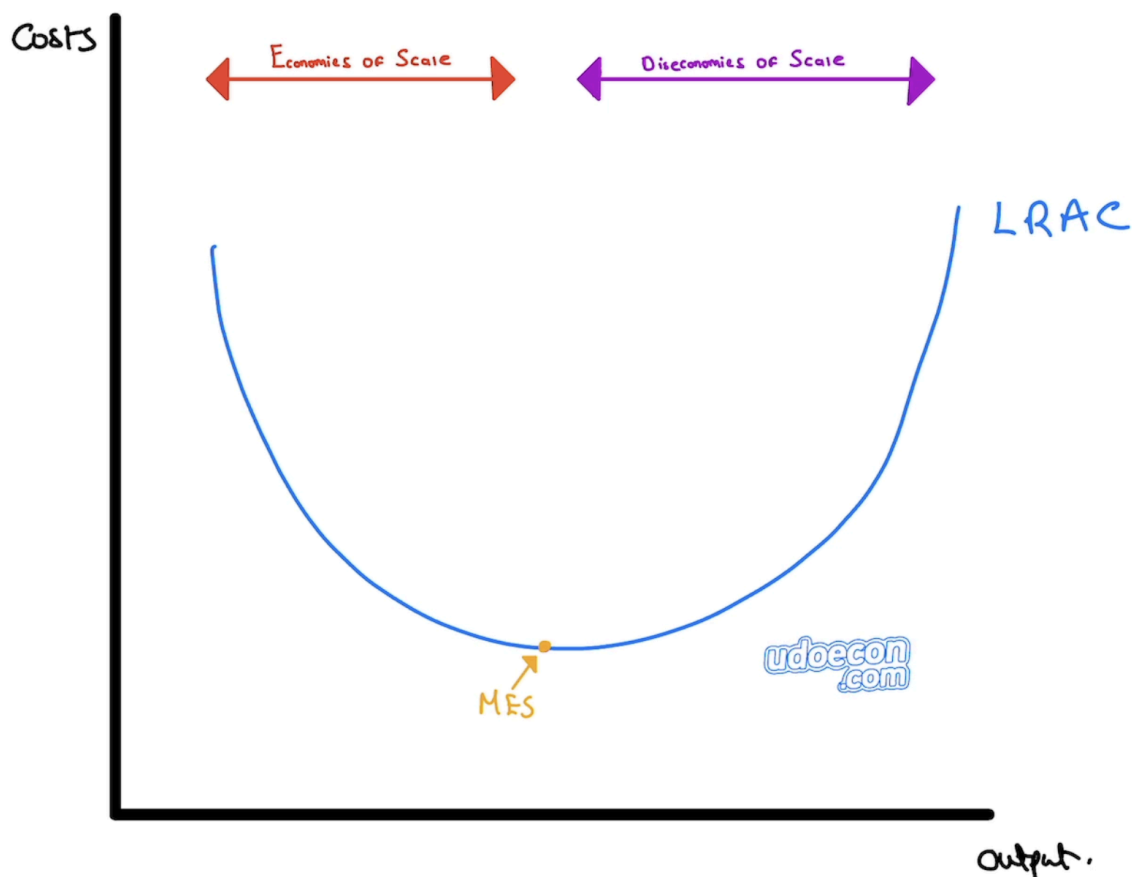


Economies & Diseconomies of Scale

Economies of Scale

Economies of scale occur when a firm increases its output leading to the LRAC falling.



Types of Internal Economies of Scale

Internal economies of scale arise from the growth of an individual firm. The cost savings are generated by changes within the firm itself.

Technical Economies of Scale

A firm's investment in expensive machinery or technology as it expands thus reducing LRAC

Firm expands → invests in expensive machinery/technology → increased productivity → cost per unit ↓ → LRAC ↓

For example, Amazon invested in 750,000+ fulfillment robots (Named Kiva and Proteus) , to cut unit fulfillment costs by around 20% thus LRAC ↓

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Purchasing Economies of Scale

Larger firms can purchase inputs in bulk and use their greater bargaining power to negotiate discounts from suppliers.

Output $\uparrow$ $\rightarrow$ firm purchases more inputs $\rightarrow$ greater bargaining power/bulk buying $\rightarrow$ lower price per unit of inputs $\rightarrow$ LRAC $\downarrow$

For example, Tesco leverages its 28% UK market share and £30bn+ annual purchasing power to demand bulk discounts from suppliers, cutting wholesale input prices by around 15% to lower its LRAC $\downarrow$

Managerial Economies of Scale

As firms grow, they can afford to employ specialist managers in areas such as finance, marketing and human resources.

Firm grows $\rightarrow$ specialist managers employed $\rightarrow$ greater expertise and decision-making $\rightarrow$ productivity $\uparrow$ $\rightarrow$ LRAC $\downarrow$

A small firm may need one manager to perform several roles, whereas a multinational can employ specialist managers for different areas of the business. For example Manchester City divides executive roles among niche specialists, Pep Guardiola (tactical head), Enzo Maresca (assistant manager), and dedicated set-piece coaches to increase operational productivity and lower its LRAC $\downarrow$

Financial Economies of Scale

Large firms can often access finance more cheaply than smaller firms. Banks may view larger firms as more creditworthy because they have more assets to use as collateral and may have a longer history of profitability.

