Overview: Fundamentals of Real Estate

Chapter 4: Risk Management

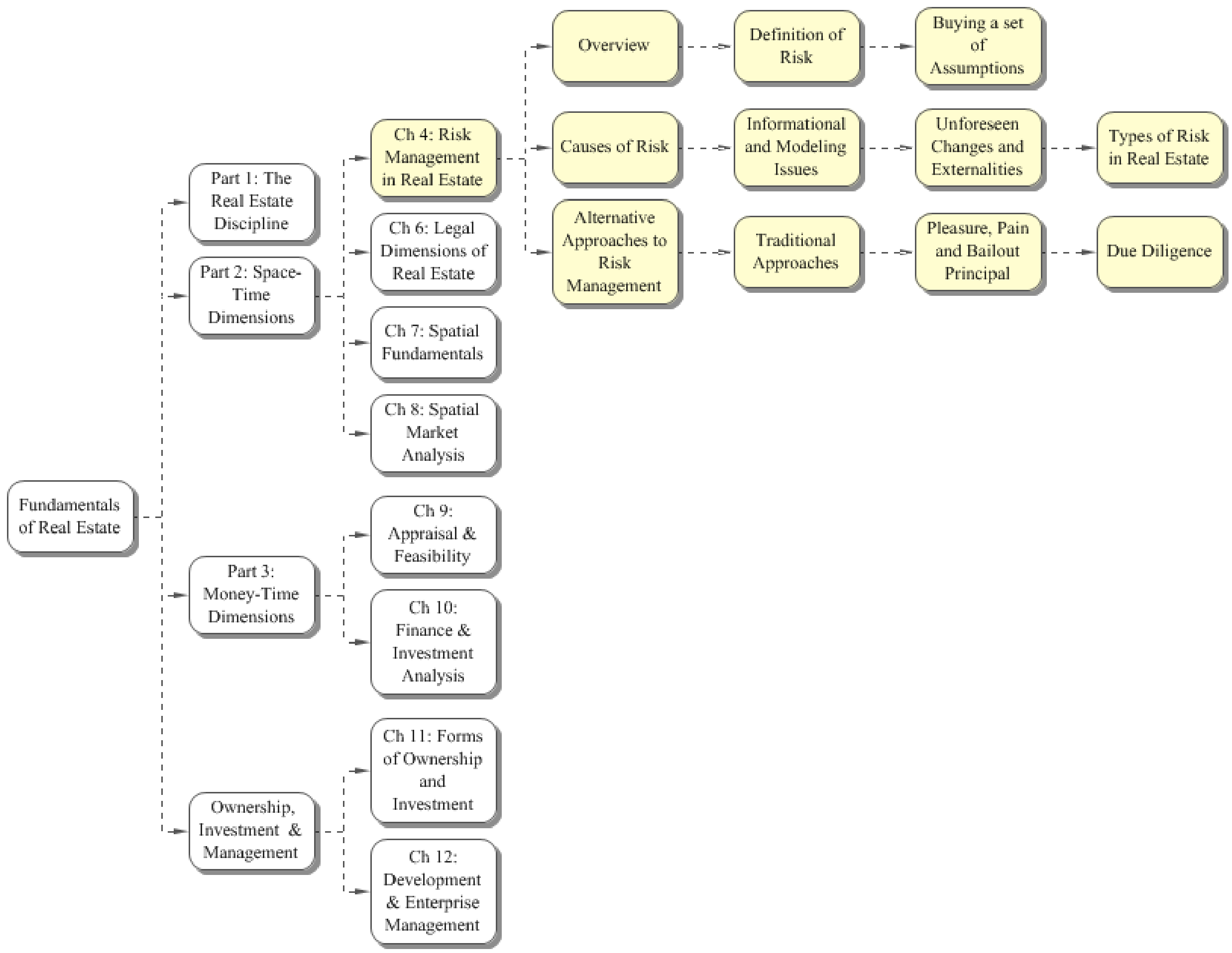

Table of Contents

Table of Contents

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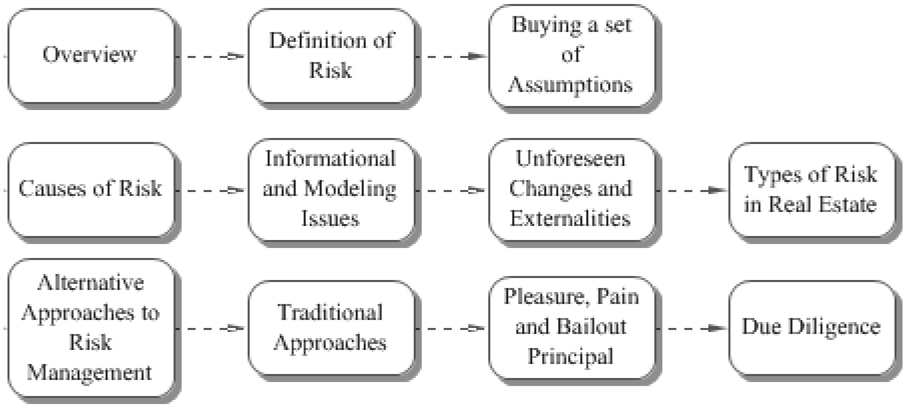
Preview Chapter 4



Overview

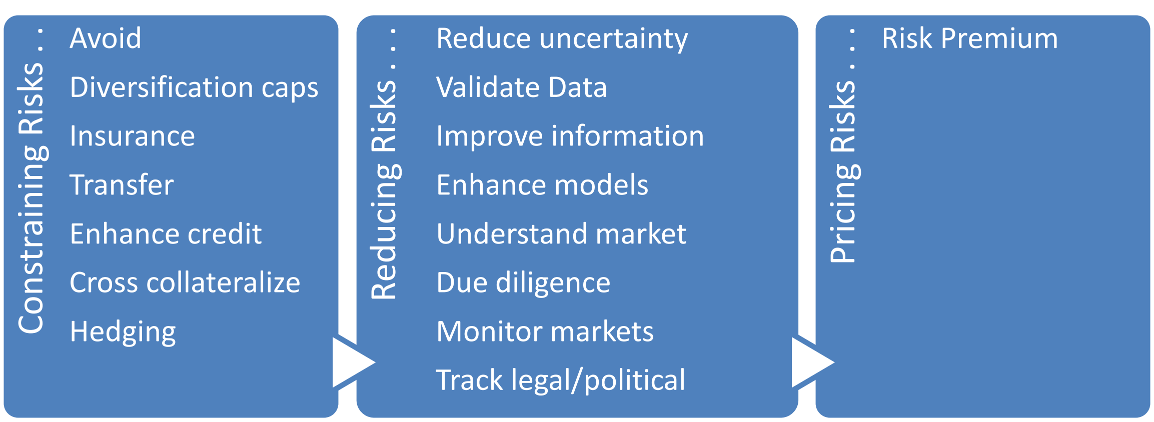
This chapter begins with an overview of the risk management process and then extends that framework commercial real estate. In a pragmatic sense, risk can be defined rather simply as the “Difference between expectations and realizations.” That is, it is a measure of the uncertainty surrounding a current or future event or state of nature regarding real estate. Rather than focusing on real estate as a tangible asset, the discussion approaches real estate as a “set of assumptions.”

To help organize the discussion, three levels of risk exposures are identified: enterprise, market/regulatory, and property. The discussion identifies three risk management approaches: constraining risks, reducing risks and pricing residual risks. The chapter closes with a discussion of due diligence as a risk management tool for real estate.

What you will learn in Chapter 4

- The definition of risk and its bi-directional nature.
- Hoe real estate decision makers are “buying a set of assumptions.
- The major causes of risk in real estate.
- Risks related to data and informational issues.
- Risks associated with unforeseen changes in competitive and regulatory environment.
- A systematic approach to the risk-management.
- Strategies for managing real estate risks.
- Levels of Real Estate Risks
  - Enterprise-level risks
  - Regulatory/Market-level risks
  - Property Risks
- Risk management approaches in real estate
  - Constraining Risks
  - Reducing Risks
  - Pricing Residual Risks
- Due Diligence as a Risk Management Device
  - Property-level Due Diligence
  - People-level Due Diligence
  - Contractual-level Due Diligence

Key Approahces to Risk Management



Nature of Risk

Risk Management and Real Estate

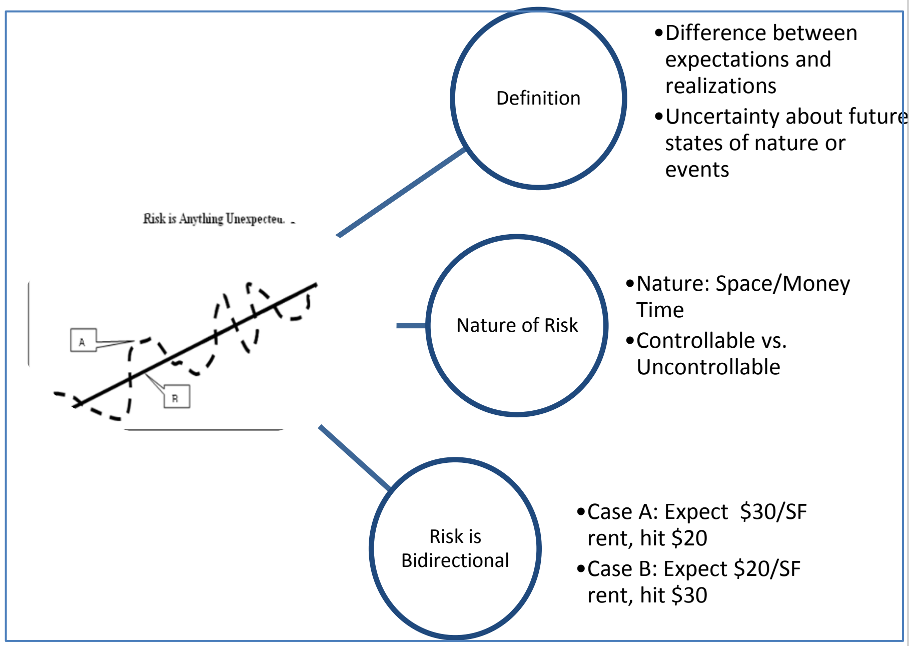


Exhibit 4- 1

Risk is a critical factor in commercial real estate. Risk is a complex topic and comes in many forms, making it difficult to identify much less quantify and manage. Thus, it is useful to start with a simple definition and then add some of the complexity to the equation. In a pragmatic sense, risk can be defined rather simply as the "Difference between expectations and realizations." That is, it is a measure of the uncertainty surrounding a current or future event or state of nature. It is the uncertainty that something will not be as it seem today, or that some prediction or assumption about what will occur in the future turns out to be wrong.

Risk in inherent in real estate due to its temporal nature: uncertainty is inherent in anything marked with the passage of time. Real estate risk is more complicated than other asset classes due to the: 1) inefficiency, behavioral nature and dual Space-Time, Money-Time dimensions of the market, and 2) the capital-intensive, durable and vulnerable nature of individual assets to external forces. These external forces make real estate vulnerable to unknown forces that can create windfalls (i.e., unexpectedly high returns) or wipeouts (i.e., erosion of capital and exposure to residual risks).

