Exam 2 | study guide

Please use this study guide to help you prepare for exam 2.

[15A]Auction Design and Information Economics

a) Optimal Mechanism Design
b) First-Come, First-Served versus Last-Come, First-Served
c) Auctions
d) Incentive-Compatible Revelation Mechanisms

VOCABULARY

appraisal	An estimate of value by an independent expert.
benchmarking	A comparison of performance in similar jobs, firms, plants, divisions, and so forth.
common–value auction	Auction where bidders have identical valuations when information is complete.
company audit	A governance mechanism for separating random disturbances from variation in unobservable effort.
contingent payments	A fee schedule conditional on the outcome of uncertain future events.
contracts	Third–party enforceable agreements designed to facilitate deferred exchange.
Dutch auctions	A descending–price auction.
English auctions	An ascending–price auction.
expectation damages	A remedy for breach of contract designed to elicit efficient precaution and efficient reliance on promises.
forward sales contracts	A consensual agreement to exchange goods delivered in the future for cash today, with no possibility of performance excuse.
frustration of purpose doctrine	An illustration of the default rules of contract law that can result in excusal of contract promises.
full contingent claims contract	An agreement about all possible future events.
governance mechanisms	Processes to detect, resolve, and reduce post–contractual opportunism
incentive compatibility	An assurance of incentive alignment.

constraint	
incentive–compatible revelation mechanism	A procedure for eliciting true revelation of privately held information from agents with competing interests.
incomplete information	Uncertain knowledge of payoffs, choices, and other factors.
linear incentives contract	A linear combination of salary and profit sharing intended to align incentives.
moral hazard problem	A problem of post–contractual opportunism that arises from unverifiable or unobservable contract performance.
non–redeployable specific assets	Assets whose replacement cost basis for value is substantially greater than their liquidation value.
optimal incentives contract	An agreement about payoffs and penalties that creates appropriate incentives.
optimal mechanism design	An efficient procedure that creates incentives to motivate the desired behavioral outcome.
participation constraint	An assurance of ongoing involvement.
pooling equilibrium	A decision setting that elicits indistinguishable behavior.
post–contractual opportunistic behavior	Actions that take advantage of a contract partner's vulnerabilities and are not specifically prohibited by the terms.
principal–agent problem	An incentives conflict in delegating decision–making authority.
private–value auction	Auction where the bidders have different valuations when information is complete.
prospect theory	A basis for hypothesizing that the satisfaction from avoiding losses exceeds the anticipation of equal–value prospective gains.
relational contracts	Promissory agreements of coordinated performance among owners of highly interdependent assets.
reliant assets	At least partially non–redeployable durable assets.
self–enforcing reliance relationship	A non–contractual, mutually beneficial agreement.
separating equilibrium	A decision setting that elicits distinguishable behavior.
spot market transactions	An instantaneous one–time–only exchange of typically standardized goods between anonymous buyers and sellers.
stratified lottery	A randomized mechanism for allocating scarce capacity across demand segments.
vertical requirements contract	A third–party enforceable agreement between stages of production in a product's value chain.
Vickrey auction	An incentive–compatible revelation mechanism for drawing out sealed bids equal to private value.
winner's curse	Concern about overpaying as the highest bidder in an auction.

[16]Government Regulation

a) The Regulation of Market Structure and Conduct
b) Market Performance
   (1) Market Conduct
   (2) Market Structure
   (3) Contestable Markets
c) Antitrust Regulation Statutes and Their Enforcement
   (1) The Sherman Act
   (2) The Clayton Act
   (3) The Federal Trade Commission Act
   (4) The Robinson-Patman Act
   (5) The Hart-Scott-Rodino Antitrust
   (6) Improvement Act
d) Antitrust Prohibition of Selected Business
   (1) Decisions
   (2) Collusion: Price Fixing
   (3) Mergers That Substantially Lessen Competition
   (4) Merger Guidelines (and)
   (5) Monopolization
   (6) Wholesale Price Discrimination