Firm grows $\rightarrow$ perceived risk of lending $\downarrow$ $\rightarrow$ access to cheaper finance/lower interest rates $\rightarrow$ cost of borrowing $\downarrow$ $\rightarrow$ LRAC $\downarrow$

For example Apple leverages its AAA credit rating and massive asset base to issue corporate bonds at 3%–4% interest rates compared to small firms paying 8%–12%, cutting capital borrowing costs to lower its LRAC $\downarrow$

Marketing Economies of Scale

Large firms can spread their marketing and advertising costs across a much greater level of output.

Output $\uparrow$ $\rightarrow$ advertising expenditure spread across more units sold $\rightarrow$ advertising cost per unit $\downarrow$ $\rightarrow$ LRAC $\downarrow$

For example, Nike spreads LeBron James' **\$1bn+ lifetime contract** across tens of millions of products sold worldwide, driving fixed marketing costs down to a few pence per shoe to lower its LRAC ↓

Risk-Bearing Economies of Scale

Large firms are often more diversified, selling a wider range of products or operating across several markets. This can reduce the overall risk faced by the firm.

Firm grows → greater product/market diversification → losses from one product can be offset by profits from another → overall business risk ↓ → risk-management costs may fall → LRAC ↓

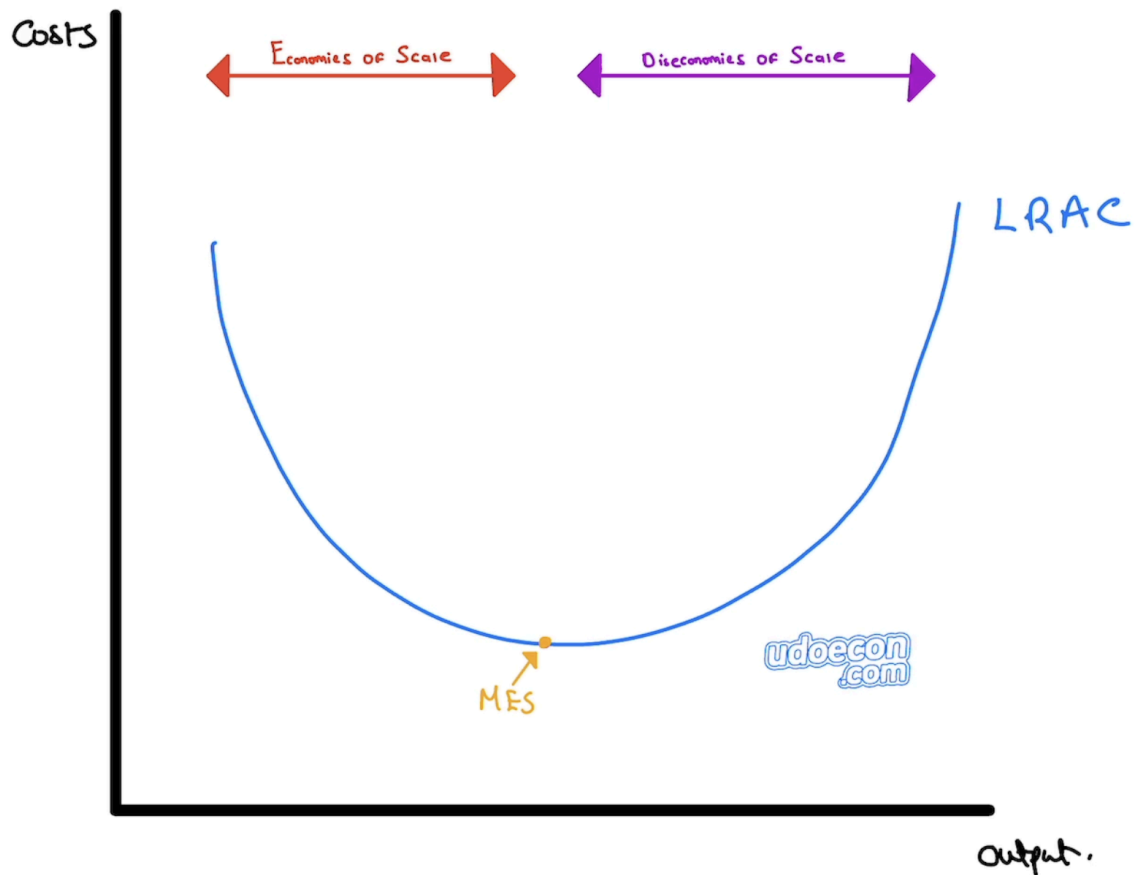
For example, Disney diversifies across theme parks e.g DisneyWorld, streaming e.g Disney+, film studios, and consumer products . Using profits from stable segments to absorb losses in underperforming divisions, reducing business risk and lowering its LRAC ↓

Diseconomies of Scale

Diseconomies of scale occur when a firm becomes so large that further increases in output cause LRAC to rise.

