

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

II. CLASSES AT THE UNIVERSITY OF WISCONSIN--MADISON

M. Business 856: Advanced Appraisal Theory and Practice

2. Assorted Exams and Keys: 1976-87

Business 856
Final Exam

Monday, December 13, 1976

Professor James A. Graaskamp

- I. Write on one of the following two questions. (20%)
 - A. Discuss the relationship between analysis of a real estate project feasibility study and the contemporary appraisal format suggested by Professor Graaskamp.
 - B. Discuss the concept of highest and best use analysis as it has evolved and then, indicate how it is modified by implications of Ratcliff's most probable price within a transaction zone.

- II. Write on one of the following two questions. (20%)
 - A. Compare the recommendations of Smith and Racster for restructuring the appraisal process to the theory of Ratcliff and the report outline of Graaskamp.
 - B. Compare and contrast the recommendations and preferences of Professor Wendt to the most probable price concept and theoretical structure of Ratcliff.

- III. Write on one of the following two questions. (30%)
 - A. Identify and discuss the theoretical and practical advantages and disadvantages of price prediction using the computer program, MKT COMP.
 - B. Identify and discuss the theoretical and practical advantages and disadvantages of multiple regression analysis for predicting price.

- IV. Identify and outline the logic of Ratcliff's most probable price appraisal system and then indicate which components of most probable price theory would need to be modified or replaced when undertaking special appraisal assignments specified below. You must indicate modifications for two of the following three special appraisal problems: (30%)
 - A. Partial taking by eminent domain to be tried in court.
 - B. Valuation of an existing subdivision to be sold wholesale to a single buyer.
 - C. Valuation of an income property for a tax appeal presentation.

ADVANCED REAL ESTATE APPRAISAL-BUSINESS 856
Mid-Semester Exam

Fall Semester 1983

Prof. James A. Graaskamp

1. Briefly define four of the following five concepts as discussed in your readings for this course: (20%)
 - A. Institutional economics
 - B. A critique of the prevailing definition of market value.
 - C. Cash equivalency
 - D. The entrepreneurial component to cost
 - E. Variables in the evaluation of historic properties.

- II. Write a short essay on the following topic indicating your thorough understanding of the contemporary appraisal viewpoint: (40%)

Discuss the compatibility of the most recent definition of highest and best use by the appraisal societies and the valuation concepts of Richard Ratcliff and contemporary appraisal. Be sure to reference various viewpoints in your reading on most probable use.

- III. Write a short essay on two of the following questions for 20% each:

- A. Discuss the relationship of most probable price concepts to changing emphasis in appraisal in terms of the trend in discounted cash flow, cash equivalency, and valuation of tax subsidized properties?
- B. What is the relationship of data, the appraisal process and the definition of market value as seen by Ken Lusht? How does error and risk of property management relate to this?
- C. Discuss the pros and cons of the weighted point system as a method of market comparable sales comparison.
- D. Discuss the recommended quantitative tools suggested by Gene Dilmore in his chapters on Quantitative Techniques in Real Estate Counseling.

Business 856 - Final Exam

Wednesday, December 7, 1983

Prof. J. A. Graaskamp

I. (20%) Write on one of the following two questions:

A. Discuss the changing nature of professional liability of the appraiser for negligence in the performance of his professional duties.

OR

B. What are the institutional advantages and disadvantages for certifying and licensing appraisers?

II. (20%) Write on the following question:

Compare and contrast the appraisal report done in support of a buy/sell decision and the appraisal report done for litigation where the appraiser will serve as expert witness. Include relationship of qualifications of witness to appraisal content.

III. (20%) Write on one of the following two questions:

A. Discuss and evaluate alternative methods for valuation of subdivision land or condominium conversion including implications of land use planning.

OR

B. Discuss problems of applying a discounted cash flow approach to the valuation of income property for purposes of tax assessment as suggested by your assigned readings.

IV. (40%) Write a brief statement based on readings and lecture on four of the following miscellaneous concepts, articles and experiments:

1. Compare and contrast inverse condemnation and excess condemnation.
2. Interrelationship of the police power and the power of eminent domain.
3. Gene Dilmore's experiment in appraising houses.
4. Conceptual differences between MKTCOMP and multiple regression.
5. Advantages and disadvantages of multiple regression for appraisal purposes.

