Industry Analysis: The Fundamentals

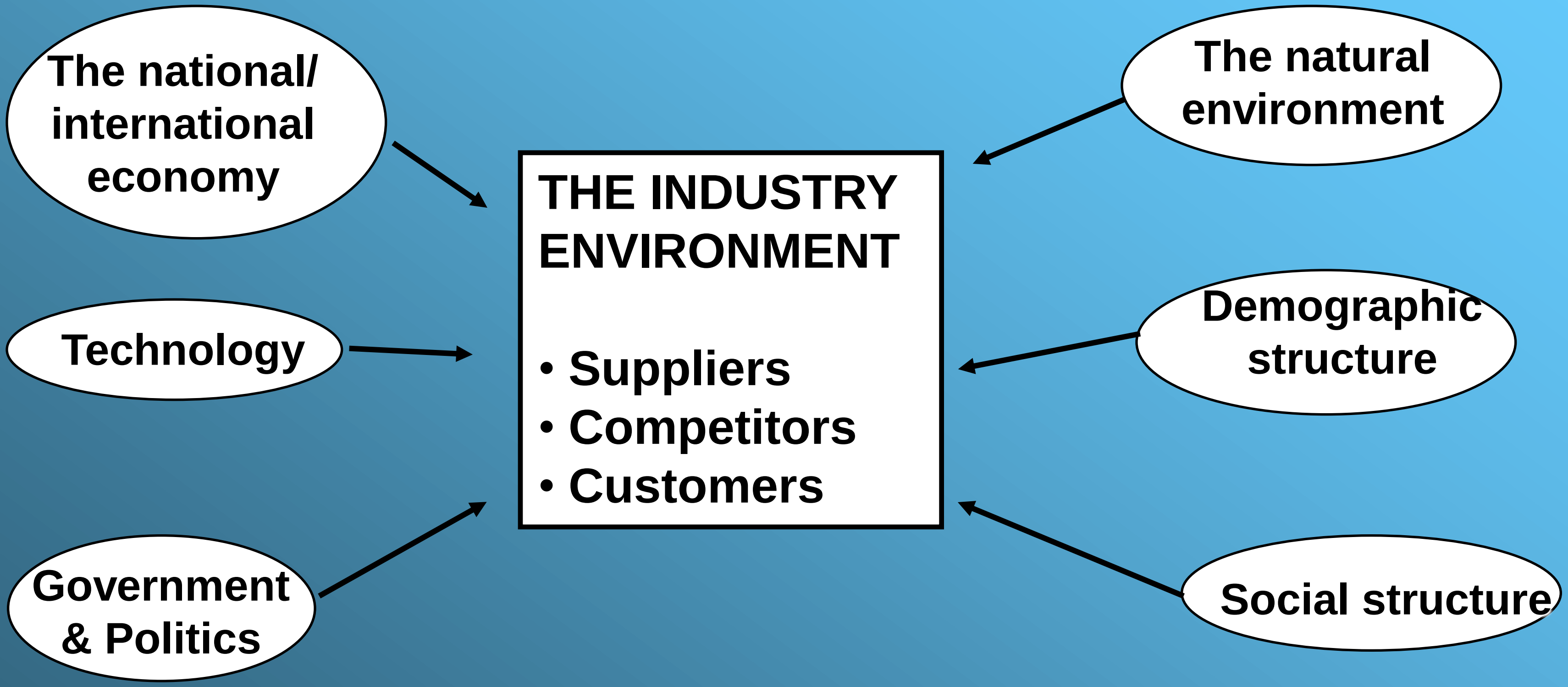
OUTLINE

- The objectives of industry analysis
- From environmental analysis to industry analysis
- Porter’s Five Forces Framework
- Applying industry analysis
- Industry & market boundaries
- Identifying Key Success Factors

The Objectives of Industry Analysis

- To understand how industry structure drives competition, which determines the level of industry profitability.
- To assess industry attractiveness
- To use evidence on changes in industry structure to forecast future profitability
- To formulate strategies to change industry structure to improve industry profitability
- To identify Key Success Factors