Commentary 4- 1

Bidirectional Nature of Risk

In addition to its pervasiveness, real estate risk is interesting in the sense that it is bi-directional. This point can be made by considering two cases associated with the acquisition of a property presented in Exhibit 5-1.

- **Case 1: Optimistic Scenario**. In the first case, the rent roll for a project averages $25/square foot/year. The acquisitions team overestimates the rent a project will generate, with a forecast of $30/sf per year but rents actually decline to $20/sf. Based on the false expectation, the buyer would have paid more than the property was actually worth and experience a loss in value or lower returns than projected, a clear risk.
- **Case 2: Pessimistic Scenario.** In the second case, a competing bidder projected the $25/sf/year rent would actually fall to $20 and adjusted their bid accordingly. Assuming the actual rent rose to $30, the potential buyer lost out on the deal since they were too conservative. So, uncertainty has a cost in either case since it affects behavior and performance.

Buying a Set of Assumptions

When developing, purchasing or making contractual commitments, decisions regarding commercial real estate are based on a "set of assumptions" about the future rather than a set of facts about the current state. These assumptions deal with both the investment elements of the property as an asset as well as its physical or spatial elements as a resource. The asset assumptions operate at property and market levels. At the property level they include rent levels, changes in rents, vacancy rates, rent rolls, lease renewals and operating expenses. At the market level the assumptions include economic conditions, capital flows, investor demand, cap rates, mortgage rates and underwriting terms. These assumptions are typically explicitly built into a proformas; a cash flow statement that indicates the expected performance of the individual asset over its investment horizon. This investment horizon is also known as the expected holding period and culminates in some assumptions regarding the exit strategy which is dependent on the market. For a developer or owner, that exit strategy refers to the net sales price that will be generated. For a tenant, the exit strategy refers to assumptions as to renewal, renegotiation or replacement of the lease.

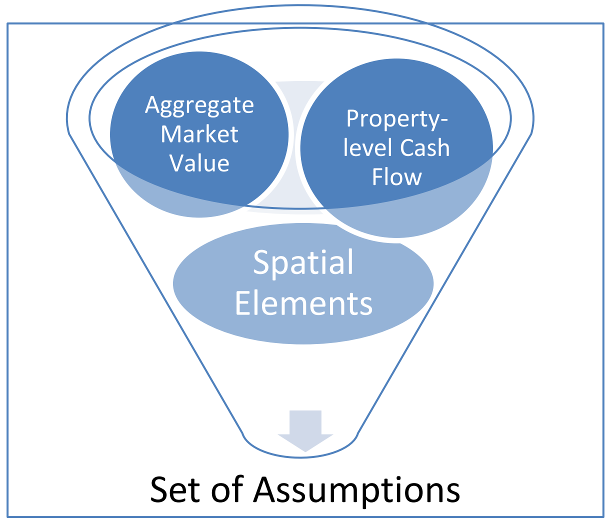


Exhibit 4- 2

…decisions regarding commercial real estate are based on a "set of assumptions" about the future rather than a set of facts about the current state. These assumptions deal with both the investment elements of the property as an asset as well as its physical or spatial elements as a resource.

In addition to the set of assumptions about real estate as a financial asset, the parties also make a set of assumptions about the spatial elements of the real estate itself. These assumptions cover the physical asset and its continued existence as well as the condition of the environment and linkages that support it in the urban context. Assumptions are also made as to the legal/regulatory environment, and the ability of the site to be enjoyed as originally specified, or under new land use controls that may be put in place. Finally, assumptions are made as to any functional or physical obsolescence that may occur and the impacts it will have on the demand for the property and its ability to satisfy the needs of current and future space users.

The breadth of assumptions that must be made about real estate as a financial asset and as a physical resource complicates the risk management process. Further complicating the situation is the fact that some of these assumptions are tangible and can be quantified, while others are intangible and difficult to quantify. Despite these challenges, the failure to explicitly address the assumptions creates an implicit buy-in which becomes a decision by default; one that assumes the status quo will continue to operate over the holding period. While this might simplify decision-making, the real estate market is simply too dynamic and subject to cyclical phases to justify such assumptions. The exception may be when the implications of the decision are relatively minor, or can be managed at a higher level. However, give the durable, capital-intensive nature of real estate, most decisions will benefit from some form of risk-management program. At a minimum, these efforts can help ensure that some latent risks that haven't been considered are identified and factored into the decision. An example would be an environmental risk which may not be identified at the inception of the deal but which has residual effects that carry on far beyond the expected or actual holding period.

Causes of Risk

Real estate risk exposures can be caused by so many factors that getting a handle on them can be a daunting task. To provide some structure to the exercise these factors can be grouped into several major categories as noted in Exhibit 5-4. Note that some of the risks are associated with errors in decision-support (i.e., Information & Analysis), while others are external (i.e., Unforeseen Changes).

Causes of Risk in Real Estate

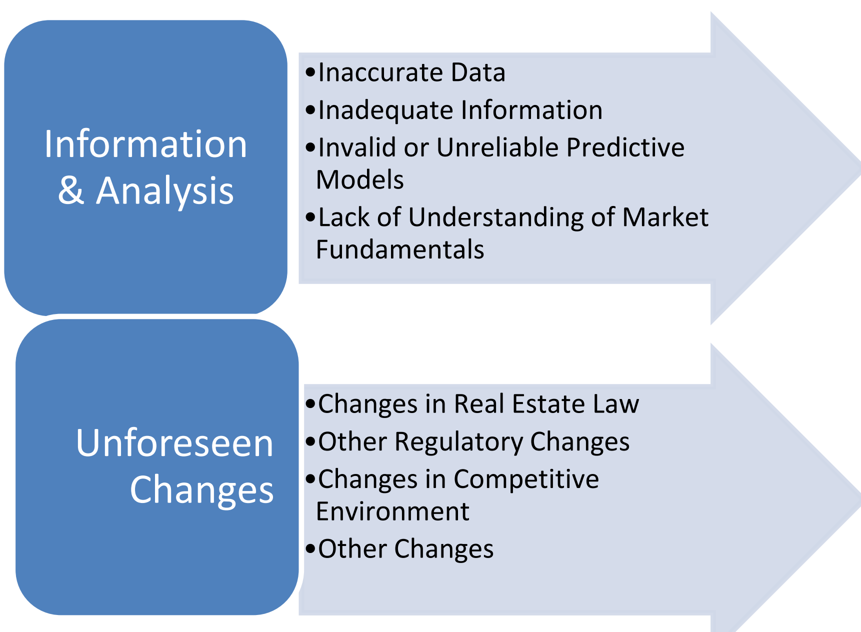


Exhibit 4- 3

Information & Analysis

The risk in real estate risk cannot be completely eliminated. Rather, it must be managed to ensure that it is compensated for with a commensurate return. Risk in decision-making can be caused by a number of factors including:

- **Inaccurate Data**. That is, there is no government clearinghouse that unambiguously monitors and reports on the real estate market conditions and transaction activity. Thus, the data on lease rates, transaction prices, occupancy levels, operating expenses and other economic factors are based on voluntary, self-report bases. While vendors try to verify data, there is no way to determine the veracity of data mandating decision-makers to rely on "good faith efforts" to ensure accuracy. To that end, the "know thy data" axiom takes on added importance. That is, a decision-maker should understand how data are compiled and the checks and balances that are put in place to avoid biases and subjective reporting driven by some underlying self-interest.

- **Inadequate Information**. As noted earlier, the real estate market is inefficient. That is not to say there are no data, but that there are no "pure" data. For example, even if the price at which a particular real estate asset trades hands is known, the "terms" surrounding the transaction (e.g., seller financing, credit enhancement, incentives and inducements) are often not known. This is particularly true with respect to leases and rent rolls, where there are a number of conditions that can affect the underlying economics (e.g., term of lease, changes in rent, use restrictions, options to extend, kick-out clauses, exclusives). That said there are a number of sources of market information that should be noted including:

    - **Fee-Based Real Estate Data Vendors**. A number of national data vendors have sprung up over the past several years resulting in the emergence of a number of dominant players (e.g., CoStar, REIS, and RCAnalytics.
    - **Commercial Brokers**. In addition to fee-based vendors, each of the national real estate appraisers and brokers (e.g. Colliers, Coldwell Banker, Cushman & Wakefield, Grubb & Ellis, Jones Lang LaSalle, Integra) tracks local market conditions to stay on top of local market trends. These data are then aggregated and make available to registered on-line users.
    - **Professional Trade Associations**. A number of major trade associations compile market data and generate periodic reports to serve their constituencies. In general, these sources focus on a particular property type (e.g., ICSC on retail, IREM on apartments, BOMA on office) while others cover several property types (e.g., NAIOP, ULI).

- **Invalid/Unreliable Predictive Model**. Since real estate investments are forward looking, decision-makers must depend on an understanding of market dynamics as well as a crystal ball that can help predict future market conditions over an appropriate planning horizon. While a number of time-series approaches can be used to identify market trends, real estate markets are cyclical and affected by changing market behavior and other externalities. As such, they cannot be predicted on a purely statistical basis, but must benefit from an understanding of the forces that operate on the market over time, as well as emerging trends and other changes that can distort the market. This is particularly true since real estate remains a behavioral science and must be approached with an understanding of the motivations behind transactions and other decisions that affect the market. Thus, additional research and analyses are necessary to determine if assumed conditions are likely to hold through the investment/commitment period which can justify the application of proven predictive models or if market dynamics are likely to render the application of static markets invalid.

- **Lack of Understanding of Market Fundamentals**. Real estate is a distinct asset class with a number of distinguishing features that differentiate it from other assets or industries. It is also a complex asset, in which the product is in a constant state of evolution brought about by changes in the static, environmental and linkages elements of the product. At the same time, the drivers of value emanating from the spatial, capital and regulatory side of the equation tend to converge over the long term, but due to market inefficiencies are in a

Since real estate investments are forward looking, decision-makers must depend on an understanding of market dynamics as well as a crystal ball that can help predict future market conditions over an appropriate planning horizon.

dynamic state of imbalance. Finally, real estate is behavioral science, wherein decisions are made by individual, companies and entities acting in their own best interest, with varying levels of social consciousness. Given these dynamics, a major risk in real estate is the failure to understand the asset class by players both within the industry and those who set the rules and make other decisions that have a material impact on the market.

Unforeseen Changes and Externalities

- **Change in Real Estate Regulations**. To a significant extent, the value of real estate is bestowed on it by the government after land use and other controls have been brought to bear on the equation. In something of an analogy to the "Residual Value of Land" concept, this could be denoted the "Residual Right to Use." In fact the two concepts are related since the right to use or entitlement ultimately determines the residual land value. Some of these changes are gradual or cyclical, while others can be instantaneous and structural.

Due to the dramatic increase in globalization of businesses, capital flows and economies over the past two decades, unexpected economic or geo-political events can have a dramatic impact on the economy, capital flows and real estate markets.