Business 856
Mid-Semester Exam

Wednesday, October 30, 1985

Prof. James A Graaskamp

- (20%) I. Briefly identify or define four out of five of the following terms:
- A. Dilmore's three approaches to value
 - B. Decision methods under conditions of certainty
 - C. Dilmore's components of capitalization
 - D. Cash equivalency
 - E. Institutional economics
- (20%) II. Compare and contrast - two out of four:
- A. Traditional market value and most probable price
 - B. Highest and best use and most probable use
 - C. Cash flow simulation and direct capitalization
 - D. Value spread or transaction zone compared to statistical measurement of dispersion
- (20% each) III. Write a brief discussion on three of the following authors and concepts.
- A. "Behavior of Appraiser in Valuing Income Property: A Status Report," Ken Lusht
 - B. "Market Value: A Contemporary Perspective and Contemporary Application," Korpacz & Marchetelli
 - C. Develop a discussion on highest and best use reflecting the best articles you have read on that subject
 - D. "Development of Value Theory to its Present State," James Doykin
 - E. "The Changing Emphasis in Appraisal Techniques: The Transition to Discounted Cash Flow," Korpacz & Roth
 - F. "Debt Financing, Syndication and Real Property Value," Ken Lusht

856 Exam Key

- I. Four of five for 5% each
 - A. Dilmore - order, chance, and beauty
 - B. Dominance, lexicography, additive weighting, effectiveness index, satisficing
 - C. Cash income, change in cash income, change in principal, change in net worth after tax, annual tax shelter, net cash after tax
 - D. Cash equivalency - cash to the seller from independent third part financing
 - E. Institutional economics assumes political forces and social trends are equally important with short term supply and demand

- II. 10% each
 - A. Market value - probable price - neutrality of external conditions and bargaining power
 - B. Best use versus most probable use - may be the same unless cash or political factors provide short term distortion and irrationality
 - C. Direct capitalization - accrual accounting - cash flow equals cash account and irregular projections
 - D. Transaction zone reflects behavior and perceived limitations while statistical measurement requires normal distribution on a random basis

- III. Lusht - Income Property 20% each
 1. Return of original equity investment
 2. Growth of equity from amortization
 3. Growth of equity from value appreciation
 4. Value of cash flows at 1st year level
 5. Growth (decline) of cash flow stream
 6. Tax shelter of subject's cash flow
 7. Tax shelter of external income
 - A. Decline of residual method and GIM's increase use of of investment band model and cash flow techniques. This evidence of evolving sophistication.
 - B. Debt financing and value - traditional theory argued debt reduced risk and therefore the capitalization rate can increase value. Modigliani argued that in a perfect market the capitalization rate is always constant so that value created by leverage depends on imperfect markets. However, it is the availability of debt and not the amount which affects value and for syndication the increment in value may reflect clientele effects and and imperfect market. Again, market value affects opportunity to syndicate.
 - C. Highest and best use essay
 - D. Transition to discounted cash flow - Buyers not interested in a contrived single NOI and the present value of increasing income due to lease rollovers. The market is emphasizing internal rate of return on discounted cash flow. Special emphasis on residual value using second ten year forecast and resale in the twentieth year with stepped discounting to the present.

Bus. 856 - Mid-Semester Examination

Oct. 29, 1986

Prof. J.A. Graaskamp

- I. Compare and contrast 5 of the following: (20%)
 - A. Institutional economics vs. traditional economics.
 - B. Fair market value vs. most probable price
 - C. "Truth, chance, and beauty" vs. "inference, simulation, and normative"
 - D. Best use vs. most probable use
 - E. Rent roll vs. revenue
 - F. Cash equivalency in theory and practice
 - G. MKTCOMP vs. MULVAR
- II. Write a short essay on one of the following subjects: (20%)
 - A. Relate the problem solving approaches of Ackoff and Hayes to the Ratcliff approach to contemporary appraisal.
 - B. To what degree does syndication and debt financing impact on real property values?
 - C. What provision can be made in appraisal for the reality of errors, risk, and omission of important data?
- III. Block out the tabs describing the various components of a pro forma revenue and expense normalized statement. Which items should be on a cash accounting basis and which items on an accrual basis and when? (20%)
- IV. What are the significant innovations in the Ratgram approach as compared to traditional appraisals? Are these matters of degree of difference or total departures from the traditional appraisal process? (20%)
- V. Discuss market value, a contemporary perspective as developed in two articles by Peter Korpacz and Richard Marchitelli. (20%)

Business 856
Mid-Semester Exam

November 2, 1987

Prof. James A. Graaskamp

- 20% I. Briefly define FOUR of the following terms as used in this course:
- A. Institutional economics
 - B. Compare and contrast highest and best use versus most probable use
 - C. Cash equivalence
 - D. Comparable sale
 - E. Distributable cash
- 25% II. Write on ONE of the following two questions:
- A. Discuss the relevance of methods for solving problems under conditions of certainty ala Hayes to appraisal methods
 - B. Trace the development of value theory to its present state ala James Boykin.
- 25% III. Discuss whether the Ratcliff contemporary appraisal process is a refinement of traditional appraisal theory or a whole new concept of value and the function of the appraiser.
- 30% IV. Briefly describe the basic theme of TWO of the following articles:
- A. Harold Albritton's critique of the prevailing definition of market value.
 - B. Ken Lusht and his opinions on the impact of debt financing and syndication on real property value
 - C. Korpacz and Roth on the changing emphasis in appraisal techniques to discounted cash flow
 - D. Robert Suter's comments on the sale comparison approach versus the market data approach to farm real estate values

856 KEY-1987

I.-A. Institutional Economics argues economic behavior is more than the pleasure and pain of self interest. It is controlled by collective or group action and a process of social change.