From Environmental Analysis to Industry Analysis



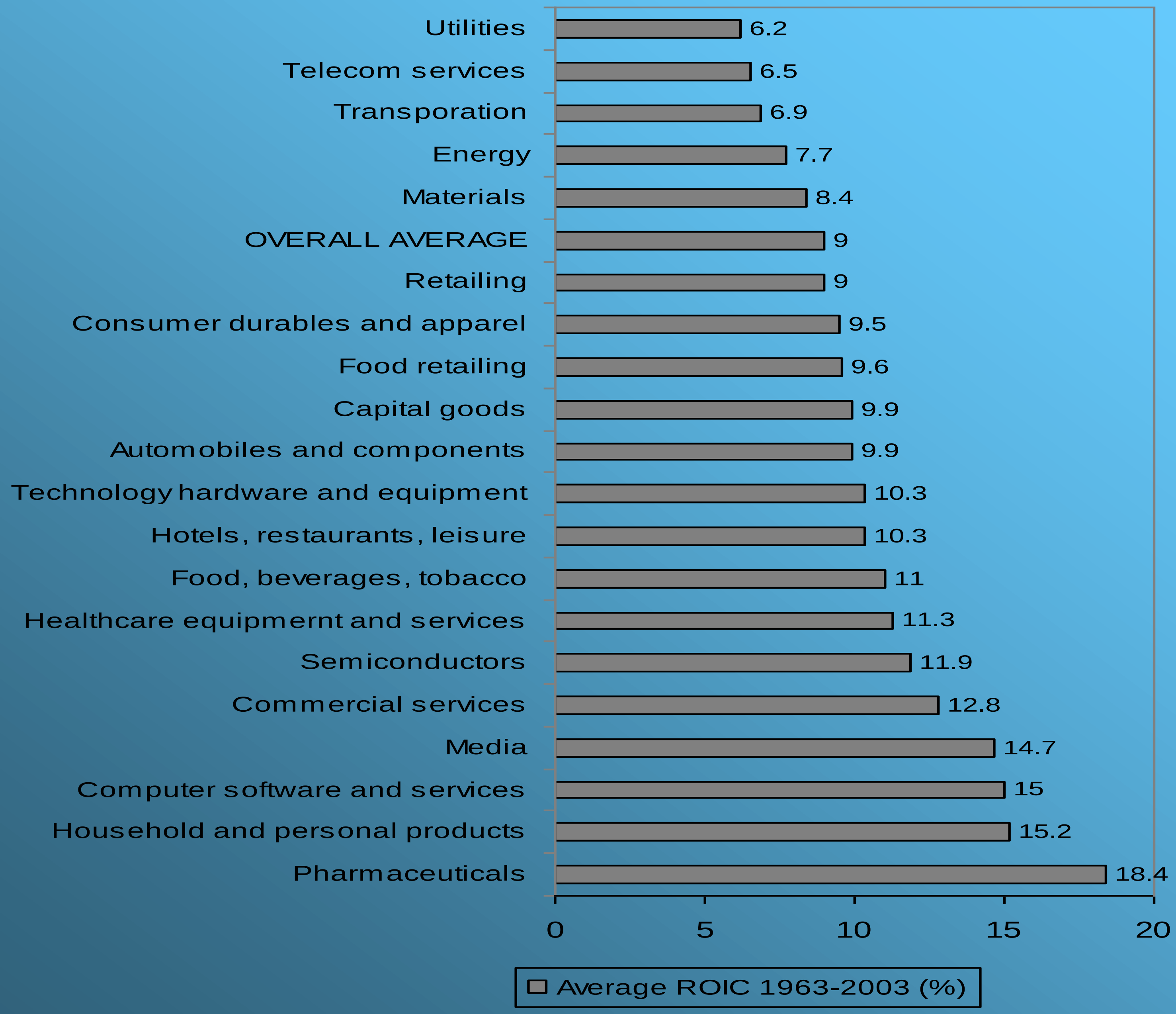
- *The Industry Environment lies at the core of the Macro Environment.*
- *The Macro Environment impacts the firm through its effect on the Industry Environment.*

Profitability of US Industries (selected industries only)