Firm becomes too large → inefficiencies increase → productivity ↓ / costs ↑ → LRAC ↑

Tip - Remember DOS as ABC → **A**lienation, **B**ureaucracy **C**ommunication



Worker Alienation

As a firm grows, workers may feel less important and less connected to the firm's objectives. This can reduce motivation and morale.

Firm grows → workers feel less valued/connected → motivation ↓ → labour productivity ↓ → cost per unit ↑ → LRAC ↑

For example Amazon has a staff turnover of over 100% annually due to workers feel like small cogs in a machine rather than valued staff

Bureaucracy

As a firm grows, it develops more departments, managers and layers of authority. This makes coordinating and controlling the business more difficult and can lead to duplication of work.

Firm grows → more layers of management → bureaucracy/duplication ↑ → decisions become slower → efficiency/productivity ↓ → LRAC ↑

Communication

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As a firm grows, information has to pass through more workers, departments and levels of management.

Firm grows → communication chains become longer → information becomes delayed/distorted → mistakes and misunderstandings ↑ → productivity ↓ → LRAC ↑

Minimum Efficient Scale

The Minimum Efficient Scale (MES) is the minimum level of output at which a firm's LRAC is minimised.

In simple terms, MES is the smallest output at which the firm has fully exploited its available economies of scale.

Internal vs External Economies of Scale

Internal Economies of Scale

Internal economies of scale arise because the individual firm itself grows.

Individual firm expands → gains economies of scale → LRAC ↓

Examples include:

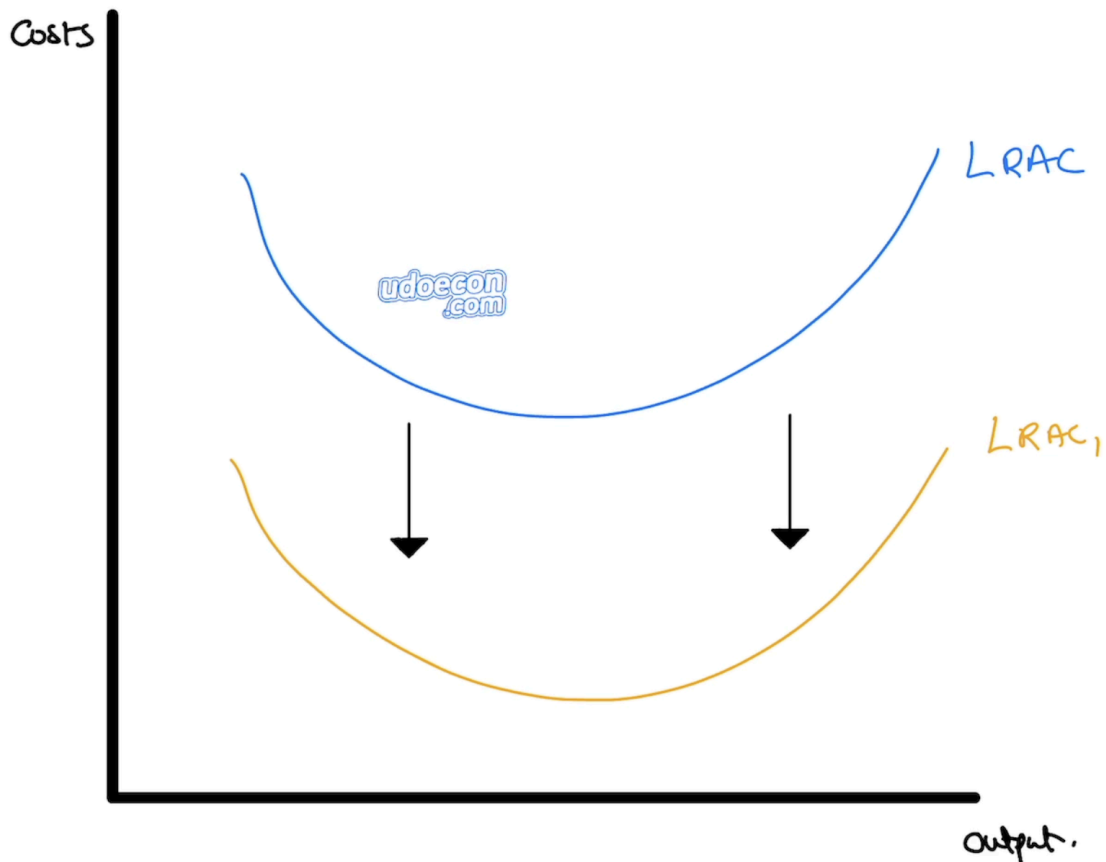
- Technical economies
- Purchasing economies

External Economies of Scale

External economies of scale occur when the industry as a whole expands, reducing the costs of firms operating within that industry.

The cost advantage therefore comes from factors outside the individual firm.

Unlike internal economies of scale, external economies of scale cause the firm's entire LRAC curve to shift downwards.



For example Silicon Valley became a global tech hub where software engineers spontaneously relocated, providing Apple and HP with an instant local talent pool that slashed recruitment, headhunting, and relocation costs, shifting their entire LRAC curve downward.