antitrust laws	A series of laws passed since 1890 to limit monopoly power and to maintain competition in most American industries.
class action suit	A legal procedure for reducing the search and notification costs of filing a complaint.
Coase theorem	A prediction about the emergence of private voluntary bargaining in reciprocal externalities with low transaction costs.
externality	A spillover of benefits or costs from one production or utility function to another.
Herfindahl–Hirschman Index	A measure of market concentration equal to the sum of the squares of the market shares of the firms in a given industry.
market concentration ratio	The percentage of total industry output produced by the 4, 8, 20, or 50 largest firms.
patent	A legal government grant of monopoly power that prevents others from manufacturing or selling a patented article.
pecuniary	A spillover that is reflected in prices and therefore results in no

externality	inefficiency.
reciprocal externality	A spillover that results from competing incompatible uses.
strategic holdouts	A negotiator who makes unreasonable demands at the end of a unanimous consent process.

(7) Refusals to Deal
(8) Resale Price Maintenance Agreements

e) Command and Control Regulatory
f) The Deregulation Movement

VOCABULARY

[17] Long-Term Investment Analysis

a) The Nature of Capital Expenditure Decisions
b) A Basic Framework for Capital Budgeting
c) The Capital Budgeting Process
   (1) Generating Capital Investment Projects
   (2) Estimating Cash Flows
   (3) Evaluating and Choosing the Investment Projects to Implement
d) Estimating the Firm's Cost of Capital
   (1) Cost of Debt Capital
   (2) Cost of Internal Equity Capital
   (3) Cost of External Equity Capital
   (4) Weighted Cost of Capital
e) Cost-Benefit Analysis
   (1) Accept-Reject Decisions
   (2) Program-Level Analysis
f) Steps in Cost-Benefit Analysis
g) Objectives and Constraints in Cost-Benefit Analysis
h) Analysis and Valuation of Benefits and
   (1) Costs
   (2) Direct Benefits
   (3) Direct Costs
   (4) Indirect Costs or Benefits and Intangibles
i) The Appropriate Rate of Discount
j) Cost-Effectiveness Analysis
   (1) Least-Cost Studies

(2) Objective-Level Studies

VOABULARY

benefit–cost ratio	The ratio of the present value of the benefits from a project or program (discounted at the social discount rate) to the present value of the costs (similarly discounted).
capital budgeting	The process of planning for and evaluating capital expenditures.
capital expenditure	A cash outlay designed to generate a flow of future cash benefits over a period of time extending beyond one year.
cost of capital	The cost of funds that are supplied to a firm. The cost of capital is the minimum rate of return that must be earned on new investments undertaken by a firm.
cost–benefit analysis	A resource–allocation model that can be used by public sector and not–for–profit organizations to evaluate programs or investments on the basis of the magnitude of the discounted costs and benefits.
cost–effectiveness analysis	An analytical tool designed to assist public decision makers in their resource allocation decisions when benefits cannot be easily measured in dollar terms, but costs can be monetarily quantified.
dividend valuation model	A model (or formula) stating that the value of a firm (i.e., shareholder wealth) is equal to the present value of the firm's future dividend payments, discounted at the shareholder's required rate of return. It provides one method of estimating a firm's cost of equity capital.
internal rate of return (IRR)	The discount rate that equates the present value of the stream of net cash flows from a project with the project's net investment.
net present value (NPV)	The present value of the stream of net cash flows resulting from a project, discounted at the required rate of return (cost of capital), minus the project's net investment.
social discount rate	The discount rate to be used when evaluating benefits and costs from public sector investments.

Additional Material

[I] The Nature of the Firm

> Why are there these "islands of conscious power"? Outside the firm, price movements direct production, which is coordinated through a series of exchange transactions on the market. Within a firm, these market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur-coordinator, who directs production. It is clear that these are alternative methods of coordinating production. Yet, having regard to the fact that if production is regulated by price movements, production could be carried on without any organization at all, well might we ask, why is there any organization?

a) Arguments that do not support the existence of a firms
   (1) Since the market is "efficient" in the sense that those who are best at providing each good or service most cheaply are already doing so, it should always be cheaper to contract out than to hire.
   (2) "Decreasing returns to the entrepreneur function"
      (i) increasing overhead costs
      (ii) increasing propensity for an overwhelmed manager to make mistakes in resource allocation.
b) Arguments explaining existence of firms
   (1) Various costs of contracting
      (i) Transactions costs
      (ii) Search and information costs
      (iii) Bargaining costs
      (iv) Keeping trade secrets
      (v) Policing and enforcement costs
   (2) Firms will arise when they can arrange to produce what they need internally and somehow avoid these costs.
c) In general, Coase suggests that making the firm larger will initially be advantageous, but that decreasing returns will eventually set in, preventing the firm from growing indefinitely.
   (1) Cateris Paribus: firms will be larger:
      (i) the lower the costs of organizing and the slower that costs rise with an increase in the transactions organized.