Median return on equity (%), 1999-2005

Household & Personal Products	22.7
Pharmaceuticals	22.3
Tobacco	21.6
Food Consumer Products	19.6
Securities	18.9
Diversified financials	18.3
Beverages	18.8
Mining & crude oil	17.8
Petroleum Refining	17.3
Medical Products & Equipment	17.2
Commercial Banks	15.5
Scientific & Photographic Equipt.	15.0
Apparel	14.4
Computer Software	13.9
Publishing, Printing	13.5
Health Care	13.1
Electronics, Electrical Equipment	13.0
Specialty Retailers	13.0
Computers, Office Equipment	11.7
Gas & Electric Utilities	10.4
Food and Drug Stores	10.0
Motor Vehicles & Parts	9.8
Hotels, Casinos, Resorts	9.7
Railroads	9.0
Insurance: Life and Health	8.6
Packaging & Containers	8.6
Insurance: Property & Casualty	8.3
Building Materials, Glass	8.3
Metals	8.0
Food Production	7.2
Forest and Paper Products	6.6
Semiconductors & Electronic Components	5.9
Telecommunications	4.6
Communications Equipment	1.2
Entertainment	0.2
Airlines	(22.0)

The Profitability of Global Industries: Return on Invested Capital, 1963-2003



The Determinants of Industry Profitability

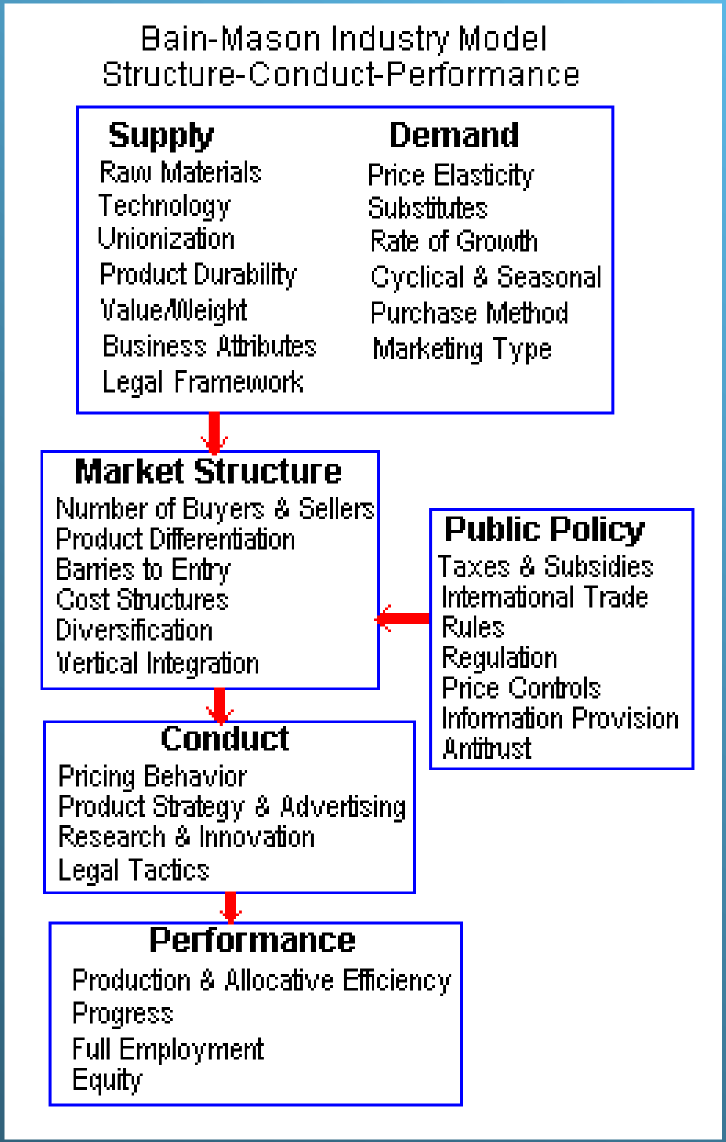
***3 key influences*:**

- **The value of the product to customers**
- **The intensity of competition**
- **Relative bargaining power at different levels within the value chain.**

