Managerial Economics

MBA ZC 416

BITS Pilani
Pilani Campus

Krishnamurthy Bindumadhavan, CFA, FRM
Associate Professor, Management - Finance
Email: k.bindumadhavan@pilani.bits-pilani.ac.in

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Managerial Economics
Introduction - Part 1

Agenda

- Introductions
- Flipped classroom
- Course objectives
- Textbooks/ Resources
- Evaluation scheme
- Overview of Managerial Economics

Introductions – Lead Instructor

Krishnamurthy Bindumadhavan, CFA, FRM

- Bachelor of Engineering, MBA
- Received the CFA charter in 2002
- Awarded FRM title in 2008
- Worked for over 7 years as Senior Analyst/ Consultant to leading Corporations, Banks; preparing candidates for CFA/ FRM exams
- Worked for 8 years at Capital One, a top 10 US bank and one of the World's largest diversified financial services firms
- Worked in both strategic roles as well as operational roles including credit strategy, product strategy and risk operations
- Drove innovation in risk management to add value of over $50 Million
- Last assignment with Capital One was General Manager, Risk Operations, Asia
- 5+ years of prior experience in Banking technology, primarily with TCS/ TUL

Flipped Classroom

Week before class

- Replay recorded lectures
- Review relevant study materials/ pre-class assignments
- Case study (if applicable)

In “Live” Class

- Review important and advanced/ difficult concepts
- Active Learning - Application/ Problem solving
- Experiential learning – Excel modelling, Case study discussion, Simulation

After Class

- Active learning - problem solving
- Discussion forums
- Peer learning

Course Objectives

No	Course Objectives
CO1	Gain insights into the scientific and analytical methods, techniques and tools of economics.
CO2	Gain basic understanding of the underlying concepts and building blocks related to managerial Economics.
CO3	Understand the application of these concepts in business and economic policy using suitable examples, case studies, simulation, etc.

Textbook/ Resources

T1	Truett & Truett, "Managerial Economics", John Wiley & Sons, 8th edition, , 2004
R1	Samuelson & Nordhus, "Economics", Tata McGraw-Hill Edition, 16th edition, , 1998
R2	Petersen, Lewis and Jain, “Managerial Economics”, Pearson Education, , 2006.
R3	Hirschey, “Economics for Managers”, Thompson, , 2006
R4	Suma Damodaran, "Managerial Economics", Press, 2006

Evaluation Scheme

No	Name	Type	Duration	Weight
EC-1	Quiz-I	Online	-	5%
	Quiz-II	Online	-	5%
	Quiz-III	Online	-	5%
EC-2	Mid-Semester Test	Closed Book	2 hours	35%
EC-3	Comprehensive Exam	Open Book	3 hours	50%

Introduction

Fundamental Questions

– What is Managerial Economics?
– Why Managerial Economics?
– What kind of issues does it help address?
– How can it help managers to make better decisions?

Fundamental economic problems

- Three questions that managers face:
  - What to produce?
  - How to produce?
  - How to distribute?
- Scarcity of resources
- How does economics answer these questions?

Managerial economics

Definition

Managerial Economics: the application of economic theory and methods to business decision-making.