- **Changes in Competitive Environment**. Although somewhat malleable (i.e., changeable), real estate products are fairly static, especially with respect to location. On the other hand, business models which affect tenants and other space users are subject to dramatic changes. For example:
    - **Innovations**. The emergence of new technologies or logistical models can dramatically and quickly change the locational needs of the market, rendering some facilities functionally obsolescent and creating a shortage of other spaces.
    - **Sustainability/Social Responsibility**. Similarly, growing awareness of the importance of sustainability coupled with pressure on large companies to demonstrate social responsibility may shift demand away from existing buildings toward more energy-efficient or LEED certified buildings. Finally, emergence of non-store retailing and changes in inventory management can cause a dramatic shift in store requirements, both in terms of size and location.
    - **Globalization.** Due to the dramatic increase in globalization of businesses, capital flows and economies over the past two decades, unexpected economic or geo-political events can have a dramatic impact on the economy, capital flows and real estate markets. Some of these changes are temporary and affect the amplitude and frequency of cyclical phases; others can permanently enhance or impair values.
- **Other Externalities**. The final category of causes of risk in real estate is something of a catch-all that can be clustered under the umbrella phrase "things happen." Examples of such externalities include:
    - **Natural Disasters.** Given the fixed location of real estate and the nature of its physical dimensions, individual real estate projects are vulnerable to a number of natural disasters. Unfortunately, over the past several years these disasters have been increasing in frequency and severity of losses. Examples range from the hurricane-induced flooding that wiped out

much of New Orleans, to the ravages wrought by tornados that have hit in a number of mid-western and southeaster markets. While these natural disasters are somewhat predictable and benefit from early warning systems, they remain something of a random event and move much more quickly than reaction times, especially with real estate assets that must try to weather the storms.

- **Unnatural Disasters.** These types of risks stem include man-made disasters as in the case of BP's oil spill in the Gulf of Mexico and terrorist threats. However, they also include the unusual weather patterns that are causing flash flooding and environmental degradation. In addition to the physical risks they pose, these tragedies have the potential to amplify legal/political risk as national and international agencies step in and try to reverse the chain of events leading to global warming and other environmental consequences.

Risk Management Process

The risk management process is another form of decision-making. As such, it starts with a problem statement or strategy statement (see: Exhibit 4-3). This statement should specify the risk tolerances of the firm to establish a benchmark or target to guide the development of a risk management program. Given this strategy statement, the key risks that must be managed can be identified. Based on this input, the risk management program can be specified. This begins with identification of alternative controls and proceeds to an evaluation of those controls. This analysis will consider their efficacy (i.e., will they work) as well as on cost/benefit analysis (i.e., is the expected payoff high enough to justify the cost?) This analysis can be applied individually to address critical risks, as well as collectively to address the cumulative level of risks. Once the controls are identified, they can be integrated into an overall risk management plan. This play is then operationalized, and the results are monitored to determine if conditions have changed to warrant a revision in the plan.

Risk Management Process

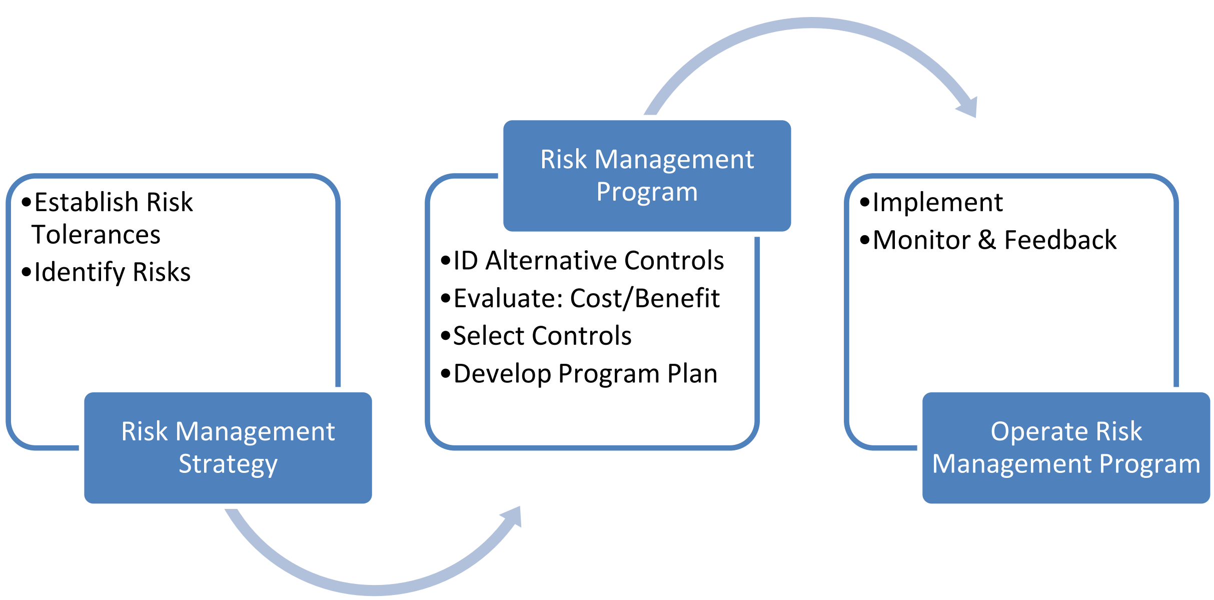
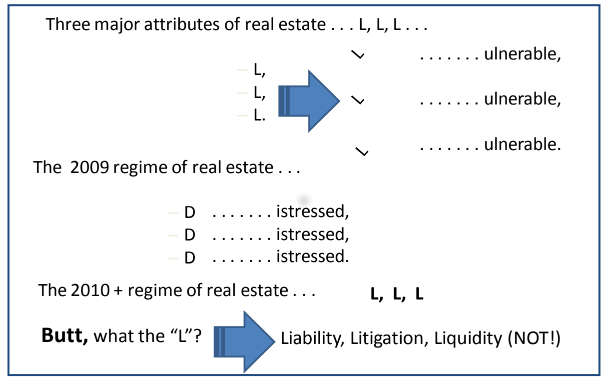


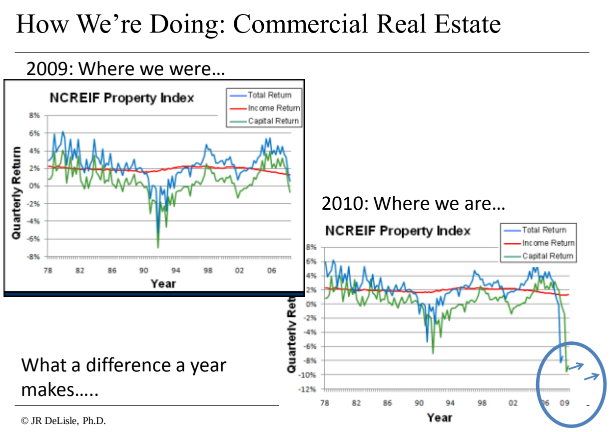
Exhibit 4- 4

Commentary 4- 2

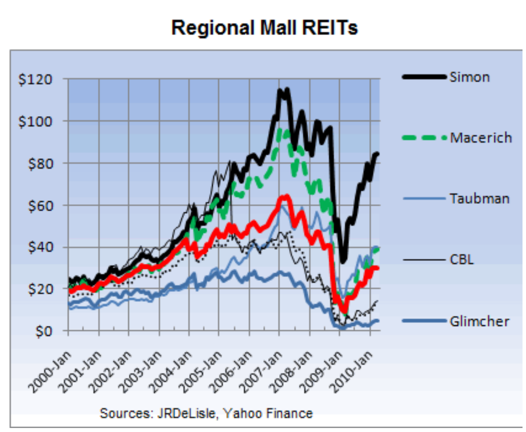
Examples of Real Estate Risks



A popular quip is that the three major attributes of real estate are Location, Location, Location. (LLL). A critical thinker would approach that phrase with more than a little skepticism, turning and twisting their head until they saw it from a different perspective. Indeed, at the right angle the LLLs become VVVs which stands for the true attributes of real estate: *Vulnerable, Vulnerable, Vulnerable* to the externalities and market inefficiencies. In 2009, the new attributes were the DDDs; Distressed, Distressed, Distressed as in the build-up of such assets in the queue. Going into 2010, the industry entered a renewed interest in fundamentals or the LLLs. The discriminating critical thinker will once again ask "What the L?" and open their eyes to the current regime: Litigation, Litigation and Liquidity (or not!). This is the personification of risk; the market giveth, and the market taketh away.



The slide "How We're Doing…"shows just how fast regime shifts can occur, with institutional returns plummeting over 40% with more downside risk than near-term upside potential. The irony in mid-2010 is the industry is gearing up for a return to normal, and evolutionary transition from one phase to another. The reality is the industry needs a revolution; a major change that takes the form of a permanent connect between Space-Time and Money-Time; between Main Street and Wall Street. After a period of denial, that re-connect will be forced on the industry, especially with pressure on mark-to-market valuations and the impending surge of distressed asset sales. However, due to short-term memory losses, professionals will have to manage their own risk exposures to survive and exploit vagaries of the market. The good news is there's an opportunity in the bad news, but pain and uncertainty along the way; that's why the focus should be on risk-adjusted returns.



In the mid-90s when the real estate market was recovering from the last major recession, some pundits argued that securitization (i.e., REIT resurgence and CMBS) would cure all that was wrong with real estate and make it a more transparent and efficient industry. This change was to be revolutionary and supplant the heretofore inefficient private market with an efficient public market. Exhibit 5-3 (c) indicates that indeed the public market has rebounded ahead of the private. However, that does not say that risk is gone or has been mitigated. Indeed, one could argue the cycles have been amplified by the de-connect between real estate fundamentals and the actual capital providers created by the public structure. That mismatch between short-term investors and long-term assets may only exacerbate the problem; fundamentals are here to stay. Just ask General Growth and the countless other owners and developers caught short when the capital markets turned their backs on good real estate.

RM Program: Pricing Residual Risks

Risk Management Strategy

Risk Management Strategy

Exhibit 4- 5

The risks in real estate risk cannot be completely eliminated. Rather, they must be managed to ensure that it is compensated for with a commensurate return. Thus, at a conceptual level the process is fairly straightforward: identify risks, manage risks and price the residual risks. These residual risks are those that cannot be managed since they are caused by uncontrollable or are random, or that are strategically not managed since they are either insignificant, or the cost-benefit equation does not justify the effort. When this happens, the decision-maker is opting for a form of self-insurance, betting on the risk not materializing or if it does, being able to cover the costs without jeopardizing the investment or the enterprise. This is also an important concept since there are times when losing an investment or getting below par returns is part of the risk-taking strategy and can be "rationale." Its only when these risks are not identified and/or are so material that they can jeopardize the survival of the enterprise.

While priorities may differ for each entity or individual, the first order for an investment is generally preservation of capital, and then hitting pro-forma rates of return or maintaining cash solvency. For the firm or entity itself, the first priority is survival and once that is secured, providing an acceptable return on investment. In this case, investment is inclusive of capital, time and human resources. Although emphasizing "preservation of capital" and "survival" might seem overly dramatic, in real estate the task is non-trivial. This is due to the cyclical nature of the industry as a whole, and the vulnerability of individual assets to external forces that cannot be controlled by an owner, investor or operator.