The Spectrum of Industry Structures

	Perfect Competition	*Oligopoly*	*Duopoly*	*Monopoly*
Concentration	Many firms	A few firms	Two firms	One firm
Entry and Exit Barriers	No barriers	Significant barriers		High barriers
Product Differentiation	Homogeneous Product	Potential for product differentiation		
Information	Perfect Information flow	Imperfect availability of information		

Structure-Conduct-Performance Paradigm



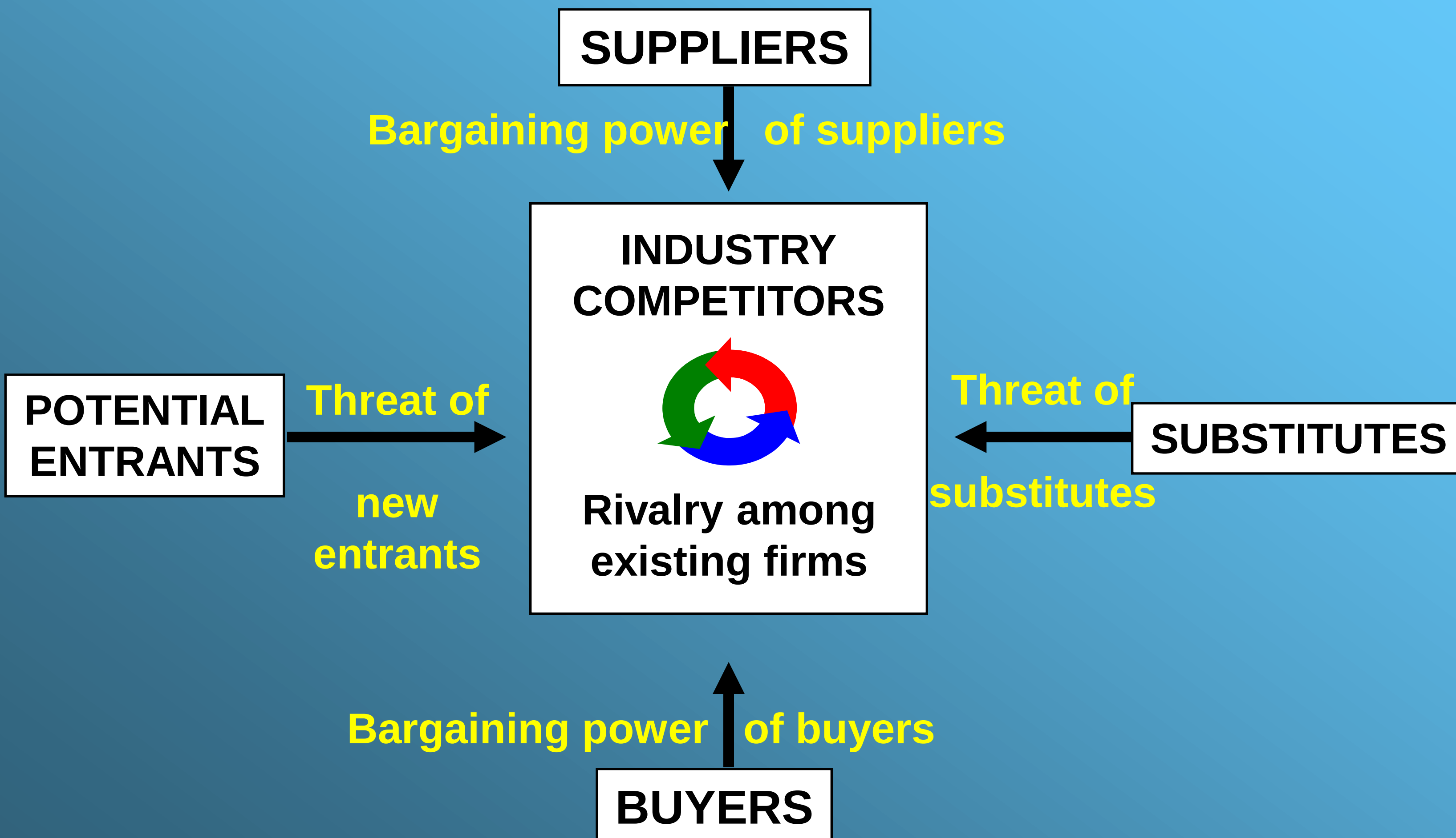
Positive correlation between concentration ratio (CR4) and price/profitability. Why?

