/R		42,000																		42,000	Sales
Bad debts Write off			(1,500)	800																(1,500)	Bad Debt Exp
Cash	37,500	(37,500)																			
COGS				(11,000)																(11,000)	COGS
Cash paid to suppliers	(14,500)			15,000						15,000	(14,500)										
Cash paid on misc exp	(8,750)										8,000	(8,750)								(8,000)	Misc Exp
Ins Exp					(1,000)															(1,000)	Ins Exp
Cash paid for int	(1,800)														200				(2,000)	Int Exp	
Cash paid for inc tax	(4,750)											5,300	(4,750)						(5,300)	Tax Exp	
Cash paid for sales & operating exp	(1,150)																			(1,235)	Rent expense
Cash paid by operating exp	(346)												85							(346)	Bdg opting exp
Int on cash	537																			537	Int on cash
<b>Inv Act</b>																					
Purchase of machinery	(2,500)						2,500														
Sale of machinery	1,400						(2,000)	500												(100)	Loss on sale
Depr Exp Mach								(1,000)												(1,000)	Depr Exp Mach
Depr Existing Building									(600)											(600)	Depr Exist Bdg
Int on cash									1,125												
Depr TI's	(1,125)								(113)											(113)	Depr TI's
<b>Fin Act</b>																					
Amort of widget patent									(500)											(500)	Amort of patent
Princ Pmt on N/P	(1,000)														(1,000)						
Cash dividends	(1,000)															2,000				(3,000)	cash dividends
Stock dividend																	2,000			(4,000)	stock dividends
<b>Ending Balance</b>	14,516	13,700	(1,700)	7,000	1,000	20,000	8,500	(2,500)	31,125	(1,913)	7,500	750	1,050	85	3,000	24,000	(1,800)	34,000	18,800	8,843	

#### Market Value: Discounted Free Cash Flow Analysis:

	"g"	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EBIT	5%		17,344	18,211	19,121	20,078	21,081	22,135	23,242	24,404	25,625	26,906	28,251
Taxes:	35%		6,070	6,374	6,693	7,027	7,378	7,747	8,135	8,542	8,969	9,417	9,888
EBIT (1-t)			11,273	11,837	12,429	13,050	13,703	14,388	15,107	15,863	16,656	17,489	18,363
Depreciation	3%		-2,100	-2,163	-2,228	-2,295	-2,364	-2,434	-2,508	-2,583	-2,660	-2,740	-2,822
PPE	3%	58,000	59,625	61,414	63,256	65,154	67,108	69,122	71,195	73,331	75,531	77,797	80,131
ΔPPE			1,625	1,789	1,842	1,898	1,955	2,013	2,074	2,136	2,200	2,266	2,334
CAPX			-475	-374	-385	-397	-409	-421	-434	-447	-460	-474	-488
Net A/R	3%	9,000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127
Inventory	3%	3,000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407
A/P	3%	8,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423
Other C/Liab	3%	2,000	1,800	1,854	1,910	1,967	2,026	2,087	2,150	2,214	2,281	2,349	2,419
NWC		2,000	8,700	8,961	9,230	9,506	9,792	10,085	10,388	10,700	11,021	11,351	11,692
ΔNWC			6,700	261	269	277	285	294	303	312	321	331	341
<b>Free Cash Flow</b>			2,949	9,787	10,318	10,876	11,463	12,081	12,731	13,415	14,135	14,892	15,689
<b>Terminal value (end 2009) @ 10%</b>												156,888	
Assume ABC cost of capital =		15.0%											
<b>Market Value @ Dec 2000</b>			\$11,980										

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## CASE STUDY PROTOCOL

### **1. Understanding the context:**

The objective is to have a firm understanding of these issues before arriving on site. As preliminary discussion, this material will be briefly covered in the interviews with various role players in the decision making process. Consensus should be reached in terms of our understanding of these issues.

### **Overall corporate strategy:**

- Consider the driving force: this determines the future product and market scope that define the business and provide a framework for guiding operating decisions. This will provide the context to consider the linkage of corporate business strategy to the real estate strategy.
- What is the primary driving force which provides the basis for defining all other choices related to your company's strategic profile?
- What is the clear and simple concept that guides top management in developing their strategic framework?
- How do you see the competitive playing field in your industry? Who are your key competitors? Are any of them new to the industry?
- If asked by the shareholders, how would senior management describe the company's overall business strategy for remaining profitable in the current competitive environment?
- Are there any documents that I can read in order to deepen my understanding of these issues?
  