It is problem oriented economics, interdisciplinary, inductive, and interested in social problem solving rather than neo-classic price and distribution theory.

-B. Maximum value of what is legal, in demand, technically possible, and financially viable while most probable use is more sensitive to political constraints and subjectivity of most probable buyer.

-C. Cash equivalence is cash to the seller for real estate rights

-D. A comparable sale is a property of similar potential purchased by someone with the same motivations presumed for the most probable buyer.

-E. Distributable cash is net income on an accrual basis adjusted for non cash expenses and reinvestment is the property plus cash capital released to the project from escrows, equity subscriptions, etc.

II. -A. Conditions certain include models for dominance, lexicographic ranking, scoring, and indexing.

-B. Boykin-US history only-3 eras 1906-1944, 1945-1965, 1966-present. Era I-Fischer-present value, highest and best used. John Zangerle. Babcock urged probability, capitalized income, and attacked cost approach. Kniskern attacked allocation of income to land and building, market price vs. justified price, and a premium for financing-Thursin. Ross an investment ban theory.

Era II- Wendt, Elwood and Ratcliff

Era III.-Follows Wisconsin colloquium-Kenard-development of quantitative statistical model.

III. Ratcliff is a refinement with more emphasis on problem, context for behavior, and inductive methods of prediction within a range.

IV. -A. Herald Albritton

-D. Review of all market data relevant or selected sales to argue a bias of the appraiser.

-B. Ken Lusht- argues that the discount rate is always the same after risk adjustments are made for alternative financing arrangements are made and premiums for expanding the market by selling shares are eliminated.

-C. K and R indicate that discounted cash flow is required to deal with irregular cash flows, while CAP rates deal only with income on a mathematical line and do not simulate investor logic.

856 12 Weeks Exam Key

I. 5 points each,

- A. Institutional economics is a term to describe the Wisconsin tradition in terms of Commons, Ely, and Witte who saw economics responding to political and social institutions as well as micro price theory.
- B. A statistical oriented definition of market value considers probable price as the mean, or mode of the range. Coldwell argues that it's the mode while Ratcliff would regard central tendency to be a heuristic point rather than a statistics one.
- C. Cash equivalency is the process of discounting financial terms when the seller is willing to provide credit to the buyer at non-market rates. Fair market value requires adjustment of cash equivalent value if financial terms are not in the seller's interest.
- D. The entrepreneurial component to cost is a topic introduced by Kahn to explain the value added by entrepreneurial talent to the cost approach.
- E. Value:
 - 1. The quantity of one thing which can be obtained in exchange for another.
 - 2. The ratio of exchange of one commodity for another, e.g., one bushel of wheat in terms of a given number of bushels of corn; thus, the value of one thing may be expressed in terms of another. Money is the common denominator by which real property value is usually measured.
 - 3. It is the power of acquiring commodities in exchange, generally with a comparison of utilities - the utility of the commodity acquired in the exchange (property).
 - 4. Value also depends upon the relation of an object to unsatisfied needs, i.e., scarcity of supply and demand.
 - 5. Value is the present worth of future benefits arising out of ownership to typical users or investors.
 - 6. The verb "value": The act or process of estimating value. See valuation.

II. Recent definitions of highest and best use maximize value with whatever is needed. Contemporary theory considers community plans and goals as one of the constraints. Requires analysis of the existence of effective demand and testing to see how a portion of the market might be captured by the subject property at a pace that maintains its financial viability.

III. A. Land approach as though vacant is fictional and land may suffer depreciation. Building - replacement cost is arbitrary and fictional and adjustments for depreciation are highly subjective and normative so that there is no predictive power in the methodology. A subjective value on the building added to a fictitious price for the land was not likely to produce value.
B.

C. The weighted point system first depends on the degree of variations explained by a common unit of comparison, such as sq. ft. of building area or number of rooms. It is important to choose qualitative attribute rather than continuous variables for adjustment. Once the points are scored they become proxies for allocation of the weights which reflect market preference.

- D. Chapter 1 - Probability
- Chapter 2 - Bayesian Analysis
- Chapter 3 - Network Analysis
- Chapter 4 - Linear Programming
- Chapter 5 - Regression Analysis

ADVANCED APPRAISAL

FINAL EXAM

Monday, December 14, 1987

Professor J. Graaskamp

- (30%) I. Discuss one (1) of the following:
- A. Discuss the proper methods for appraisal of development land as discussed by Boykin, Kimball, and Bloomberg.
- OR -
- B. Discuss the major issues that need to be defined by the appraiser before beginning his/her appraisal for a partial taking of a major industrial project for eminent domain valuation.
- (30%) II. Discuss the admissibility in court for highway acquisition of the following terms:
- A. Evidence of sales.
 - B. Evidence of income and income value.
 - C. Evidence in the form of photos, models, and visual aids.
- (40%) III. In your opinion, which institutional forces will have the greatest impact in improving the professional behavior and technical competence of commercial property appraisers before the year 2000? Which institutional forces will have the least impact on current efforts at reform?