(ii) the less likely the entrepreneur is to make mistakes and the smaller the increase in mistakes with an increase in the transactions organized.

(iii) the greater the lowering (or the less the rise) in the supply price of factors of production to firms of larger size.

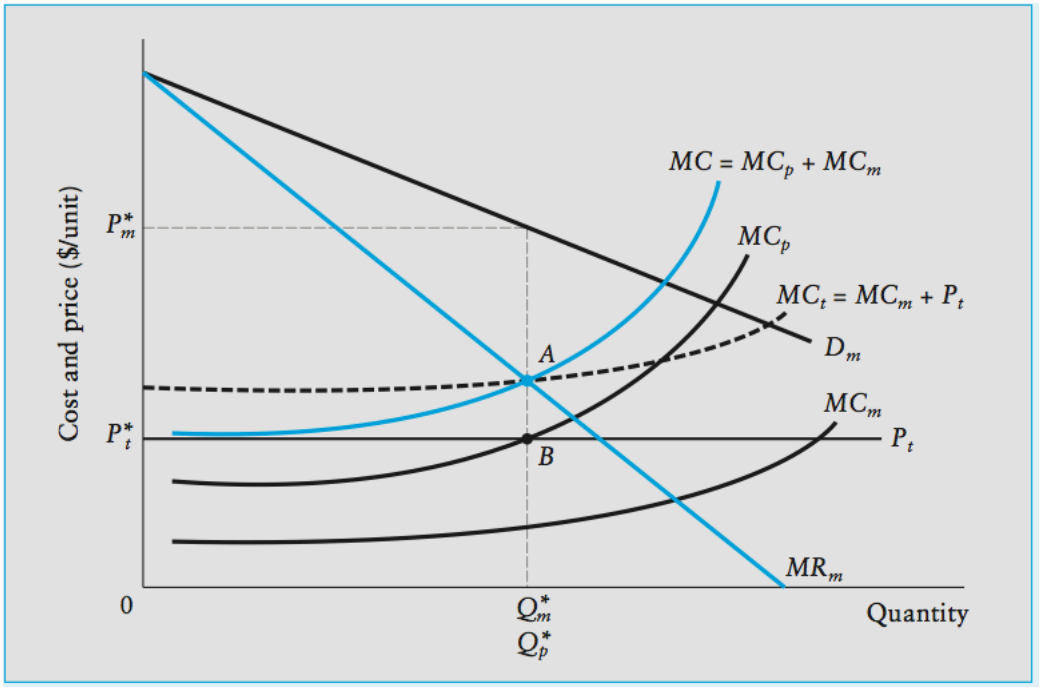
[II] Transfer Pricing[1]

Transfer Price ~ The price at which an intermediate good or service is transferred from the selling division to the buying division within the same firm.

a) Origins of transfer pricing
   (1) Growth of firms has led to a trend towards decentralized decision making
   (2) Firms are broken into groups of autonomous operating divisions.
   (3) Each division constitutes a profit center with responsibility and authority for making operating decisions

b) Sources of dependence between division
   (1) Divisions may compete for external demand (eg Buick and Cadillac)
   (2) Divisions may compete on the input market such as for steel or gasoline.
   (3) Divisions may sell all or part of its output to another division of the same firm. (We only consider this form of dependence).