Business: Any situation where there is a transaction between two or more parties

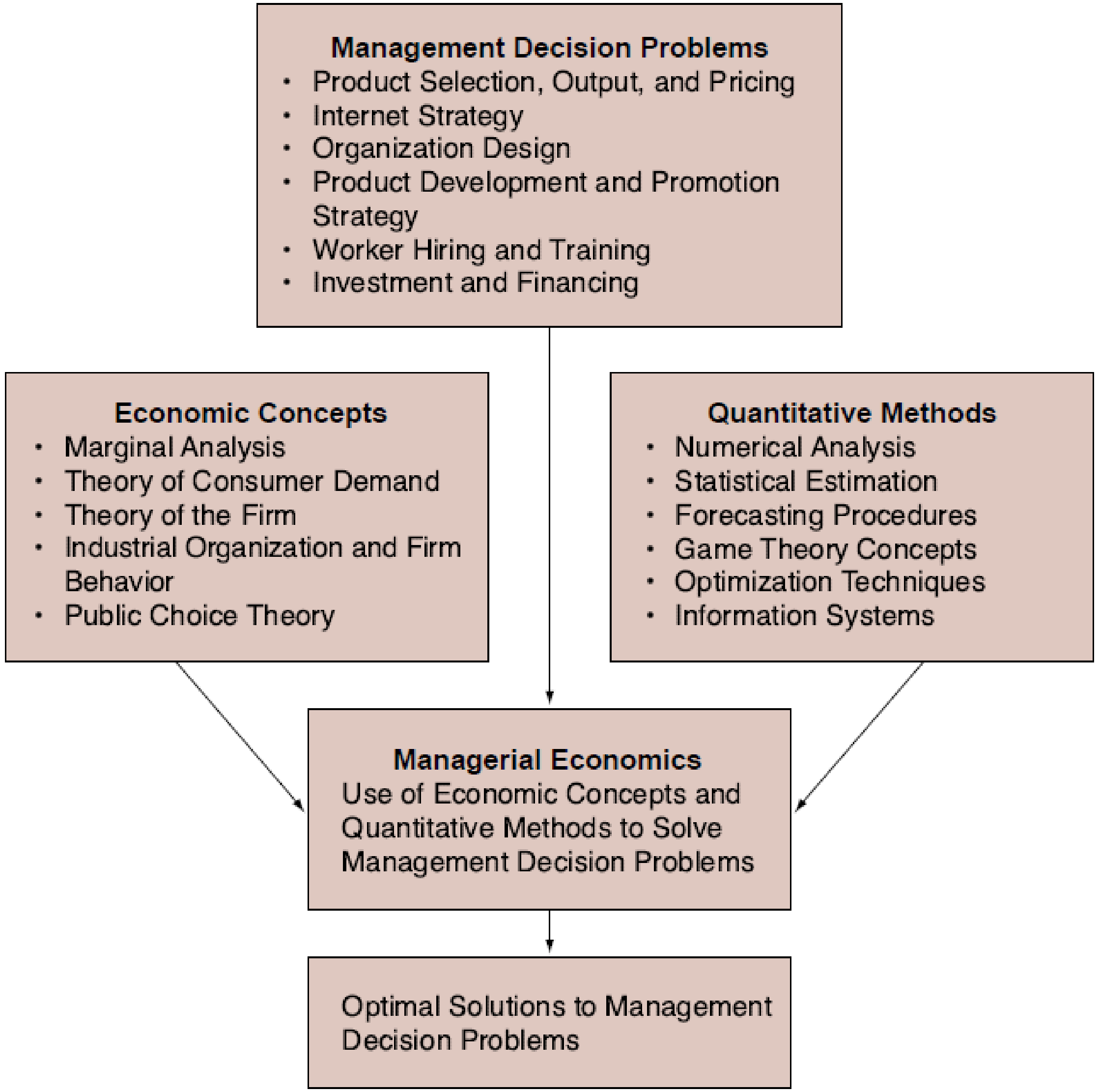
Relationship with economic theory

- Microeconomics
  - Focuses on individual consumers and firms
  - Theory of the firm
  - Theory of consumer behaviour (demand)
  - Production and cost theory (supply)
  - Price theory
  - Market structure and competition theory
- Macroeconomics
  - Aggregate variables such as GDP, GNP, Unemployment, Inflation, etc.

Managerial Economics: How is it useful?

- While economics attempts to describe how the economy works, managerial economics speaks to how the economy ***should*** work!
- It <u>prescribes</u> rules for improving managerial decisions
- It helps managers recognize how economic forces affect organizations
- It links economic concepts with quantitative methods to develop vital tools for managerial decision making