Once the risk management strategy has been formulated, the process should identify the significant risks to which the company is exposed, with a brief explanation of the nature of the risks, the triggers that may cause them, and whether they are controllable…

Once the risk management strategy has been formulated, the process should identify the significant risks to which the company is exposed, with a brief explanation of the nature of the risks, the triggers that may cause them, and whether they are controllable (i.e., under the discretion of the decision-maker) or uncontrollable and vested in the hands of outside forces. These external forces can create windfalls (i.e., unexpectedly high returns) or wipeouts (i.e., erosion of capital and exposure to residual risks). While windfalls may appear to have no downside, they violate a useful operating premise of "no surprises" and should, at a minimum, be channeled back to help document lessons learned. This will turn what could be a cost center into a net revenue enhancer and contribute to continuous quality improvement. In addition, the program should be ready to go on "alert" due to the cyclical nature of the industry and the fact various phases can amplify or compress the risk exposures. This is especially true in real estate where properties are vulnerable to competition and dependent on the survival of tenants or users who pay for the space. Indeed, any new activity, investment, venture or line of business should be submitted to a risk assessment to avoid introducing unanticipated risks that could have ripple effects far beyond the new activity.

Risk Management Program

The Risk Management Program (RMP) is the policy-oriented component of the risk management process, translating the strategy to an executable state. It is the operational component of an integrated process and as such, should incorporate feedback links to the other stages. In some respects it is a toolbox, but rather than assortment of tools, is more like a Leatherman 300 that is "project-ready" with all the bells and whistles it needs and the user manual to know when and how to deploy them. While this is something of an overstatement, the underlying concept is important. That is, a good risk management program is pro-active and gets in front of risks before they arise in the spirit of an old adage picked up years ago, "The Best Defense is a good Offense." This is not to say a risk management program has to be able to handle all cases, but to be able to identify the critical ones (i.e., the deal breakers) and make sure they are addressed, and then have procedures in place to respond in order of priority. Since some unexpected risks will likely surface (i.e., "Things happen"), the program should include a process that can be deployed to develop the appropriate response. Thus, it is important to make be able to see things happening and avoid the "out of sight, out of mind" syndrome. Assuming a formal RMP has been established at an overall level and for specific activities or exposures, the results should be sufficiently documented to be sent to the Implementation Stage

Levels of Risk in Real Estate

Levels of Risk in Real Estate

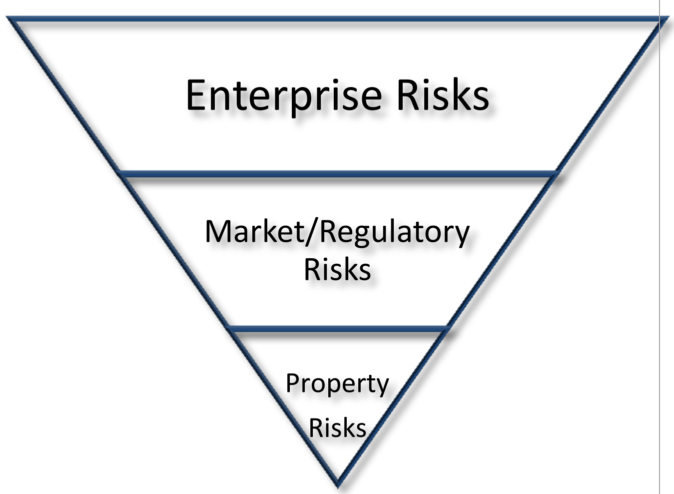


Exhibit 4- 6

To develop a risk management program, real estate professionals should consider the full spectrum of internal and external risks to make sure all the bases are covered. Exhibit 4-6 presents a classification system that illustrates three major levels of real estate risks. The Property Level risks are those that affect individual properties; both the spatial and capital sides of the product. The category of Market/Regulatory risk represents the "externalities" or outside forces that can affect a property or the broader real estate market, and the business activities of real estate enterprises. The Enterprise Level of risks consists of the factors that can threaten the viability and survival of the business. The inverted pyramid denotes that fundamental Property Level risks must be managed as a first priority. If the property risks are not managed, the entire system can topple over.

Commentary 4- 3

Real Estate Enterprises
In real estate, the term “enterprise” takes on a much broader meaning than it does in other asset classes. It applies to individual properties, special purpose entities and to companies created to develop, invest or otherwise conduct real estate activities (e.g., consulting, advising, and management).

Properties as Enterprises. In essence, a commercial property is itself an enterprise. It operates as a business with gross income as sources of capital and operating expenses as use of capital; the result of the tow is net income which provides a return or dividend to owners and other capital providers (e.g., lenders, investors, partners). In addition to periodic cash throw-off, owners capture other benefits including tax shelter which increases after tax cash flows and appreciation which can increase the value and thus sales price of the asset at disposition. In addition, properties may provide some intangible benefits such as brand, market position, monopoly value (i.e., logistical, unique), and economies of scale. As an enterprise, cash solvency is the key to long-term survival, although a commercial property may operate in the red for a period of time. This insolvency is temporary and must be offset by an infusion of funds from working capital, reserves, lines of credit or capital infusions (e.g., capital calls.

Unless the investor/owner is willing to subsidize an investment that is chronically insolvent, the value will decline to a level at which a new buyer is willing to acquire the property. Upon acquisition, the property becomes a new “enterprise operation” but with a lower cost basis. Over the long term, the asset will continue to decline in value until a viable the acquisition prices is low enough to create an enterprise that can maintain solvency. On the other hand, the project may generate higher returns than necessary if it outperforms the proformas. In this case, the value would increase to the solvency point is reached. Understanding this “fundamental” principle is critical to managing enterprise risk at the property level.

Special Purpose Entities. Real estate ownership and business activities are often domiciled in a special purpose entity which functions as an enterprise. These entities take various forms but share the common foundation of being focused on an individual real estate project, investment, or business activity. Alternatively, they may involve multiple properties, investments, business activities or some combination of all three. Some examples include: general partnerships, limited partnerships, or joint ventures. They may also include commingled funds, either open-end operating in perpetuity, or closed-end operating for a fixed period (e.g., 10 year closed-end fund). They can also take the form of funds-of-funds which are entities that invest in a series of commingled funds and/or securitized real estate. Investments may also be held in hybrid entities, ranging from a Joint Venture to a Tenancy-in-Common (TIC) that were created to support the ownership and transfer of Section 1031 Tax Free Exchange properties.

Corporations. The types of enterprises at the corporate level are more limited than the special purpose category but still contain a number of options. The common thread they hold is the fact they are focused on real estate as their core business activity. This is opposed to the fact that real estate comprises a significant share of corporate balance sheets, which by some estimate exceeds one-third of assets. Despite this high concentration, they are not looking for real estate as a revenue source, but as a factor of production along with labor, materials and capital. Real estate corporations may take the form of traditional C-corporations, although this form is not typically selected to hold real estate assets due in large part to double taxation that is not characteristic of other corporate formats. That said, there are a number of real estate operating companies (REOCs) that provide development and other real estate services in addition to property ownership. Other corporate forms of ownership include S-Corporations and Limited Liability Companies (LLCs). Finally, the most common form of corporate ownership is the Real Estate Investment Trusts. Like s-corporations and LLC, REITs have some tax advantages, but must operate under more restrictions on business activities and make significant dividend payments. REITs come in a number of forms including public listed, public unlisted and private. They can invest in the full array of property types, although the majority stay focused. They are also divided into equity, mortgage and hybrid categories based on their focus and core business.

Exhibit 4-7 presents the categories of risks that occur in each of the levels. Starting from the most basic Property level, these risks include those affect the product itself where the product is holistically defined to include the Static, Environmental and Linkages dimensions. The Market/Regulatory level of risks cover the Spatial Markets in terms of supply and demand, the capital markets in terms of availability and yield requirements, and the Regulatory Risks that both affect real estate directly (e.g., land use, building codes) and the real market indirectly (e.g., financial reforms, federal taxes affecting real estate). At the Enterprise level these risks include business risks that deal with the kinds of activities in which the enterprise engages, and financial risks that deal with its solvency and ability to maintain operations over the long term. At this point, more elaboration on these individual risks is warranted to set the stage for a discussion of how they can be managed.

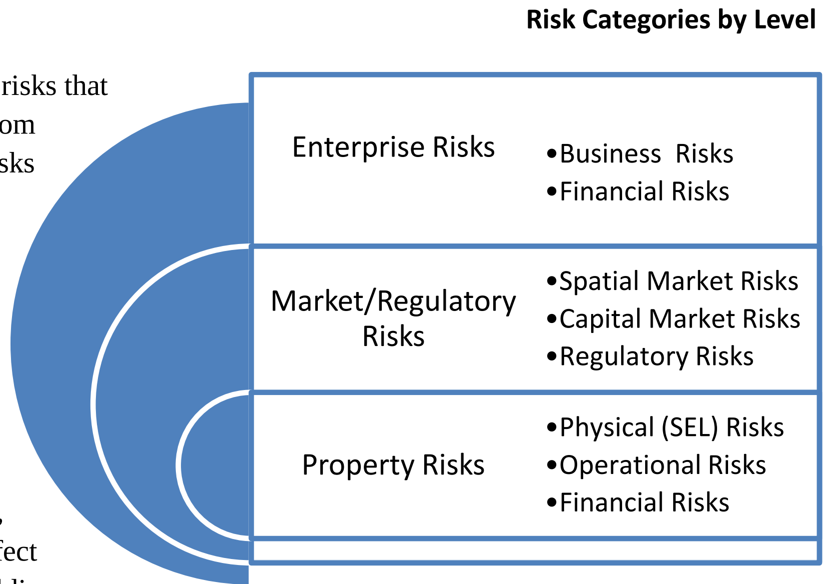


Exhibit 4- 7

Enterprise-Level Risks

Business Risks

Nature of Business. These risks to the enterprise stem from the nature of business they conduct, the sector(s) in which they operate, and the business lines, services, and activities they perform. They could affect the top line in terms of gross revenues or they could affect bottom line in terms of total costs of business. Top line performance (i.e., total revenues) could be affected by new competition, shifting demand, an economic recession, inflation that erodes purchasing power of customers, changes in regulatory restrictions, technological innovations that render products or services obsolete, and rising costs that drive up prices and restrict demand. Bottom line performance could be eroded by increasing operating costs, increased taxes, increases in existing fees, creation of new fees, increased labor costs, increased costs of capital that drive up interest payments.

…risks to the enterprise stem from the nature of business they conduct, the sector(s) in which they operate, and the business lines, services, and activities they perform. They could affect the top line in terms of gross revenues or they could affect bottom line in terms of

Financial Risks

- **Cash Solvency Risks**. This is the risk that the revenues generated the business activities and investments are not adequate to cover fixed operating expenses of the enterprise. This insolvency may not be permanent if the firm has adequate operating reserves, the ability to take out property or portfolio level debt, or the ability to raise capital through secondary stock offerings, asset dispositions or other means to cover short-term imbalances.