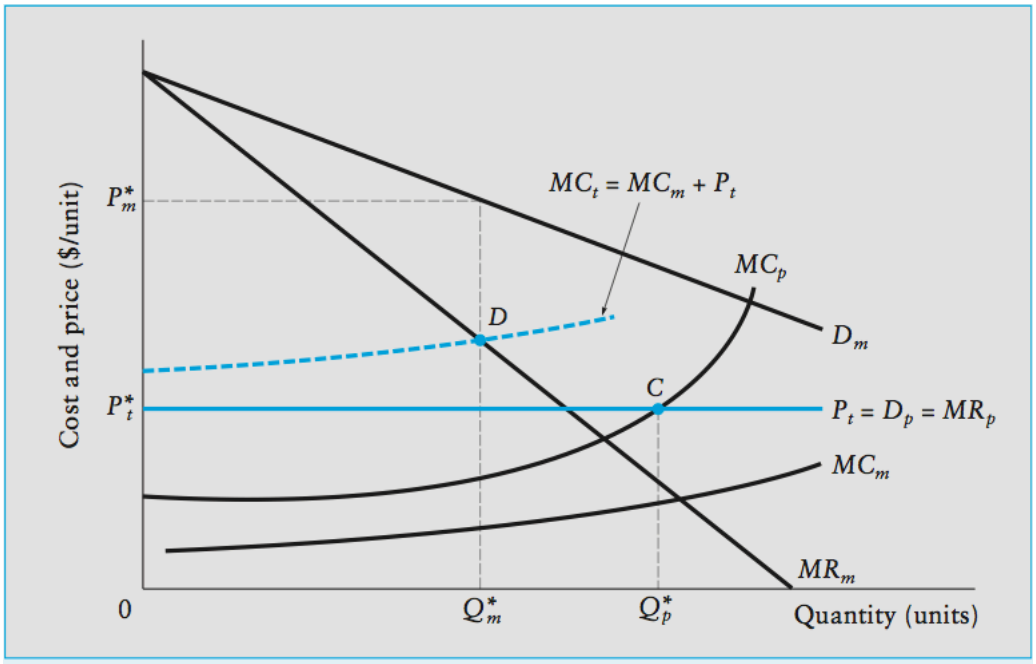
c) Variations in the external market for intermediate product
   (1) No external market



   (i)
   (2) Perfectly competitive external market

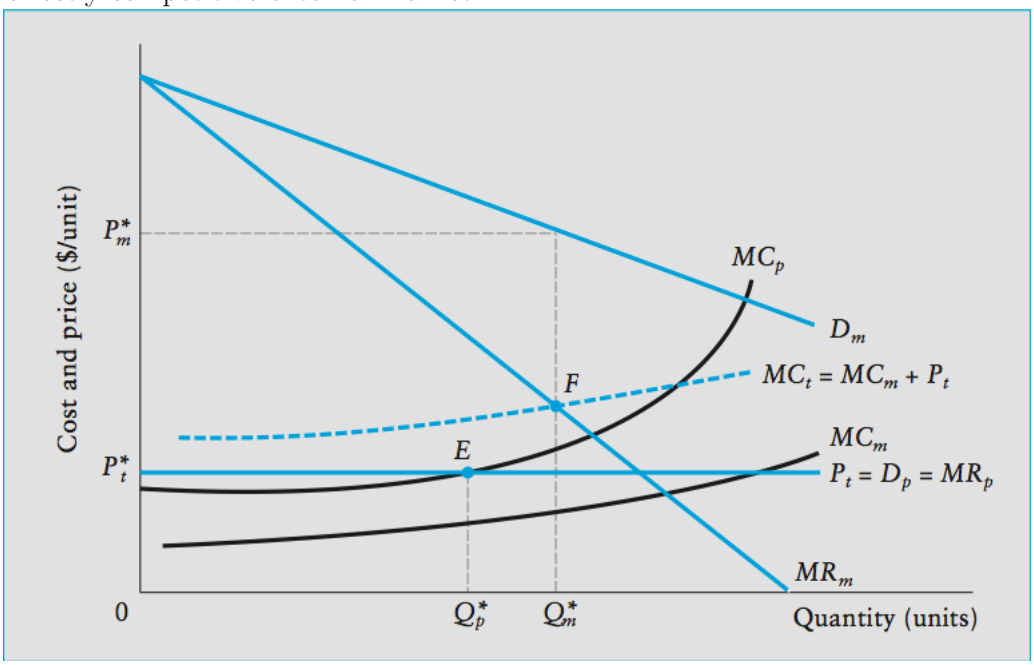
[1] See Web Appendix E.

