JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

H. Presentations Sponsored by Other Universities

6. "Real Estate Trends and Risk Management", ;ponsored by the Michigan State University, 'anuary 31, 1974

Index

REAL ESTATE TRENDS AND RISK MANAGEMENT
Kellogg Center, Michigan State University
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Advanced Income Property Seminar
Mortgage Bankers Association of America

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I. Some Basic Real Estate Attributes and Definitions

A. A space-time interface of land (public resource), people (cultural preference) and artifacts (improvements).

B. Convert neutral forces to identified decision makers - consumer, producer, and society with the planner as the arbitrator.

C. Some implications of this definition of the Real Estate process:

1. Land is an exhaustble resource and therefore a public utility.
2. Business of Real Estate is the process of converting space-time to money-time.
3. Real Estate Business is a service industry using manufactured products.
4. The space-time service product is the social terrarium and therefore a public utility.
5. The money not the Real Estate is the only private property.

D. The legal concept of private Real Estate

1. Private property the residual after subtracting public rights.
2. In a service industry there is no ownership of a product - only control of a customer.
3. Twentieth Century Real Estate equity is a degree to which one controls disbursements of a captive customer.

E. Feasibility is a nonfinancial concept of matching artifact and service to a context of public priorities and customer needs.

F. Real Estate investment is "buying" a set of financial assumptions derivative of a feasible solution.

G. Risk is the variance between assumptions taken and realizations achieved, between proforma estimates and P and L realized.

II. Real estate investment decisions may often finally depend on a question of the expected rate of return and the risk incurred in pursuing that investment return. There is a natural tendency in appraisal to consider the net income figure and the over-all investment as fixed numbers--as conditions of certainty.

A. An investment in a bond can be defined as to when it begins in time, when it is sold, when coupons are collectable and total costs and total receipts under alternative outcomes. Thus, yield is easily computed and risk depends on whether you can rely on the promisor.

B. Real estate financial analysis seldom enjoys such a rigid set of financial specifications and therefore seldom enjoys reasonable conditions of certainty.

C. To talk about risk and compare it between investments implies some explicit measures rather than simply subjective doubt--expressed by a shrug of the shoulders.

D. Modern management defines risk as the potential variance between expectations and realizations, i.e., between proforma prospects and historical balance sheet and P & L statements.

   1. Variance sometimes is a binary--yes-no question. You will or you won't receive zoning approval.
   2. Variance sometimes is the possible range around an average or a median--a distribution of alternative costs or revenue possibilities.

E. For ease of analysis there are two kinds of risks:

   1. Dynamic risks can produce profit or loss and are best controlled by the finesse of management execution of a plan.
   2. Static risks are those which can only cause a loss due to surprise upset of a plan.

F. Risk evaluation or comparison grows out of the function of risk management for an enterprise. Risk management has two objectives:

   1. Conservation of existing enterprise assets despite surprise events.
   2. Realization of budgeted expectations despite surprise events.

G. The process of risk management involves systematic and continuous:

   1. Identification of significant exposures to loss
   2. Estimation of potential loss frequency and severity
   3. Identification of alternative methods to avoid loss
   4. Selection of a risk management method
   5. Monitoring execution of risk management plan

III. The risk management process is both a philosophy of inquiry or analysis and a systematic management process which is attempting to answer "WHAT IF...?" questions, to anticipate surprise and to provide for a response or adjustment in advance of the contingency.

A. Identification of significant exposures to loss can begin by using standard business documents as reminders, such as:

   1. Review of balance sheet accounts
   2. Review of profit and loss statement accounts
   3. Review of business organization or function chart
   4. Review of elements of financial feasibility analysis

B. <u>Significant</u> has to do with potential loss frequency, loss severity, and degree of uncertainty.

1. Very frequent and minor become expense accounts
2. Less frequent but predictable and major become reserves or budget allowances.
3. Infrequent, uncertain but very severe become issues of risk management.
4. A 50/50 probability is the most uncertain outcome.

C. The alternative methods of avoiding loss which everyone subconsciously uses include:

1. Eliminate risk exposure
2. Reduce frequency or severity of loss (mortgage loan closing process)
3. Combine risks to increase predictability (reserves for expenses)
4. Shift risk by contract (subcontracts or escape clauses)
5. Shift risk by combination by contract (insurance)
6. Limit maximum loss (corporate shell or limited partnership)
7. Hedging (sale and lease-back, options, contingent sales)

D. Selection of a risk management method depends on whether you are talking about a dynamic or static risk and the trade practices of a particular industry or business type.