- **Interest Rate Risk.** This risk is associated with the use of leverage at the individual property level, at a division or business line, or at the enterprise level. Depending on the term structure of debt, this risk might cause erosion in net earnings, negative cash flows, or a capital crisis if refinancing existing maturing debt at higher rates is not feasible.

Market/Regulatory Risks

Market Risks

- **Spatial Market Risks.** These risk are related to the cyclical nature of the market which introduces the risk that there may be significant divergence between the supply of space and the demand for that space. This could occur in the aggregate and reflected in rising vacancy rates or at a submarket or property level. This latter could occur as a result of overbuilding or shifting demand that renders the space less attractive to the market of most probable users for whom the space was developed. This could result in temporary impairment in value as the market "adjusts" to a temporary imbalance or permanent impairment as the space becomes functionally obsolescent.
- **Capital Market Risks.** Real estate has two key dimensions: space-time and money-time. Over the long term, the value proposition in real estate is driven some 70-80% by spatial fundamentals of supply and demand for the property and 20-30% by the capital market fundamentals and the supply and demand for assets. Periodically, this equation gets reversed, creating unsustainable periods where properties are over or under-valued depending on capital flows. Since the capital side of the equation can change more quickly than the spatial side, capital flows and the connection between sources and uses of capital should be closely monitored

Over the long term, the value proposition in real estate is driven some 70-80% by spatial fundamentals of supply and demand for the property and 20-30% by the capital market fundamentals and the supply and demand for assets. Periodically, this equation gets reversed…

Real Estate Regulatory Risks

- **Building Code Changes**. Building requirements can be changed through a simple policy decision which may be fully vetted or may be in response to some disaster or awareness of a problem not considered in the initial codes. These changes may require expensive retrofit where the public health, safety and welfare are involved.
- **Changes in Zoning Codes/Designations**. The nature and intensity of use for a parcel can be materially affected through down-zoning or up-zoning. Since the value of land is typically a percent of the value of the total property (e.g., 15-20%) a change in intensity quickly translates to changes in land value. In the case of an existing building, changes in zoning may make a building a non-conforming use subject to future risk.
- **Environmental Regulations**. Over the past several years, environmental risks have taken on added meaning as concerns grow over global warming and environmental degradation. These risks and the changing legal/political environment they can lead to require

continuous monitoring and should be accepted as a moving target rather than a fixed hurdle. Going forward, changes in awareness and action regarding environmental implications of buildings may lead to a range of new policies and practices that are imposed on the industry and can materially affect the value of existing buildings which may not be in compliance with new standards and have an even more immediate impact on new construction activity.

Other Regulatory Risks

- **Tax Code Revisions**. With the exception of tax-exempt investors, commercial real estate performance should be evaluated on an after-tax basis. Since tax codes are periodically revised to raise revenues or influence investor or market behavior, changing should be closely monitored and built into the pricing algorithm. This is evidenced by the recent discussion of the "carried interest" provision which would dramatically increase the taxes on compensation to general partners.
- **Accounting Changes**. These risks stem from changes in best practices or accounting standards to which the real estate industry must adhere. Traditionally, these standards were established by FASB and culminated in Generally Accepted Accounting Guidelines (GAAP). With globalization, domestic standards have been increasingly affected by the International Accounting Standards Board (IASB). The goal of ISAB is to **"**develop a single set of high quality, understandable, enforceable and globally accepted international financial reporting standards (IFRSs) through its standard-setting body."
- **Financial Regulatory Reforms.** The near collapse of the financial market has triggered a number of regulatory reforms which affect capital flows to the asset class. Such interventions, which are negotiated agreements made by committee –with significant political overtones and a sense of urgency—can have significant impacts on the real estate market, many of which are unintended consequences.

Property-Level Risks

Physical

- **Static Attribute Risks**. Real estate is comprised of a "bundle of right" which can be enjoyed as a whole or split into parts and transferred, either temporarily or permanently. Thus, one of the risks associated with the asset is the risk of claims on those rights that can cloud the title. In addition to rights, real estate is a physical asset and as such, it subject to risks ranging from the quality of construction to the adequacy of maintenance.
- **Environmental Attribute Risks**. Given the fixed location of real estate, assets are vulnerable to a number of risks associated with the condition, composition and quality of its immediate environs as they change over time. Some of these changes may be positive creating opportunities, while others are negative and create downside pressures that must be managed.
- **Linkages Risks.** Similarly, the locational nature of real estate and its dependence on conditions in its market or trade area as well as connectivity to ancillary uses as part of a larger urban system exposes the value proposition to changes affecting commuting and transit patterns.

Given the fixed location of real estate, assets are vulnerable to a number of risks associated with the condition, composition and quality of its immediate environs as they change over time.

Operational

- **Management Risk**. This risk stems from the fact that real estate investments must be managed over time. In most cases, property management activity must be proactive, responding to changing market dynamics and competitive conditions, operating requirements and rent rolls. In effect, real estate investments are enterprises which require a continuous, on-going management and sufficient resource commitment and expertise to maintain value and capture targeted returns.
- **Business Risk**. In this context, business risk refers to risks associated with the tenants or other revenue generating entities or activities. It is associated with the nature of operation or activity that generates the income and hence rent-paying ability of a tenant.
- **Functional Obsolescence.** This is the risk that a change in the market which results in new standards or best practices renders a building or location obsolescent and wipes out value.
- **Exit Risk**. Exit risk occurs at the eventual point in time when an investor, tenant or other party seeks to sell or transfer an asset and there is insufficient demand to acquire the asset at the desired price. This could occur for a variety of reason ranging from erosion in net income to an increase in cost of capital and thus hurdle rates by potential investors

…real estate investments must be managed over time. In most cases, property management activity must be proactive, responding to changing market dynamics and competitive conditions, operating requirements and rent rolls.

Financial

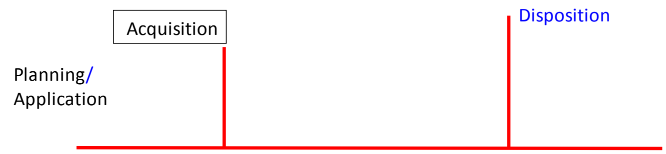
- **Cash Solvency Risks**. This is the risk that the revenues generated by an investment may not be sufficient to cover fixed costs which make the project insolvent. This could occur when required payments for expenses and mortgage payments exceed revenues after vacancy.
  - This situation could be caused by a combination of one or more factors including unexpectedly high vacancy rates, lower rents or higher operating expenses.
  - It may also be triggered by the use of bullet loans which must be refinanced at a time the project cannot satisfy then-current underwriting standards.
  - Alternatively, it could be caused by use of a floating rate loan may trigger increased payments that exceed the net income generated by a project.
  - Finally, a project may need some capital improvements due to unexpected events or need capital to cover tenant improvements after some turnover in the rent roll and not have access to sufficient capital to cover these unexpected and non-recurring costs.
- **Inflation Risk.** This is the risk that the increase in net income or property value will not keep pace with inflation, resulting in erosion in purchasing power and diluting real returns.
- **Interest Rate Risk.** This risk is associated with the use of leverage and refers to the risk that net income growth may not be sufficient to support refinancing or projected disposition prices on exit.
  - The former would occur with the use of floating rate debt or bullet loans that mature during the holding period.
  - The latter would occur when the next buyer found their maximum bid price constrained by imposition of a debt coverage ratio (i.e., income/mortgage payments) where the income was lower than expected and/or the interest rate was higher than expected.

A Life-Cycle Approach to Risk Management

Commentary 4- 4

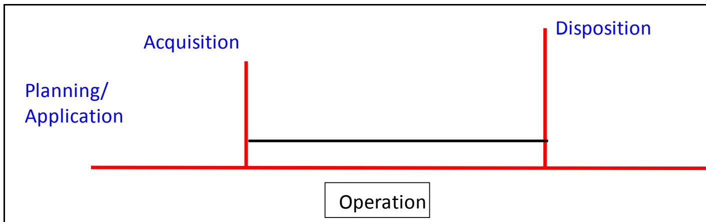
Planning/Acquisition Period Risks

During the planning or acquisition phase, the decision-maker faces an adverse selection risk. In the case of an existing asset, this risk stems from the sourcing of an inappropriate project to the inability to underwrite the asset to ensure the existence and capture of value. In the case of development, the risks are associated with the failure to create value that can be captured. This could stem from market timing which would result in the delivery of a project in the face of a market collapse, or the development of an inappropriate project for which there is little or no effective demand.



- Sourcing Deals
  - Marketing Channels: on-market and off-market listings
  - Search Scope: strategy to focus on targeted assets
- Evaluative Process
  - Sourcing Deals
  - Underwriting: tenant/borrower will and ability
  - Due Diligence: collateral integrity, quality and quantity
- Existence of value
  - Appraisal: value of underlying asset
  - Collateral Access: clear title, deed
- Capture of Value
  - Pricing vs. Market Value; risk-based
  - Valid "set of assumptions" regarding proforma
  - Contractual protection

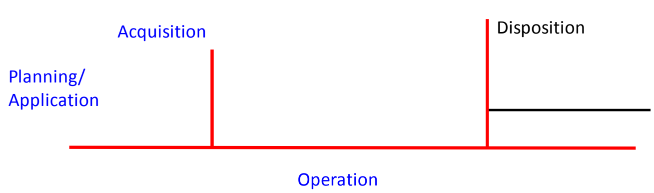
Operating Period Risks



- Management Oversight
  - Asset Management: Strategic overlay
  - Property Management: Tactical execution
- Tenant Relations
  - Rent roll management, tenant mix
  - Lease negotiations, renewals, tenant improvements
- Financial Management
  - Revenue processing: collection, posting, record-keeping
  - Expense servicing: operating expenses, taxes, insurance

During the operation stage, the property must be managed in a proactive way to retain the value proposition. The key activities during this phase relate to property and asset management, as well as tenant relations. It also extends to financial management which is necessary to maintain the solvency of the property as an enterprise.

Disposition Period Risks



- Hold/Sell Analysis
  - Annual review
  - Proactive holding period planning
  - Mark-to-Market valuation
- Sales Preparation
  - Rent roll stabilization
  - Property management audit
  - Capital Improvements
- Marketing Plan
  - Broker selection, engagement
  - Buyer review; due diligence
  - Negotiations
  - Closing and Disbursement

The final stage of property level risks is the disposition or redevelopment stage. While this stage is laid out at the end of the investment cycle, it is properly considered at the beginning with the specification of an exit strategy. At this stage, the disposition phase must be actively managed to avoid the risks of selling an asset that should be sold or vice versa, as well as getting the property ready to sell and properly marketing it to capture value.

