

#### SNS COLLEGE OF TECHNOLOGY



An Autonomous Institution Coimbatore -35

Department of Mechanical Engineering

19MEE301- Engineering Economics and Cost Analysis

UNIT – I: BASIC ECONOMICS

**Economies of Small and Large Scale** 

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#### **Economies of Scale**



cost advantage

it increases

its level of output

per-unit fixed cost and the

quantity produced

greater the quantity of output produced

ut produced - lower the par-unit fixed cost



### **Economies of Scale**







# Effects of Economies of Scale on Production Cost



➤ It reduces the per-unit fixed cost

It reduces per-unit variable costs



## Types of Economies of Scale



Internal Economies of Scale -

#### Internal Economies of Scale (IEoS)



Technical economies i.e. containerization



Using specialist managers across the supply chain



Specialist capital machinery / technology



Financial economies e.g. lower interest rates on loans



Purchasing economies (monopsony power)



Risk-bearing economies from diversification



Large scale application of the division of labour

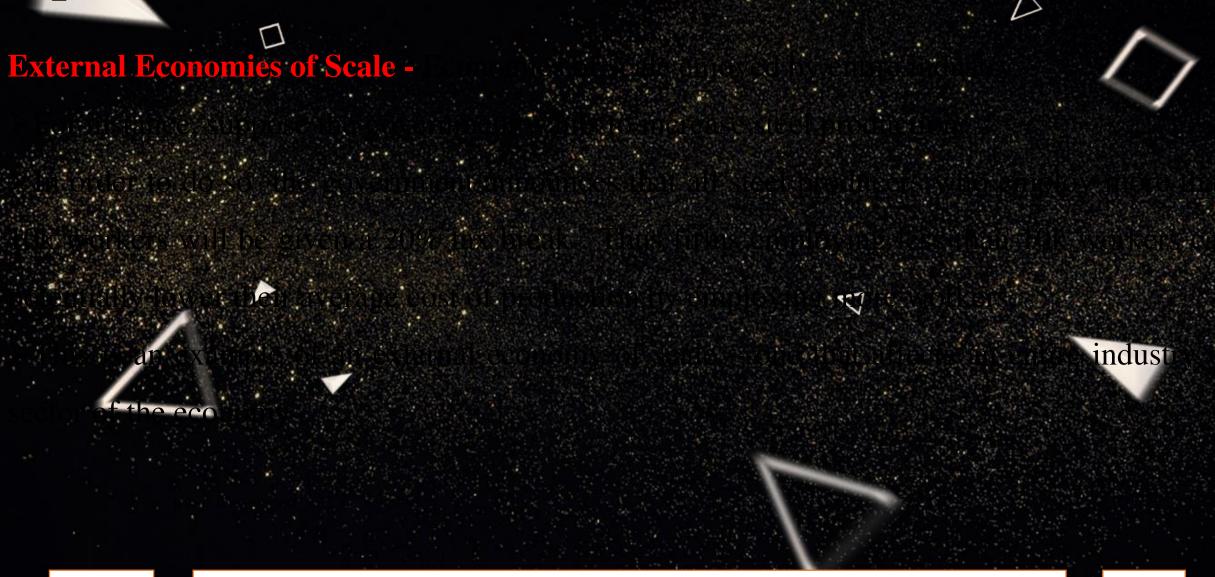


Network economies – which helps to lower marketing costs



## **Types of Economies of Scale**







# **Sources of Internal Economies of Scale**



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Network economies which helps to lowe marketing costs

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managers across the

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# Sources of Internal Economies of Scale



1. Purchasing

lower average costs buying the inputs

2. Managerial

lower average costs

improving the management structure

3. Technological

technological advancement



# Sources of Internal Economies of Scale



4. Markeitng

lower average costs

spreadign the high cost of advertisement

5. Research and Development economies

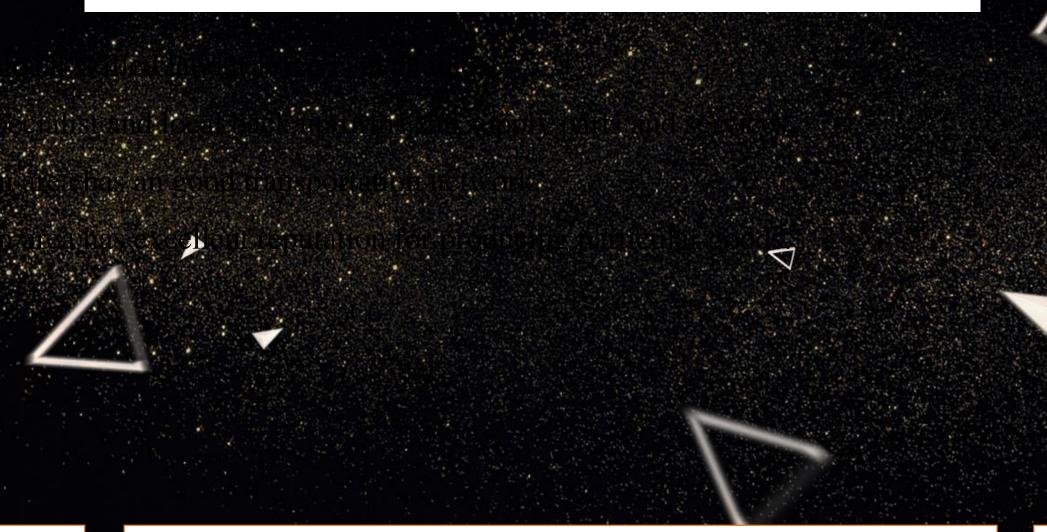
lower average costs

new and better products.



# Sources of External Economies of Scale







## Risk Bearing in Economies of Scale



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- > Internal Disconomies of scale
- **External disconomies of scale.**



#### **Diseconomies of Scale -Internal**



The disadvantages of large scale production that can lead to increasing average costs



#### Diseconomies of Scale -External







## **Internal economies - Summary**





#### Internal Economies & Diseconomies of Scale

#### Internal Economies of Scale:



- Procurement economies
- Marketing economies
- Managerial economies
- Financial economies
- Technical economies
- R &D economies
- Risk-bearing economies
- Welfare economies

# Disadvantages

#### Internal Diseconomies of Scale:

- High capital requirement
- Management becomes difficult
- Scarcity of Raw materials
- Mass customization
- Maximum technology capacity
- Expands production risk



## **External econmies - Summary**



#### External Economies & Diseconomies of Scale



#### External Economies of Scale:

- Skilled labour workforce
- A good reputation
- Specialized Suppliers
- Specialist Services
- Specialist Market
- Improved Infrastructure



#### **External Diseconomies of Scale:**

- Increasing Operating Cost
- Increase Competition
- Scarcity of Raw materials
- Increase Technology Cost
- Increase Labour Cost



# Technical Activity - Eg - Bread



What are the things are required to manufacture bread? Match with the Factor of Production

Land
Labour
Capital

Enterprise