1. A lease is a risk management contract.
2. A pool plan syndication is risk management through combination.
3. Some selections can be mathematical or statistical and others must be entrepreneurial.

E. Real estate operations and management can become very complex risk management systems and the problem for the decision maker is to monitor the current progress of all the little details necessary for the execution of a risk management plan.

1. Some of these details are financial and that is primarily what we are talking about today. I am suggesting the theory of management and suggesting how data processing devices are beginning to make it possible to apply these theories in practice.
2. We hope that the theory will have immediate practical application as you see relationships to your personal real estate problems but we also hope you will begin to see the trend of management theory as it begins to utilize the computer for better risk management.
3. It should be noted that the principles are appropriate to any enterprise and not just real estate. Real estate education has been too quick to be inbred, to regard its problems as unique, rather than to relate to the evolution of management science in general.
4. Management theory in the abstract simply represents a careful structuring of the common sense which you have successfully applied to your own business.

IV. Real estate financial analysis involves the conversion of a product of space over time to flows of money over time from a real estate enterprise which involves both large amounts of capital and large amounts of managerial services.

A. In forecasting the finance elements there is an infinite number of details so one must over-simplify by means of modeling and then determine the key assumptions which need to be made.

B. The purchase of any property and investment real estate in particular is the result of the decision maker "buying" a set of assumptions. A set of assumptions implies conditions of uncertainty--the possibility of variance--hence, risk.

C. Strategic format for developer-investor taking an active management role:

1. Development role assumed (see attached mimeos)
2. Major objective
3. Key determinants of economic success
4. Elements of cost/price relationship where developer has some control
5. Elements of greatest variance or slippage
6. Devices for minimizing maximum potential loss
7. Devices for maximizing control
8. Developer skills or personnel of critical importance
9. Marginal components of cost/price/profit centers

D. Strategic format for the passive investor (i.e. mortgage lender)

1. Pleasure, pain and bail-out theory of mortgage finance
2. Incentives and the time line of financial events
3. The ethical-aesthetic constraint for the lender

E. Basic elements of a real estate financial model which in turn identify the exposure for risk analysis might be as follows:

1. Definition of desired profit centers
2. Definition of a timeline over which events will still take place
3. Assumptions on the capital budget and sequence of source and applications of funds.
   a. Direct construction or purchase cost
   b. Indirect and capitalized carrying cost

4. Assumptions on operating budget and sequence of source and application.
   a. Pattern of sales revenues
   b. Pattern of operating expenses

5. Financial plan
   a. Credit amounts and terms
   b. Equity amounts and terms
   c. Holding power

6. Profits classified as to type and tax
   a. Cash from operations
   b. Cash from capital gains
   c. Cash surplus from financing
   d. Cash from tax savings on other income

7. Selected measures of profitability
   a. Definition of investment
   b. Definition of profit
   c. Selected ratios of profit to investment

8. Selected measures of risk
   a. Payback periods
   b. Capacity for variance
   c. Variance controls

F. Control of time line risks in financial projections can be handled in a variety of ways or models which may or may not serve the client's purposes.

   1. The classic appraisal assumes a project has moved on the time line to completion and normal operation as of the date of the appraisal. This may be appropriate to the permanent loan position.
   2. What if major profit centers occur before closing permanent loan?
   3. What if tax shelter expires before loan ratio reaches 75-80%?
   4. Interfacing of temporary and permanent loans may be stabilized with interim loans of 3-5 years, gap loans, or conditional debt such as limited partnership or accessible stock.

V. Current Trends and Risk Management Affecting Real Estate

A. Control of marketing risk through market research of special consumer groups and their motivations to create monopoly.

B. Control of discretionary expenses by motivation of professional managers through contracts with incentive compensation formulas.

C. Public control of new land development plus control of auto transit means recycling of intown sites.

D. Energy crisis will redefine linkages to utilities regionally as well as locally.

E. Energy crisis will mean redefinition of the auto and all auto dependent forms of land use.

F. Energy crisis will alter expensive character of current leisure

G. As real estate becomes recognized as a service product, fee ownership declines in significance.

H. Trend toward condominium and homeowners association means success of hardware is tied directly to success of group organization software.