The Pleasure, Pain and Bailout Theory

Commentary 4- 5

Pleasure, Pain and Bailout Principle

The Pleasure, Pain and Bailout Principle

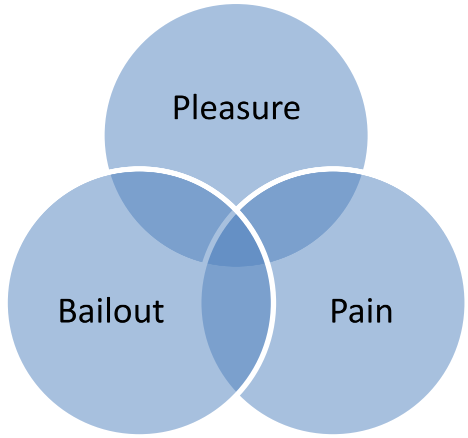


Exhibit 4- 8

The "Pleasure, Pain and Bailout" (PPB) principle developed by the late James A. Graaskamp provides a concise and intuitively appealing explanation of applied real estate risk management. Namely, all voluntary relationships formed by contract or association involve three key elements:

Pleasure. The economic, sociological, physical or psychological benefits associated with real estate.
Pain. The monetary or contractual sacrifices that must be made to acquire or control real estate interests.
Bailout. The exit strategy that can be triggered allowing one to walk away from real estate.

The PPB principle is fairly robust and applies to any ongoing arrangement in which two or more parties are engaged in some form of contractual relationship regarding real estate interests over time. The principle recognizes that the parties to a real estate activity will typically have different motivations, sensitivities and operating styles that must be reconciled to ensure proper alignment of interest. The principle also recognizes that a bailout becomes the key safety mechanism, since most parties are judgment proof with respect to capital-intensive real estate investments. It should be noted that to ensure success, only two of the three elements must be part of the equation. That is, if the pleasure/pain mix is sufficient, the investor will be adequately compensated in terms of risk/return and not walk away from an investment. However, if the pleasure/pain ratio is out of balance, the investor can bailout or walk from the investment. If the debt or position is recourse (i.e., contains claims against other assets in case of a bailout) the pain side of the equation rises and may hold the investor to the deal longer than might otherwise occur. The existence of the principle and its impact on the market can be evidenced by the wave of "strategic foreclosures that can occur when properties are upside down (i.e., value is less than mortgage balances) or when they are faced with the prospects of imminent default due to a maturing bullet loan or other capital event which does not make economic sense to overcome or address.

Alternative Risk Management Approaches

Real Estate Risk Management Programs

Exhibit 4- 9

There are several approaches to risk management including those designed to constrain or put a cap on risks, those designed to reduce risk, and those designed to price risk and make sure there is adequate compensation for taking on the residual or unmanaged risks.

Constraining Risks

- **Avoiding Real Estate.** The easiest way to manage real estate risks is to avoid the asset class due to its inherent complexity and uncertainty regarding the risks and returns. This approach was widely followed by pension funds and institutional investors in the early 70s, but was forced aside after the passage of the 1974 Employment Retirement and Income Security Act (ERISA) which imposed a prudent expert criterion on third party money managers and fiduciaries. While many investors are not subject to ERISA, most will find the benefits of the asset class outweigh the risks.
- **Diversifying.** Once an investor or developer has assembled several properties, diversification can be used to manage systematic risks. Briefly, diversification benefits can be captured for a number by drawing on an understanding of the different drivers of value across property types, subtypes and locations to dampen the cyclical waves associated with concentration in a single property type or market.
- **Insuring Risks.** Since not all risk exposures can be anticipated, liability can be managed by shifting exposures to third parties via insurance. The level and types of insurance should be decided after considering the tradeoffs involved in the certain loss of the insurance premium in return for control of the unpredictable loss from catastrophic events.
- **Transferring to Third Parties.** Real estate risks can also be managed through the use of contractual arrangements and covenants. Such approaches are exemplified by lease escalation clauses, guaranteed construction cost contracts, credit enhancement programs, third-party guarantees, and contingency programs (e.g., standby loans, pre-approved capital calls).
- **Limiting Exposures.** Certain types of liabilities can be capped through the use of certain forms of ownership (e.g., limited partnerships) or the use of exculpatory clauses in which one party agrees not to pursue relief from the other party (i.e., non-recourse financing).
- **Hedging.** A variety of products have emerged to allow investors to “hedge” risks by using financial engineering and structuring techniques to protect against future price fluctuations, changes in exchange rates, or other external forces. In effect, the investor takes opposite positions in the market, and then buys or sells at a fixed price depending on what happens in the market.

Reducing Risks

- **Improving Forecasts.** One of the most important risk management approaches is to reduce uncertainty by developing more accurate forecasts for key decision variables. Improved forecasts can be developed by combining the strength of quantitative analysis with the qualitative insights that come from an understanding of the structure of the market and the key players likely to affect a particular market or submarket. Since real estate appeals to different classes of users and owners, these forecasts are best conducted from the perspective of the most likely market segments that will be in the market for particular real estate opportunities.
- **Enhancing Models.** Due to the nature of the industry, forecasts can be improved by applying the scientific method to derive more valid and reliable models. Given the nature of the market, these models will have some behavioral and qualitative elements to ensure they do not become black boxes that are blindly relied on due to their statistical significance.

Improved forecasts can be developed by combining the strength of quantitative analysis with the qualitative insights that come from an understanding of the structure of the market and the key players likely to affect a particular market or submarket.

This caveat is particularly important since real estate markets are inefficient and at times do not trade on facts but on perceptions and expectations. Finally, the cyclical nature of the market should be kept in mind to ensure models that appear to work are periodically recalibrated to account for changes that may have occurred since they were initially validated. To that end, a critical element of model enhancement is the monitoring and feedback loop to provide the opportunity to continuously enhance decision-support and respond to emerging trends and other shifts in the spatial and capital markets for real estate.

- **Understanding Market.** Real estate is a unique market, one that is inefficient, largely private and determined by behavioral responses to various factors. In order to reduce uncertainty, it is important to understand the structure of the market, how it is stratified into meaningful submarkets, the drivers of value overall and by submarket, the legal/political process that affects real estate utilization, the supply function and barriers to entry, the demand function and changing preferences, market cycles, external forces, and decision-making processes of various participants.

Due to the private and inefficient nature of the real estate market, it is critically important that users adhere to the "know thy data" adage to avoid being drawn into decision support that is properly referred to as "garbage in, garbage out."

- **Improving Data/Enhancing Information.** These data should cover the full spectrum of real estate spanning both the Spatial and Capital sides of the market. Particular attention should be focused on the key factors that have an impact on the real estate market to avoid data overload and confusion that could be caused by noise or excess data. Due to the private and inefficient nature of the real estate market, it is critically important that users adhere to the "know thy data" adage to avoid being drawn into decision support that is properly referred to as "garbage in, garbage out." This is particularly important with respect to third party data which relies on voluntary reporting and cooperation rather than objective fact finding where data scrubbing and validation standards are applied. Due to the behavioral nature of the market, primary data should also be compiled to provide additional insights into how the market is reacting to the various stimuli and how it affects their attitudes and, by extension, future behavior.
- **Drawing on Experience.** Since real estate is an inefficient, cyclical industry with relatively low barriers to entry and the lack of a unified body of thought, lessons learned are often forgotten. Not only does this characteristic hurt the evolution of the discipline, but it creates uncertainty since the current genre of players may have little experience or sense of history to draw on when entering "familiar territory." To address this void, those with long-term career paths or aspirations should get in the habit of documenting how the market reacts to internal stimuli or external factors. While some aficionados contend the market will never get back to this place, that prediction has failed the test of time as noted by the current collapse of the residential and commercial markets. Granted, each situation is somewhat different and times may have changed, but in reality real estate fundamentals are remarkably stable. Indeed, in the absence of major structural changes forced by regulators and policy makers, the real estate market exhibits a strong tendency to "migrate to the mean."
- **Achieving Economies of Scale.** The real estate industry is a complex, interdisciplinary field that draws on a lot of related fields and areas of specialization. Given this somewhat eclectic nature and the capital-intensive nature of real estate, it is difficult for an individual enterprise or decision-maker to achieve meaningful economies of scale across multiple platforms, markets and property types. That is one reason REITs tend to focus on a particular property type and/or subtype (e.g., retail, regional mall, neighborhood centers). Despite this tendency, the more successful REITs and other real estate enterprises have expanded their product lines (e.g., entering new markets, becoming globalized, offering related products) and service lines to expand their operations and achieve greater economies of scale. At the same time, professional associations (e.g., BOMA, CCIM, CoreNet, ICSC, IREM, NAIOP and ULI) have taken on added importance, creating networking, research and educational

opportunities to help support their particular areas of concentration and advance best practices. Thus, risk and uncertainty can be reduced by achieving intellectual and business economies of scale through Mergers and Acquisitions (M&A), as well as externally through networking and continuous education.

- **Property Level Risk Reduction.** In addition to reducing risks through better information and decision-making processes, risks can be reduced at the property level through several avenues.
  - **Managing the Rent Roll.** As noted previously, developers and investors are "buying a set of assumptions" regarding the financial performance of commercial real estate rather than focusing on the tangible asset itself. Management of the rent roll is a critical success factor for most income-producing properties. At the aggregate level these efforts can address such important issues as tenant mix and tenant synergies, as well as the individual tenant level by assessing their will (e.g., payment history) and ability (e.g., sufficient revenues) to pay. These issues are addressed in various covenants in the lease, but still provide some uncertainty in the case of bankruptcy of a tenant or financial issues leading to the early termination of a lease. These risks can be managed by establishing minimal standards for tenant credit and, where appropriate, requirement credit enhancement. A variation on this theme is the use of a guarantor who pledges to back-stop another party in the event of a problem making required payments.
  - **Cross-Collateralizing**. In traditional mortgage lending and investments, capital providers focus on an individual building or site to collateralize the investment. In some cases, the severity of loss can be reduced by required cross-collateralization or pledging of security beyond the individual property. In the event of an unanticipated but potential problem, the capital provide can call a claim on the troubled asset as well as other assets pledged as part of the arrangement.
  - **Establishing Reserves**. To protect the economic solvency of a property during operations and provide funds to cover unexpected expenses or a downturn in the market, reserves may be established at the time of acquisition. These reserves can then be drawn down to cover costs without compromising current returns or cash flows. Alternatively, these reserves may be built up over time be making periodic payments to reserve account which are then compounded forward until the funds are needed. If there are surplus funds at the end of the holding period, these can be added to the net sales proceeds to calculate the actual holding period return.

Residual Risk Pricing

Regardless of how risks are managed, it is important to realize that some level of risk is inherent in real estate activities. Risk management programs should reduce residual risks to a tolerable level and then make sure that any unmanaged risk is factored into the pricing. This can be achieved by establishing a floor or base price for properties with certain "market rate" risk. Then, using a build-up approach, the hurdle rate (i.e., rate of return for a given project) is adjusted upward or downward for the residual risks that are higher or lower than the "typical" risk for the particular type of asset. For example, assume that the "cap rate" or overall rate of return for a "typical" garden apartment in a close-in location served by mass transit is 7%. Now, assume that you are looking at a property that is not served by mass transit and appeals to a narrower segment of renters which introduces additional leasing risk. In this case, you might add 1.5% to the required yield, raising the cap rate to 8.5% and thus reducing the price. Assuming the premium yield is correct, the investor would be indifferent to the close-in asset purchased at a 7% cap and a riskier asset that can be bought at an 8.5% cap rate. In essence, the two deals would have comparable risk/adjusted returns. A similar strategy could be applied to other

Regardless of how risks are managed, it is important to realize that some level of risk is inherent in real estate activities. Risk management programs should reduce residual risks to a tolerable level and then make sure that any unmanaged risk is factored into the pricing.

investment choices with the spread or required premium a function of the risk tolerances of the investor and the differences in perceived (vs. actual) risks.