Higher advertising to sales ratio Correlated with superior profitability. Why?

Multi-market contact correlated with higher prices/profitability.

Tool for antitrust.

Porter's Five Forces of Competition Framework



The Structural Determinants of Competition

BUYER POWER
- Buyers' price sensitivity
- Relative bargaining power

THREAT OF ENTRY
- Capital requirements
- Economies of scale
- Absolute cost advantage
- Product differentiation
- Access to distribution channels
- Legal/ regulatory barriers
- Retaliation

INDUSTRY RIVALRY
- Concentration
- Diversity of competitors
- Product differentiation
- Excess capacity & exit barriers
- Cost conditions

SUBSTITUTE COMPETITION
- Buyers' propensity to substitute
- Relative prices & performance of substitutes

SUPPLIER POWER
- Suppliers' price sensitivity
- Relative bargaining power

Threat of Substitutes

***Extent of competitive pressure from producers of substitutes depends upon*:**

- **Buyers' propensity to substitute**
- **The price-performance characteristics of substitutes.**

The Threat of Entry

Entrants' threat to industry profitability depends upon the height of barriers to entry. The principal sources of barriers to entry are:

- **Capital requirements**
- **Economies of scale**
- **Absolute cost advantage**
- **Switching costs**
- **Product differentiation**
- **Access to channels of distribution**
- **Legal and regulatory barriers**
- **Retaliation**

Bargaining Power of Buyers

Buyer’s price sensitivity

- Cost of purchases as % of buyer’s total costs.
- How differentiated is the purchased item?
- How intense is competition between buyers?
- How important is the item to quality of the buyers’ own output?

Relative bargaining power

- Size and concentration of buyers relative to sellers.
- Buyer’s information .
- Ability to backward integrate.

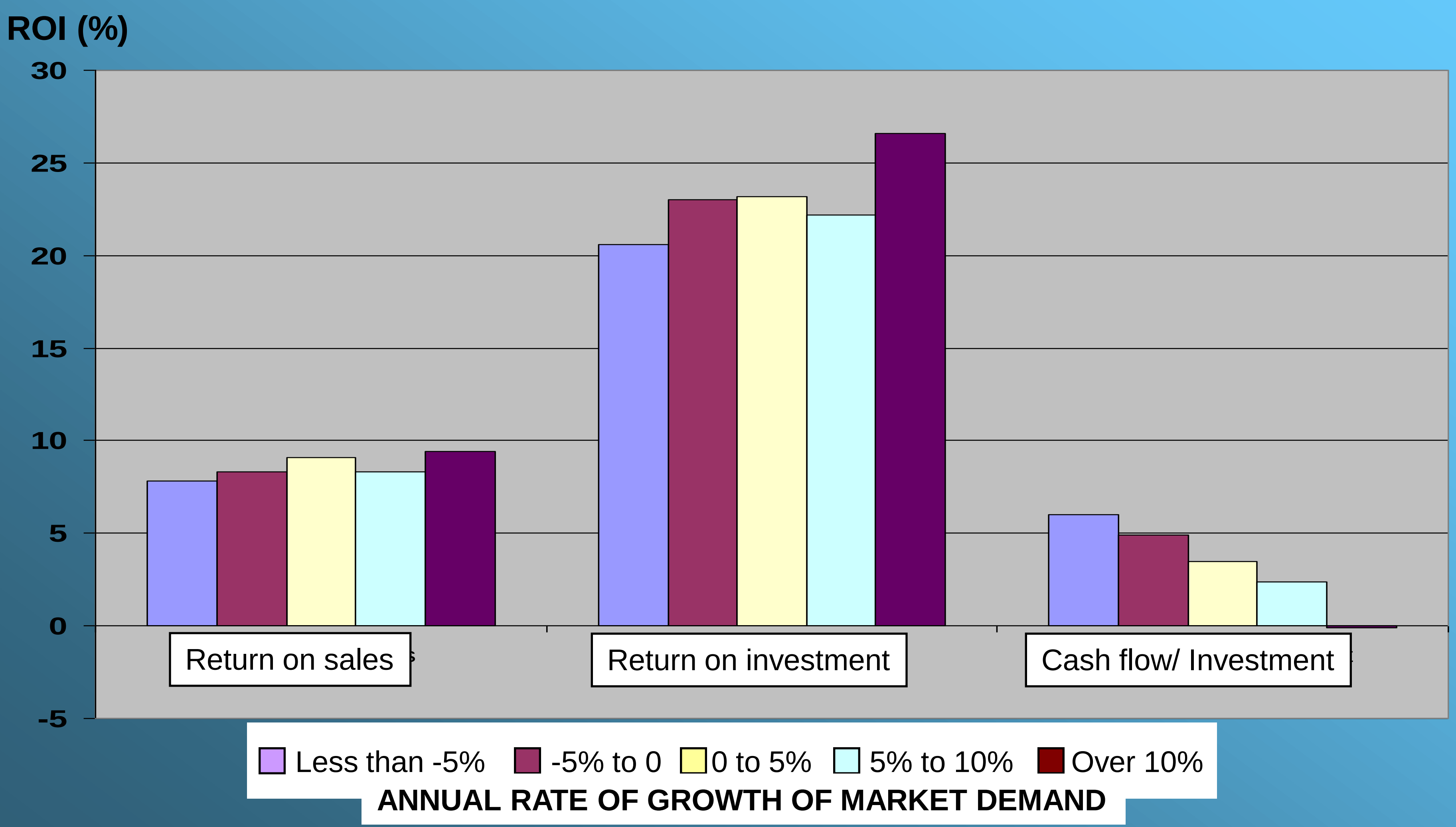
Note: analysis of supplier power is symmetric