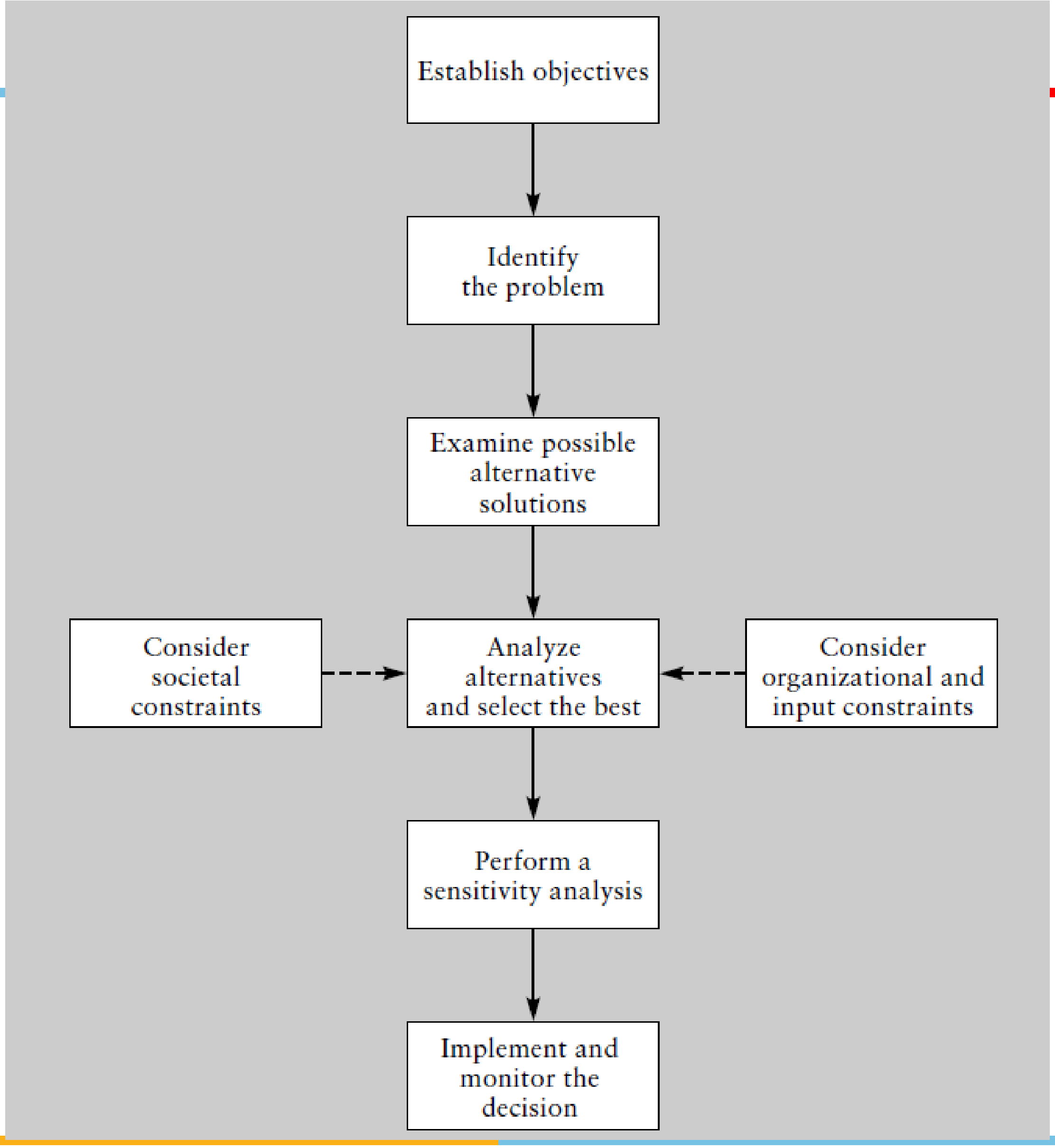
Managerial Economics: a Tool for Improving Management Decision Making



What is the best “choice”

- Understand the economic environment in which firms operate
  - We will be exploring several case studies throughout the course
- Consider alternatives
- Make optimal choices to maximize
  - Profit
  - Market share
  - Managerial interests
  - Government influence
  - National interests
  - Social and environmental benefits

The Decision-Making Process



Summary

- Managerial Economics helps business leaders and policy makers to make optimal decisions
- Leverages economic analysis for concepts such as demand, cost, production, profit and competition
- Bridges the gap between theory and practice
- Provides tool sets to make optimal decisions

Application of concepts using Case Studies

- Multinational production and pricing
  - How does Ford or GM decide where to produce its cars (multinational factory locations) and where to sell (multinational markets)
- Market Entry
  - How do major bookstores decide where to set up shop, assess demand and profitability, assess and react to threats from online stores
- R & D Decisions
  - How does a pharma company decide whether to invest in traditional biochemistry based research or to pursue biogenetic approaches (such as gene splicing)