It should be noted that the residual risk pricing should address cover the full spectrum of the investment cycle and should be "market-based." For example, assume that a buyer is more savvy than most and has developed the ability to source, underwrite and price distressed assets better than the market as a whole. While this can allow the buyer to "beat the market," the strategy may backfire if the assets are held in a market value account that must be "marked to market." In such cases, the properties acquired as a result of superior skills may face a write-down that creates an unrealized loss. This is particularly true for institutional investors whose holding must be valued by third party appraisers. To satisfy best practice requirements, these appraisers have to rely on "market" assumptions that are more pessimistic as in 2010-2011 when the market is beginning to be flooded with distressed assets that have built up in the queue as a result of the collapse of the commercial real estate market. Another example can be cited with respect to the recent push for premium pricing for green buildings. While such buildings might theoretically present a better value proposition, the assumption of whether this price premium (i.e., lower yield) is justified will be tested when the property is subjected to appraisal and "typical" expense ratios are applied. This risk might also carry over into the operating stage when the promised energy savings are not realized, or when lease structures and competitive market conditions do not allow the investor to benefit from the savings. Finally, the risk may re-emerge at the disposition side if the potential buyers do not apply the same pricing algorithm. Alternatively, if the standards for what a green building is have changed, the buyer may be faced with a functionally obsolescent form of "green" that not only has no positive value spread, but has a negative spread because it does not comply with then-current standards.

Due Diligence

Due Diligence

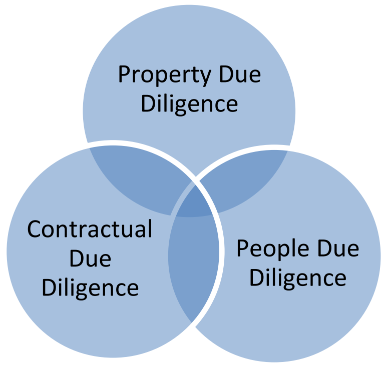


Exhibit 4- 10

Overview

Due diligence is a detailed, in-depth analysis of the collateral property and other assumptions that are critical to the success of a deal. This analysis can be expensive and time-consuming. As such, it is generally not conducted until a preliminary deal has been struck between the seller and buyer. In the interim, the buyer and seller can negotiate a contingent offer to purchase or an option to purchase which specifies the major terms of the transaction including price, closing costs and timetable. However, the contract does not become binding until the buyer has the opportunity to conduct due diligence to identify issues and risks that have not surfaced prior to the tentative agreement. If issues are discovered during this more detailed underwriting or evaluation, they become deal points and are subject to negotiation. In many cases these issues can be resolved through mutual agreement regarding repairs or price reduction. However, if an agreement can't be reached, they can become "deal breakers" and remove the buyer from an obligation to close. An example of this provision is the "home inspection" requirement commonly used in purchasing a house. The objective of the contingency is to protect the buyer from unknown or undisclosed defects in a house. Depending on the severity of the problems, the buyer may be able to renegotiate and/or withdraw from the purchase agreement with no prejudice or penalty. In the commercial real estate arena, there are no such protections with buyers operating under the caveat emptor standard. In commercial real estate there are three basic types of due diligence: property due diligence, people due diligence and contractual due diligence.

Property Due Diligence

Property Due Diligence: Physical and Legal

- **Records**
  - Title search and abstract verifying ownership, authority to transfer
  - Ability to secure title insurance
  - Property tax records, mortgage liens, mechanics liens if any
- **Quality**
  - The accurate “as built” survey of the building
  - Operating: mechanicals including equipment
  - Property management review
- **Compliance**
  - Environmental studies
  - American with Disabilities Compliance
  - Zoning and building code conformity, easements

Exhibit 4- 11

Property Due Diligence focuses on the physical and financial elements of the property. With respect to the physical side of the equation, the first set of issues for property due diligence is the existence of the property and the validity of the owner’s claim to the bundle of rights. These issues are explored through an in-depth review of the public records to ensure a clean title. This analysis is often provided by a third-party title insurance company or a title abstractor due to the specialized nature of the process the legal terms and potential nuances that must be accurately evaluated. In some cases, the buyer will obtain title insurance, while in others they may rely on an opinion of title. In addition to reviewing the chain of title, this analysis explores property records, permits, and liens to determine if there are any intervening claims that could cloud the title and/or limit the potential use of the property. Special attention should be paid to mechanic’s liens which are binding and take precedence even though they may not be recorded prior to another claim.

The second set of property due diligence concerns is related to the quality of construction and the integrity of the physical asset. These items generally require an on-site inspection and may involve a review of building plans and as-completed drawings. The nature of raw materials and mechanical systems s are also of interest as is the condition they are in, any needed repairs and remaining useful lives. A review of mechanical systems is particularly important when they represent new technologies or innovations (e.g., green building systems) which are still in the experimental stage and which may not stand the test of time and/or could be rendered functionally obsolete by product improvements. This is especially true when the building design has been built around the innovation and may have to be replaced or renovated to accommodate improved systems. Where possible, the method of assembling and construction is also reviewed to identify and latent defects in workmanship. Attention should also be paid to any deferred maintenance which may create some significant issues that can emerge at some point in time after the closing. These issues may be identified by a detailed analysis of operating expenses, maintenance and other expenditures.

A review of mechanical systems is particularly important when they represent new technologies or innovations (e.g., green building systems) which are still in the experimental stage and which may not stand the test of time and/or could be rendered functionally obsolete by product improvements.

The third set of property due diligence issues focuses on compliance with governmental policies and standards. This begins with an exploration of environmental issues since these can have economic implications far beyond the value of the property and are not extinguished by exercising an exit strategy and transferring the risk along with the title. Other issues deal with compliance with building and zoning codes, as well as other government requirements designed to protect the public safety, health and welfare. It should be noted that these standards can be idiosyncratic and materially different from jurisdiction to jurisdiction. In addition, they can be changed over time which may make a building that was once in compliance, out of compliance. An example of this risk would be the risks associated with needed seismic upgrades which can be triggered upon transfer of ownership. Another example would be uses that have been grandfathered in but are non-conforming with current zoning. Although permitted to continue to avoid undue hardship, continuation of the use can be invalidated upon transfer or when repairs or improvements exceed a certain threshold. Since the ultimate goal of the zoning designation is to bring the use into compliance over time, these triggers can be relatively low and thus should be carefully monitored.

Property Due Diligence: Financial

- **Market Value**
  - Appraised Value vs. Investment Value
  - Capital Flows and Capital Requirements
  - Market Conditions, Cycles and Forecasts
  - Obsolescence: physical, functional, economic
  - Deal breakers (e.g., licenses, flags, contracts)
- **Rent Roll**
  - Tenant Mix
  - Tenant Quality
  - Rent Roll
- **Operating Expenses**
  - Management Expenses
  - Utilities
  - Property Taxes

Exhibit 4- 12

In terms of the financial side of a property, due diligence addresses the issues that may jeopardize the financial assumptions under which the deal was underwritten in the first place. As noted earlier, from a financial perspective a property can be considered as an enterprise; one that must maintain cash solvency over its holding period. Due diligence should focus on the underwriting assumptions fed into the pro-forma to identify potential risks that might affect solvency. These risks will be affected by a number of external forces emanating from the changing market conditions and capital flows to real estate. At the same time, attention should be paid to the positioning of the property in the overall market and any risks that might be associated with technological innovations and other emerging trends that could render a property functionally or physically obsolete. Finally, the analysis should look for any hidden drivers of value that may be unique to a particular property. For example, in valuing a property that houses a successful bar or restaurant, the analyst should make sure the liquor license is attached to the property rather than personally held by the owner who may transfer it to another site and undercut the value proposition for the property. Similarly, a property that is performing above par might have benefitted from a having a superior location which would translate to higher values, or might

...from a financial perspective a property can be considered an enterprise; one that must maintain cash solvency over its holding period. Due diligence should focus on the underwriting assumptions fed into the pro-forma to identify potential risks to that might affect solvency.

have benefited from non-compete covenants that prevented a key tenant from opening competing stores within a certain radius. These agreements may be extinguished when a tenant vacates the property or may be rendered invalid upon sale. Thus, the assumption that a replacement tenant would be equally successful might be invalid, creating downward pressure on values.

Depending on the nature of the property and tenancy, an additional set of property enterprise risks stems from the rent roll. For example, in a shopping center the value proposition is often supported by the mixture of tenants; a mixture that must be proactively managed and targeted at the center's trade area. Thus, when assembling a tenant roster the manager must pay particular attention to the tenant mix to make sure the chemistry is synergistic. Thus, it is important to ensure the tenants are complementary and don't create negative externalities that could drive other tenants away. In some cases, tenants will have co-tenancy agreements which can tie the duration of their lease to the continued occupancy of named tenants. These named tenants will be ones for whom they have a particular affinity or who generate traffic from which they can also benefit without cannibalizing sales. Thus, while getting the tenants into the center and firming up the rent roll is critical to initial success, ensuring the key tenants remain is critical to on-going success and value retention.

Problems with high tenant turnover could be exacerbated by the fact the property may not have access to sufficient capital to cover the need for leasing commissions, tenant improvements, free rent and other concessions that might be necessary to draw new tenants to the property.

The rent roll or pattern of expiration of leases can also have a significant impact on the cash solvency and value of a property. For example, if tenants don't renew in line with pro-forma assumptions, the property may not be able to cash flow due to excess vacancy. Problems with high tenant turnover could be exacerbated by the fact the property may not have access to sufficient capital to cover the need for leasing commissions, tenant improvements, free rent and other concessions that might be necessary to draw new tenants to the property. Finally, if the leases are not staggered, the property can face a systematic decline in rents if the market is in a down cycle when the leases begin to roll over. Similarly, the prospects of a loss of a significant portion of tenants over the near term will often have a depressing effect on net terminal values (i.e., future sales prices) since the market will be faced with leasing risk. Again, in a down market this uncertainty could create a major drag on net sales proceeds and thus realized vs. pro-forma holding period returns.

The final set of property due diligence concerns that should be addressed during the acquisition phase relate to operating expenses and other projected drains on gross revenues. These expenses range from utility costs to maintenance expenses. While the analyst could look at audited financial statements to determine historical expenses, due diligence will typically involve more research to determine if the unusually low expenses were due to some unusual property feature (e.g., high efficiency mechanicals that cut costs but have a short useful life) or market anomaly (e.g., incentives, temporary price freezes, tax breaks) and may not be enjoyed going forward. Finally, operating expense reimbursements (i.e., billed through to tenants) may have been owner-friendly if the leases were written during a strong market. Thus, while net expenses may indeed have been lower in the past, this pattern will not hold in the future due to high lease expirations and soft market conditions.