Rivalry Between Established Competitors

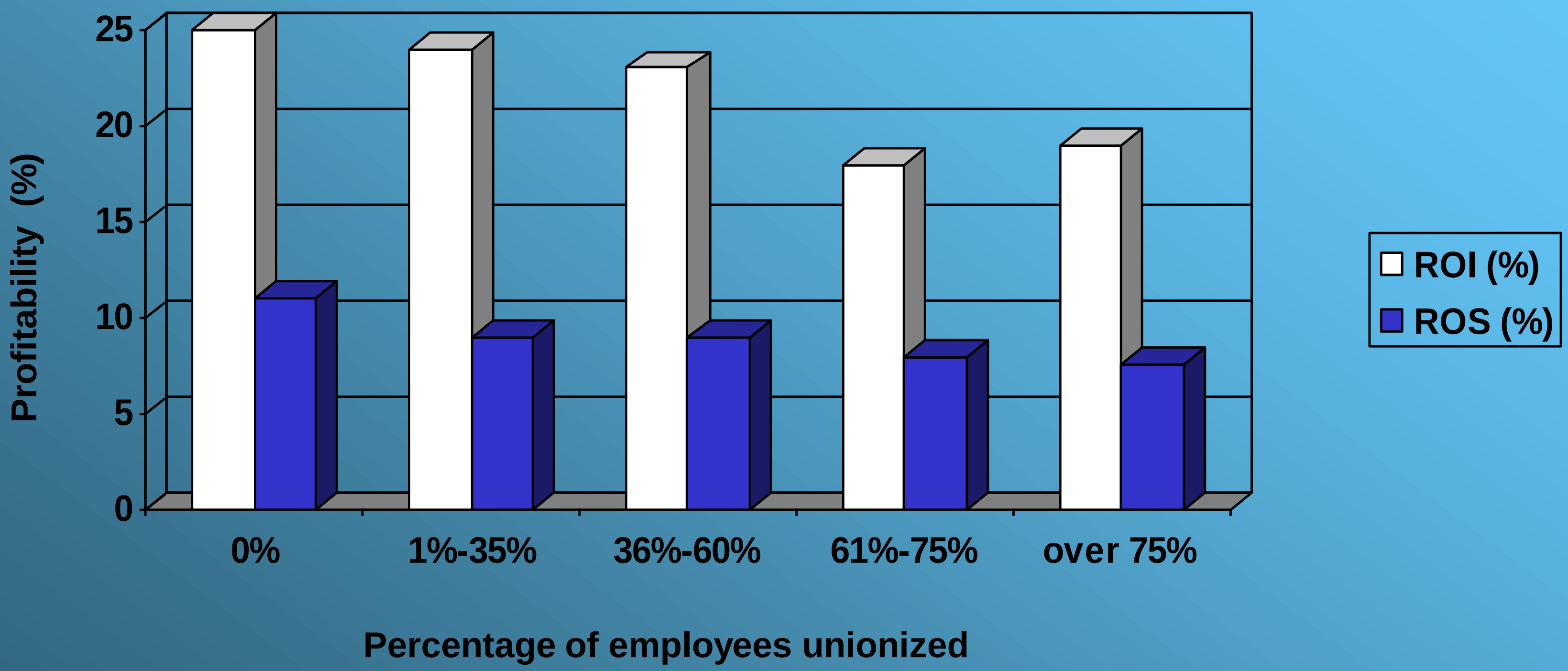
The extent to which industry profitability is depressed by aggressive price competition depends upon:

- **Concentration (number and size distribution of firms)**
- **Diversity of competitors (differences in goals, cost structure, etc.)**
- **Product differentiation**
- **Excess capacity and exit barriers**
- **Cost conditions**
  - **Extent of scale economies**
  - **Ratio of fixed to variable costs**

Profitability and Market Growth



Supplier Power: The Impact of Unionization on Profitability



Applying Five - Forces Analysis

Forecasting Industry Profitability

- **Past profitability a poor indicator of future profitability.**
- **If we can forecast *<u>changes in industry structure</u>* we can predict likely impact on *<u>competition</u>* and *<u>profitability</u>*.**

Strategies to Improve Industry Profitability

- **What structural variables are depressing profitability**
- **Which of these variables can be changed by individual or collective strategies?**

Drawing Industry Boundaries : Identifying the Relevant Market

- **What industry is BMW in:**
  - **World Auto industry**
  - **European Auto industry**
  - **World luxury car industry?**
- **Key criterion: *SUBSTITUTABILITY***
  - **On the demand side : are buyers willing to substitute between types of cars and across countries**
  - **On the supply side : are manufacturers able to switch production between types of cars and across countries**
- **We may need to analyze industry at different levels of aggregation for different types of decision**

Identifying Key Success Factors

Pre-requisites for success

What do customers want?

How does the firm survive competition

Analysis of demand

- **Who are our customers?**
- **What do they want?**

Analysis of competition

- **What drives competition?**
- **What are the main dimensions of competition?**
- **How intense is competition?**
- **How can we obtain a superior competitive position?**

KEY SUCCESS FACTORS

Identifying Key Success Factors Through Modeling Profitability: The Airline Industry

Profitability = *Yield* x *Load factor* - *Unit Cost*

$$\frac{\text{Income}}{\text{ASMs}} = \frac{\text{Revenue}}{\text{RPMs}} \times \frac{\text{RPMs}}{\text{ASMs}} - \frac{\text{Expenses}}{\text{ASMs}}$$