Thank You

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Positive and Normative economics

- This is also referred to as is/ought distinction
- Positive statements
  – Factual statements
  – It can be verified by empirical study or logic
- Normative statements
  – Value judgements
  – It can't be verified by empirical study or logic
- Relevance of the distinction to the study of managerial economics

Opportunity costs

- Scarcity and choice are central to the economics discipline
- In the face of scarcity, we make many decisions
- Follow one course of action and forgo some other course of action

Opportunity cost is the highest valued alternative forgone whenever a choice is made

Definitions of Profit

- Business or Accounting Profit: Total revenue minus the explicit or accounting costs of production.
- Economic Profit: Total revenue minus the explicit and implicit costs of production.
- Opportunity Cost: Implicit value of a resource in its best alternative use.

Theories of Profit

- Risk-Bearing Theories of Profit
- Frictional Theory of Profit
- Monopoly Theory of Profit
- Innovation Theory of Profit
- Managerial Efficiency Theory of Profit

Social Function of Profit

- Profit is a signal that guides the allocation of society's resources.
- High profits in an industry are a signal that buyers want more of what the industry produces.
- Low (or negative) profits in an industry are a signal that buyers want less of what the industry produces.

Ten Economic Principles for managers

1. Making optimal decisions
2. Decisions are always among alternatives
3. Decision alternatives always have costs and benefits
4. Objective is to increase the firm’s value
5. Firm’s value is measured by its expected profit
6. Firm’s sales revenue depends on demand for its product
7. The firm must minimize cost for each level of output
8. The firm must develop a strategy consistent with its market
9. Growth depends on rational investment decisions
10. Firms deal rationally and ethically with laws and regulations

1. Making decisions

- The role of the managers is to make decisions
  - Business firms come in all sizes
  - No firm has unlimited resources
  - Short-run and long-run decisions
- *Managerial Economics*: How to make decisions that make sense for the operation of the firm

2. Decisions are among alternatives

- Choices are always among alternatives
- Example-buying a new computer
- A job can be done by many, but some may be better at it than others-cost differs

3. Decision alternatives have costs and benefits

- Working Vs. Pursuing further studies
- What we consider when making our decisions?
- Benefits: benefit gained from studying – enhanced knowledge and capabilities, which lead to better career opportunities in the future
- Cost - cost of giving up short term promotions and increments
- Choosing to study- additional benefit gained from further studies exceeds the additional cost
- Opportunity cost

4. Objective of management is to increase the firm's value

- Profit is the difference between TR and TC
- Different types of organizations/ firms
- Problem - Managers attempt to maximize own interest while shareholders increase own benefit
- Principal –agent problem

5. The firm's value is measured by its expected profit

- Example: consider two companies using different production process
- Which one would be the better company?
- This can be easily evaluated based on excepted profits
- Present value of the expected future profit stream

6. Firm's sales revenue depends on demand for its product

- Some goods are highly price sensitive while other goods are less price sensitive
- Demand for a product is a function of a number of factors in addition to price

7. Firm must minimize cost for each level of output

- TR - TC
- Important factors:
  – Technology of production
  – Input prices
  – Factors of production
  – Different levels of technologies

8. Firm must develop a strategy consistent with its market

- We will study the various market structures and the appropriate strategy for each of these situations
- Selling identical products
- Differentiated products
- Example - airline industry, software industry, etc.

Value of the Firm

The present value of all expected future profits

9. Firm's growth depends on rational investment

- Decision to invest in new plant or equipment or develop a new product
- The process of evaluating new investments of the firm- capital project analysis or capital budgetting
- Capital project - calculating the expected stream of benefits it will produce for the firm

10. Successful firms deal rationally and ethically with laws and regulations

- Various business laws and regulations
- Case of Enron or closer hope the collapse of Satyam highlight the consequences of unethical behaviour

Expectations

- Replay prerecorded digital content before class
- Attend all “live” classes else replay recordings
- Review the relevant chapters from textbook before and after class
- Do the homework and assignments in a timely manner
- Make sure you have access to laptop/ computer with Excel; we will need it for experiential learning components in subsequent classes. (Excel 2007 or later versions preferred.)