(i)



(3) Imperfectly competitive external market

(i)



[III] Executive Compensation[2]

US CEO/worker pay gap stood at 354-1 in 2013, as compared to only 42-1 in 1982 and 20-1 in 1950.

a) Agency Theory of Executive Compensation
   (1) Agency Theory: Agency theory is branch of game theory that studies the design of contracts to motivate a rational agent to act on behalf of a principal when the agent's interest would otherwise conflict with those of the principal.
      (i) In agency theory, people are assumed to be rational profit maximizing individuals who will promote self interest.
      (ii) Have alternative opportunities of use of their time
      (iii) Are effort-adverse (moral hazard)
      (iv) Choose actions that maximize own expected utility (adverse selection)
      (v) Tendency to shirk (moral hazard)
b) An executive compensation plan is
   (1) an agency contract between the firm and its manager
   (2) attempts to align the interests of owners and manager
   (3) details the manager's compensation (bonus, shares, options, salary, benefits, memberships, etc.)
   (4) bases on one or more measures (net income and share price) of the manager's effort in operating the firm.
c) Are contracts necessary?
   (1) NO
      (i) Managerial labor market - the present value of reduced future compensation will cause managers to avoid shirking.
      (ii) Internal monitoring – shirking will be detected and reported by subordinate managers
      (iii) GAAP limits shirking – accruals reverse
   (2) Yes
      (i) Managing release of information – manager can disguise the effects of shirking by controlling releases of private information

[2] See William Scott's *Financial Accounting Theory 6e* chapter 10

(ii) Internal monitoring – internal monitoring is effective if contract is based on joint contract; if the payoff is a joint effort, shirking by either manager will reduce the payoff for both

(iii) Reputation – research suggests that internal and market forces (e.g. labour market) help to control not eliminate tendencies to shirk

d) Executive Compensation Statistics

(1) Wal-Mart CEO Lee Scott makes $9 M US which is 400 times compensation of average Wal-mart Employees

(2) In Europe business leaders are paid 3 to 40 times the average employees salary and performance is comparable to North American Companies

(3) Highest paid CEO in 2013 Larry Elison $96 million ORACLE

e) Executive Compensation Components

(1) Time

(i) Mix of short term and long term incentive components – balance reward based on current year's performance and a longer manager decision horizon

(ii) Share Ownership

(2) Risk

(i) Risk – upper (i.e.. cap) and lower (i.e.. bogey) limits limit variation in executive compensation caused by uncontrollable events in economy or industry

(3) Reward

(i) Threshold levels of performance measures – accounting and market based measures

(ii) Incentive effects - apparent and measurable

f) Executive Performance Measures

(1) Holstrum predicts that the efficiency of compensation contract may be increased if it is based on two or more performance measures.

(2) Various measures:

(i) Total Shareholder Return

(ii) Return On Assets

(iii) Return On Capital

(iv) Return On Equity

(v) EPS Growth

(vi) EBITDA Growth

(vii) Net Income Growth

g) Risk and return trade off - the more risk the more return compensation required

(1) Risk avoidance –incentives to exert effort will suffer if not enough risk is imposed

(i) Controlling risk
  (a) Limiting downside risk – too much risk may be dysfunctional and cause only "safe" strategies (bogey)
  (b) Limiting upside risk – cap excessive opportunistic risk opportunities which incur a high penalty (cap)
(ii) Relative Performance Evaluation (RPE) – reduces manager's risk while maintaining incentives by setting incentive rewards compared with relative average performance of other firms in industry
(iii) Compensation committee

h) Power theory – managers influence own compensation
  (1) so that compensation is driven by manager opportunism, not efficient contracting.
  (2) Firms adjust pay to between 50^{th} and 75^{th} percentile.

i) Other arguments that executive compensation may be inflated
  (1) overblown market valuations
  (2) accounting shell games
  (3) phantom profits (The amount of phantom or illusory profit is the difference between the profit reported using historical cost—as required by generally accepted accounting principles (GAAP)—and the profit that would have been reported if replacement cost had been used.)
  (4) lack of transparency