Another area of concern may be management expenses, especially if the previous owner provided their own services and had some competitive advantage that created above-average performance. This is known as a form of intangible value that created a price premium that may not be able to be captured by future management. An example of this form of intangible value would be in a regional shopping center where the previous owner was a large REIT which provided both economies of scale and negotiating power over retailers who depended on the REIT for other locations. This would give the REIT leverage over tenants that would not transfer to a new owner unless they had a similar market presence. Another example would be a warehouse operator who benefited from a long-term relationship with key tenants that would not automatically pass on to a new owner.

People Due Diligence

- **Role**
  - People can mess up whether or not contracts are binding
  - Determine if everything else seems to be as represented
- **Ability to Perform**
  - Who is really signing all contracts?
  - Income and net worth as primary source
  - Competing liabilities
  - Are personal guarantees worth anything?
- **Willingness to Perform**
  - What is the track record of owners and parties involved?
  - Are known risks enforceable or backed?
  - Are there escrow accounts and trustworthy people involved?

Exhibit 4- 13

People Due Diligence

One of the easiest and most rewarding adages that can apply to real estate is "don't do business with scuzzbags." Unfortunately, scuzzbags are notoriously hard to identify in real estate. This is due to a number of factors ranging from the private nature of the industry to the lack of transparency that prevents one from getting an accurate picture of someone's track record. Even if they were involved with successful projects in the past, attribution analysis is hard to apply since the actual role that individuals or enterprises played in a project's success may not be obvious. As such, it is important that considerable attention be paid to the "people due diligence" side of the equation, especially if there is some on-going relationship upon which success of a venture depends. Depending on the situation, people due diligence should focus on other parties' reputations, as well as their track record. Indeed, in real estate the reputation or "human capital" side of the equation is particularly important in real estate which, despite the large number of players, remains a relatively small industry. Thus, what goes around comes around. That is because large-scale transactions are subject to market scrutiny and must draw on a number of players bound together with the common objective of doing a deal. While some parties try to squeeze every nickel out of each transaction and leave nothing on the table, such an approach can be short-sited, leaving them out in the cold during phases of the market cycle where players can pick and choose with whom they work.

…in real estate the reputation or "human capital" side of the equation is particularly important in real estate which, despite the large number of players, remains a relatively small industry. Thus, what goes around comes around.

In assessing the quality of people involved in a transaction or on-going business relationship, attention should place on their ability to perform, as well as on their will to perform. The ability to perform is a function of their legal standing;

the authority and responsibility to perform. This is particularly important where one relies on the credit-worthiness of the other party which is vested with a related firm or party who may or may not have to stand behind individual transactions. In many cases, tenants set up shell corporations or special-purpose enterprises which share portions of the same name, but have significantly less access to capital in case things don't work out. The ability to pay is also determined by the adequacy of the revenue stream generated at a particular location, or by the parent organization if part of a larger enterprise.

An example of the risk related to the adequacy of sales revenues at locations can be drawn from the retail sector where emphasis is placed on "total occupancy costs" as a percent of revenues. Depending on the nature of the retail operation and competition, the "affordable" or Real Estate Capture Ratio (RCR) is typically in the 12-15% range of on-site sales. As noted in Exhibit 4-13, the RCR converts the gross revenues generated at a location to a Gross Rent that is "affordable." While an owner might feel they won at the negotiating table by getting a tenant pay 20% or more of gross revenues, this strategy is likely to be short-lived with the tenant struggling to make the unit profitable. Indeed, if these costs are out of line relative to competitors, the operator may not be able to compete and lose sales to competitors with a lower real estate claim on revenues. After netting out operating expenses, the Net Income is converted to the Value of the revenue stream by dividing it by a required Return (V = I/R). This Return is s a function of the perceived risk relative to alternative investments which then links the tenant risk to the value of a property.[1] It should be noted that some retailers and operators do not focus on unit profitability over the near term, placing attention rather on market share and subsidizing operations to maintain a competitive presence. While appearing to work in the short term, this will generally not be a viable long-term strategy and may lead to store closures as retailers are forced to cut back in a down market.

Real Estate Capture Ratio

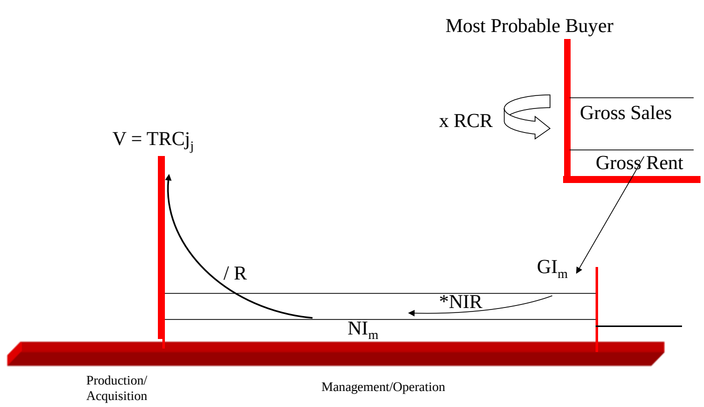


Exhibit 4- 14

The "ability to perform" is also determined by understanding the financial condition of the other party and the outlook over the relevant holding or operating period. This analysis should identify all sources of revenue that will directly flow to the real estate operation, as well as net worth , reserves or capital calls that can be made to cover temporary short-falls. These other sources of income may come from the property by increasing rents or reducing expenses. Alternatively it can come from the other holdings of the enterprise that can either be drawn upon, or that have been pledge to cross-collateralize or credit-enhance a contractual commitment.

The willingness to perform is an intangible element that is difficult to quantify but is essential to successful contractual relationships. In essence, with enough "will to perform" other parties can generally overcome

[1] The V=I/R equation and more in-depth examples will be presented in a discussion of real estate appraisal and real estate finance. They are presented here to illustrate the linkages among risk, returns and values and the importance of market-based solutions to ensure solvency of the real estate enterprise.

significant challenges. To a certain extent, the will to perform is a test of the personality and values of o the other party and the pride they take in honoring their commitments. On the other hand, it is also a function of how well the real estate satisfies their needs vis-à-vis alternative locations. That is one reason why the people due diligence analysis should incorporate an understanding of key tenants' businesses, as well as trends that may affect their long-term outlooks. Thus, fundamental real estate analysis transcends a mere understanding of supply and demand, translating to an understanding of the nature of tenants' businesses and the drivers of value that determine their long-term success and rent-paying ability. These insights are typically provided by asset managers who look beyond buildings and direct real estate to bring a richer understanding of the competitive arena surrounding their customers.

…fundamental real estate analysis transcends a mere understanding of supply and demand, translating to an understanding of the nature of tenants' businesses and the drivers of value that determine their long-term success and rent-paying ability.

Contractual Due Diligence

The final type of due diligence is contractual due diligence which addresses the purchase agreements as well as any other contractual provisions that could affect the developer, transaction or operation of real estate. The range of contracts in commercial real estate is fairly broad, spanning the full life cycle from planning to disposition. They include contracts for purchase and sale, leases, options, pledges, and other formal agreements that create legal rights and responsibilities regarding real estate. They may also include informal and implicit contracts and agreements. These contracts can be explicitly created by agreement or activities among the respective parties, as well as by common law or legal authority. Given the complexity of real estate and the legal environment surrounding real estate, contracts should be drafted and reviewed by legal experts. However, individual players and companies should develop the ability to apply due diligence to such contracts to make sure they satisfy the requirements of the risk management program that have been established. Depending on the scale of operation, this analysis may be provided by internal personnel or outsourced. While the former may be ideal, it should be noted that in many cases it will require very specialized skills to analyze and interpret real estate contracts.

Contractual Due Diligence

- **Several Stages of importance**
  - Sales/Purchase
  - Design, Construction & Development
  - Operations and Dispositions
- **Dimensions**
  - Costs & Time
  - Uncertainty
  - Risk Management & Dispute resolution
- **Key questions will include:**
  - How are the parties selected?
  - How is alignment of interest achieved?
  - What are the deadlines for each step?
  - Who is responsible for each unresolved issue?
  - Who will take charge of resolving disputes?

Exhibit 4- 15

Summary Chapter 4

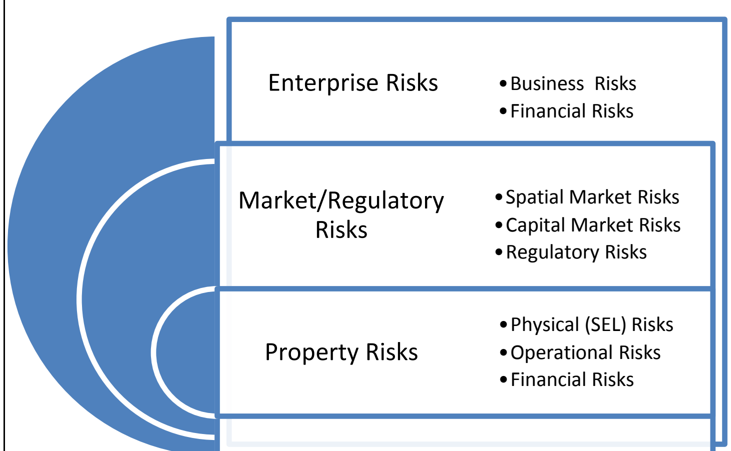
- **Nature of Risk**. Risk is pervasive and inherent in anything associated with time. Risk is the uncertainty surrounding some event or future state.
- **Directionality of Risk**. Risk is bi-directional, with both upside and downside elements.
- **Real Estate Assumptions**. When developing or investing in real estate, estate decision makers are “buying a set of assumptions.”
- **Causes of Risk**. The major causes of risk in real estate include:
  - Risks related to data and informational issues.
  - Risks associated with unforeseen changes in competitive and regulatory environment.
- **Risk Management Process (RMP).** The risk management process consists of a systematic approach to the risk-management. It begins with strategies for managing real estate risks.
- **Levels of Real Estate Risks.** In real estate, there are three major levels of risk including:
  - Enterprise-level risks
  - Regulatory/Market-level risks
  - Property Risks
- **Constraining Risk**. This involves putting a cap on the maximum risk exposure.
- **Reducing Risks.** This approach is designed to reduce risks to tolerable levels using various techniques.
- **Pricing Residual Risks**. Since not all risks can be managed or eliminated, the residual risk must be factored into the pricing to ensure that returns are commensurate with risk.
- **Due Diligence.** Due diligence can be applied as a Risk Management Device including property-level Due Diligence, people-level Due Diligence and contractual-level Due Diligence

Concepts

- Application of Formal Decision Models
- Risk Management
- Real Estate Capture Ratio
- Enterprise-Level Risks
- Market/Regulatory Risks
- Property-Level Risks
- Rent Roll Risks
- Risk Reduction
- Constraining Risks
- Pleasure, Pain and Bailout Theory
- Risk Management Process
- Residual Risk Pricing
- A Life-Cycle Approach to Risks
- Property Due Diligence
- People Due Diligence
- Property Due Diligence

Levels of Risk in Real Estate

There are three major categories of risks, with the highest order risks those hat expose the enterprise itself. However, it should be noted that the higher order risks are all predicated on satisfactory performance on lower level, property risks.



Section 2: Chapter 5 Legal Dimensions of Real Estate