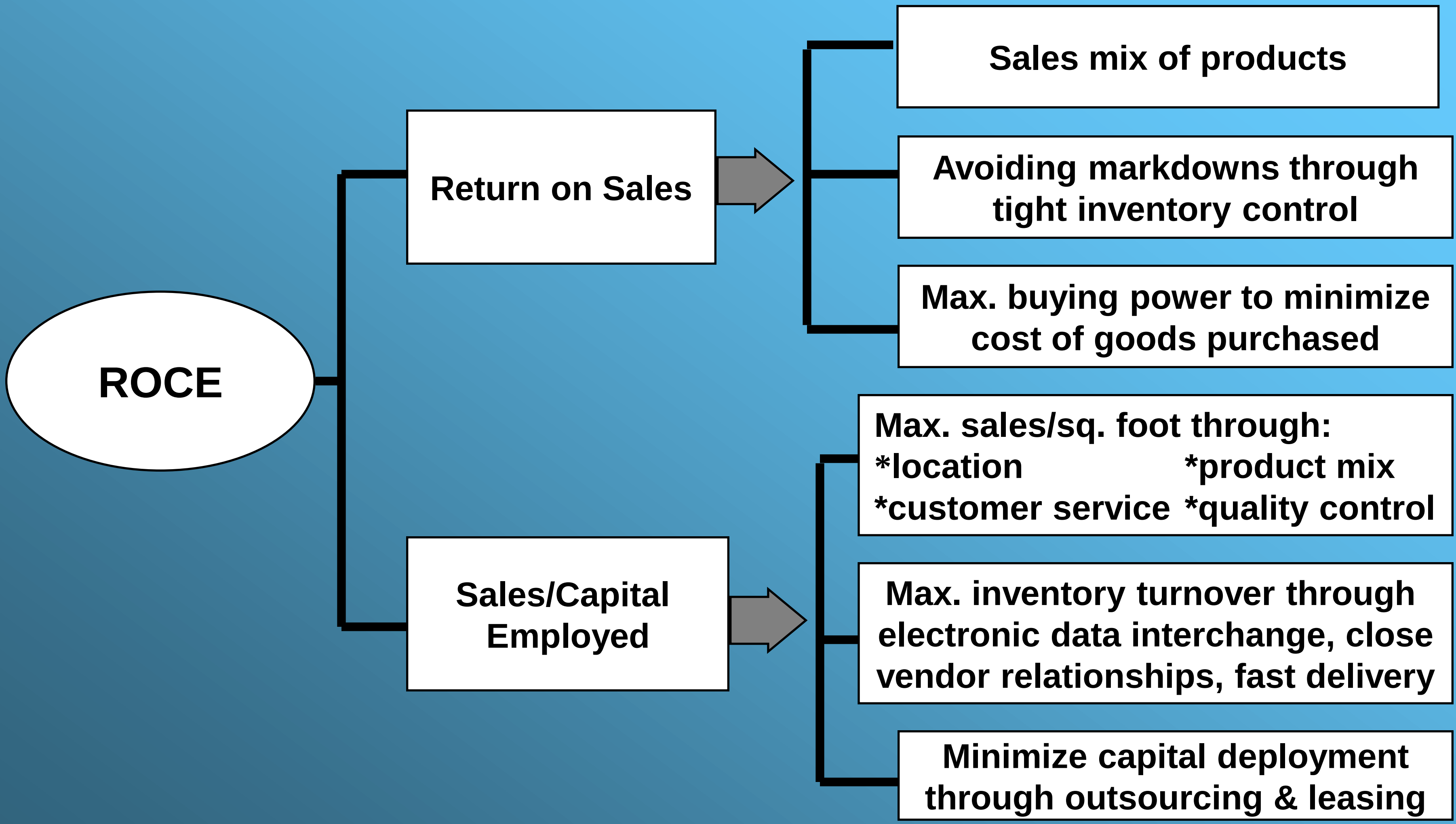
- Strength of competition on routes.
- Responsiveness to cha- anging market conditions
- % business travelers.
- Achieving differentia- tion advantage

- Price competitiveness.
- Efficiency of route planning.
- Flexibility and responsiveness.
- Customer loyalty.
- Meeting customer requirements.

- Wage rates.
- Fuel efficiency of planes.
- Employee productivity.
- Load factors.
- Administrative overhead.

ASM = Available Seat Miles RPM = Revenue Passenger Miles

Identifying Key Success Factors by Analyzing Profit Drivers: Retailing



SUMMARY: What Have We Learned?

Forecasting Industry Profitability

- **Past profitability a poor indicator of future profitability.**
- **If we can forecast *changes in industry structure* we can predict likely impact on *competition* and *profitability*.**

Strategies to Improve Industry Profitability

- **What structural variables are depressing profitability?**
- **Which can be changed by individual or collective strategies?**

Defining Industry Boundaries

- **Key criterion: *substitution***
- **The need to analyze market competition at different levels of aggregation (depending on the issues being considered)**

Key Success Factors

- **Starting point for the analysis of competitive advantage**

Ford Case

- Why has profitability in the auto industry declined from 10% from 1965-1972 to 4% today?
- How is the structure of the industry likely to change in the next five years?
- Is the industry going to be more or less profitable in the next five years?
- Which companies are going to be more profitable?
- What should Ford in the next five years?