- Consider the generic strategies employed to implement that driving force:
  - How does your company position itself among your key competitors? After response probe:



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- cost minimization
  - quality differentiation
  - service leadership
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- Consider the particular culture and values of the company
  - Consider the competitive environment: Porter five forces
  - What role does geography play in the business? Is the business defined by the markets in which it is located? (i.e. financial services chartered for a specific region) As opposed to a company whose product is more intangible and uninfluenced by geographic considerations. If the company is a hybrid (service/manufacturing) where do the customers/suppliers fit into location/facility decisions? Is proximity to customers and suppliers important?
  - Consider the real estate requirements of primary business strategy?
  
  - What is the CRE unit's key mandate within your company? How is your responsibility organized? (refer to both reporting and accountability)
  - Probe: roles in decision making process, property types covered, geographic reach.
    - What specific contributions does real estate make as an input to production and service delivery function of the business?
    - Do contributions vary by key business unit/customer market? By geographic market?
    - What performance measures are used to assess your units contribution to the overall business value?
    - Has either your mandate or the performance measures changed in recent years? If so, what precipitated those changes?
  - Is real estate central to the distribution of the company's products? Is it ancillary?

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- How important is interpersonal interaction between workers with the organization? Is interaction critical – thus proximity important?
  - What message does the company want to send by the image, external appearance, and internal ambiance of its space to employees, suppliers, capital markets and the broader community in which the business is based?

The particular strategy that the enterprise elects to pursue will obviously determine what resources will be required to implement that strategy. What is more important, however is how substantial the real estate/workplace investment is and whether this is a part of a deliberate strategy linked to anticipated business value?

**Corporate real estate strategy:**

- Does your company have an explicit strategy?
- Is the real estate strategy consistent with reinforcing the corporate strategy?
- What is the driving force in formulating the strategy? i.e. occupancy to cost minimization, flexibility, facilitation of operations, production, service delivery?
- Consider the organizational demands? i.e. structural demands, cultural demands & internal financing demands.
- What factors exist outside the direct control of the company which affect the time horizon, functional requirements, and resources available to plan and occupy space?
- What sort of dialogue exists between the business strategic planning functions and corporate real estate planning?
- What factors/environmental constraints impact the ability of the company to make the long-term logistical and financial commitments inherent in real estate and facility management decisions? i.e. product life cycles, the regulatory environment, and financial resources.

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- What are the objectives of the real estate strategy? Consider:
    - Cash generation,
    - Takeover prevention
    - More effective use of tax laws
    - The use of real estate financing as a market signal
    - Speculating in the local real estate markets by relying on the comparative advantage generated by the corporation's long-time horizon
    - Maintaining flexibility given the firm's current and expected space needs.
    - Does the strategy primarily relate to business unit requirements? i.e. cost competitiveness, worker requirements, cycle time for delivering space, innovation in terms of location and design?
  - Is the corporate real estate team an integral part of the capacity planning process? Or do they typically just receive a mandate requesting certain space requirements? To the business unit:
    - Does your unit operate on the basis of a strategic plan?
    - Who has input into the plan?
    - What data is incorporated into the plan?
    - How predictable are the needs of the business units?
    - How does your plan take into account the lack of predictability?
    - Who signs off on it?
    - Notwithstanding the plan, are there times that business units do a great deal of legwork on their own in advance of coming to the CRE unit?

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As context consider how operating decisions are made within the company. This will then form a basis for discussion leading into the establishment of the key drivers in the financial structuring decision.

### **Real estate operating decisions:**

Of critical strategic concern for the real estate function is then the implementation of operating decisions in a way that corresponds to the enterprise's real estate strategy. These decisions will concern the process of acquiring, controlling, managing and disposing of real property interests.

- What are the issues considered in making the operating (space need) decision? For instance these may include:
  - Location, quantity, building size & character,
  - Identity, signage, exterior quality,
  - General building amenities, mechanical systems, information/communication systems,
  - Local market conditions concerning relative availability of the quantity, pricing and type of space the company may need
- Who are the key players in the capacity planning process? (HR, IT, Business Unit & CRE) Does your unit collaborate with IT, HR? How specifically does this occur? Part of planning/project driven? Part of the investment decision only?

It would help me if you could walk me through a couple of recent decisions. First, are there some facility decisions that are fairly routine? Are the operating decisions process driven? Explain.

- What would be different in a situation where the facility is more complex due to the work processes, timing of delivery, or other key factors?
- Is confirmation made that the operating decision is consistent with other critical component strategies such as finance, business unit operations, HR etc.? Who needs to sign off on the final decision?

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- The operating decision making process....How does this compare to what has been the typical sequence of events:
    1. The corporation decides on a need for additional space. This is usually part of a larger capital budgeting decision tied to operations. Consider roles played by non-core functions in capacity planning process:
      - **Business units:** FTE forecasts by function from business unit, preferred/required locations.
      - **Human resources:** available labor market capacity by function in existing or new city/region.
      - **Treasury:** financing capacity/constraints.
    2. The space need is passed onto the corporation's real estate group for implementation.
      - **Corporate real estate:**
        - Available physical and IT infrastructure capacity of existing facilities.
        - Available alternatives in existing or new city/region
        - Required cycle time for delivery of next increment of capacity.
    3. Once the space need has been determined, major builder/developers and/or real estate professionals are contacted about the need, and some subset of these professionals is hired to perform their services. This involves the selection of the optimal financing structure, which typically involves an investment decision (via DCF), with a focus on flexibility, financial reporting, risk management and other drivers as mentioned. The team selects a financing alternative which best meets all stated objectives and considerations.
    4. The real estate is entered into the firm's balance sheet and then often largely ignored. Consider lifecycle impacts of own-lease spectrum

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**Is this operating decision considered separate from the related financing decision?**

Once the actual operating/space need decision is made, the specific asset identified now focus on the selection of a financial structuring alternative:

**2. Establishing the financing spectrum:**

Fundamental question: given often inconsistent financial parameters and business unit demands, how did the decision making team identify the best financing option?

Through preliminary calls establish:

- Who was involved in this financing decision making process?
- What is their position in the organizational structure?
- Assuming the financing decision was considered together with the operating decision, were the same key role players involved? i.e. real estate manager, business unit, treasury team?

Arrange separate discussions with the various role players. Possibly speak to: CFO, treasurer, business unit leader, corporate real estate manager. Discussion will then be held separately as a means to triangulate the information which is received. Use will be made of the conceptual diagram as a basis for the discussion.

For each role player:

- Review the list of financing alternatives. First, establish the spectrum of financing options which are actively considered:

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- How do your business objectives vary by alternative?
  - How are these alternatives functionally perceived by the corporation? i.e. I have viewed them primarily as a way to control/mitigate the risk which is transferred to the corporate user. There are certainly many ways in which the alternatives can be perceived, for instance they may be seen simply as differing degrees of control. What is your perspective on this issue?
  - What percentage of your portfolio is owned, leased, or controlled via other synthetic alternatives?
  - Is there a tendency to own or lease?
  - Is there any overriding driver considered in determining the financing alternative of choice. For instance – for some companies, the decision appears to be a simple issue of determining whether the asset is core or non-core.

### **3. Considering the financing decision drivers:**

- I am hoping that we can be fairly specific about what drives your real estate financing decisions.

Present conceptual diagram and ask them briefly to each fill in the major decision drivers that they consider.

- Please outline some of the major drivers that are considered in the financing debate?
- Present my checklist of drivers and clarify/discuss the meaning of the drivers while confirming them.
- How are the drivers identified? Has there been, or is there an ongoing discussion which is held in reviewing and identifying specific drivers?
- Are they grouped in anyway? For instance, quantitative vs qualitative? Or real estate requirements, business user needs/variability and investor risk reward objectives?
- Is there a formal approach to assessing the impact of the drivers?

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- How/why does the relationship between the drivers/financing alternatives vary by project? Which specific variables tend to be considered in this case.

Consider the relative importance of the drivers:

- What specific drivers do you deem to be most important in making the financing decision?
  - Why is this most important? Assuming this is a driver that I have identified, reference with my understanding of the issue. Discuss.
  - Did other role players in the decision making process also emphasize this drivers importance?
  - If not – in your eyes, what issues/motivations were they concerned about and why? This will be a good way to again assess the mutual understanding that the role players had of each others needs.
  - How was the relative importance of the drivers assessed? Do you have a formal model for assessing this? If so, how does it work?
- Flexibility is often mentioned as a key consideration. What does “flexibility” mean to you in this context? Is owning or leasing more flexible from your point of view? Why?
- Depending on the response received in the above question: Do you distinguish between “control” and “flexibility”?
- Since treasury professionals are most familiar with corporate level capital sourcing and often have little expertise in real estate funding, does the corporate real estate manager have direct access to capital sources?
- In placing a quantifiable monetary value on the wide variety of financing options available, how is the project considered:
  - Financing of an asset that will be discounted at an after-tax cost of debt?
  - A project to be discounted at the weighted average cost of capital?
  - Does this depend on the specific financing alternative being considered?



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- Do you believe that ownership of real estate assets directly alters the risk inherent in a company's cash flows? i.e. should cash flows from a company owning a significant amount of real estate be discounted at a lower cost of capital?
  - Should companies be disgorging their real estate assets and focusing on their core competency? Is this an issue which you consider?
  - How does your corporation think about risk? Do you have a formal approach in assessing the risks which the corporation will be exposing itself to?
  - Are the market value implications of the decision considered?
  - What rationale/analysis do you require before you will decide whether a real estate investment has merit? How does the financing decision factor into your decisions?
  - Has the company developed a "stock"/"one size fits all" approach that typically results in a single answer or decision for all properties of particular type?
  - What relevant information is gathered in order to evaluate the pros and cons of the full range of financial structures?

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