

Urbanization: The Growth and Transformation of Cities

Transport and Urban Governance

Urbanization, Evolution of cities, Urban forms, Cities typology

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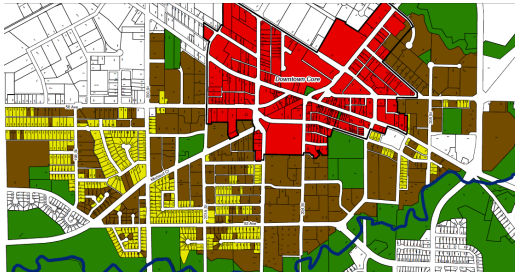
Urbanism?

'Urban' originates from the **Latin word 'urbs,'** which means 'city' or 'town,' and has been in use since the 17th century.



'City' and 'town' are often used interchangeably and refer to populations engaged in **non-agricultural or non-primary sector activities** within a given area.

Countries determine urban settlements based on **population concentration with a minimum threshold size in a specific area.**



'Towns' and 'cities' form a **functionally interdependent hierarchy**, with larger cities incorporating more functions and being more self-contained.

Urban areas are defined considering **socio-economic dimensions alongside demographics** (Pacione 2009).

The term "urban" is employed with dual meanings.

Urban Area

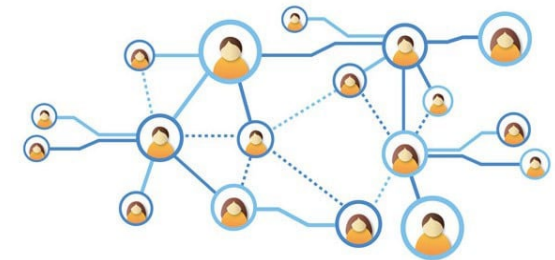
Demographic

In demographic terms, the emphasis lies in examining the **population's size, density, and the predominant occupation among adult males which is non-agricultural.**



Sociological

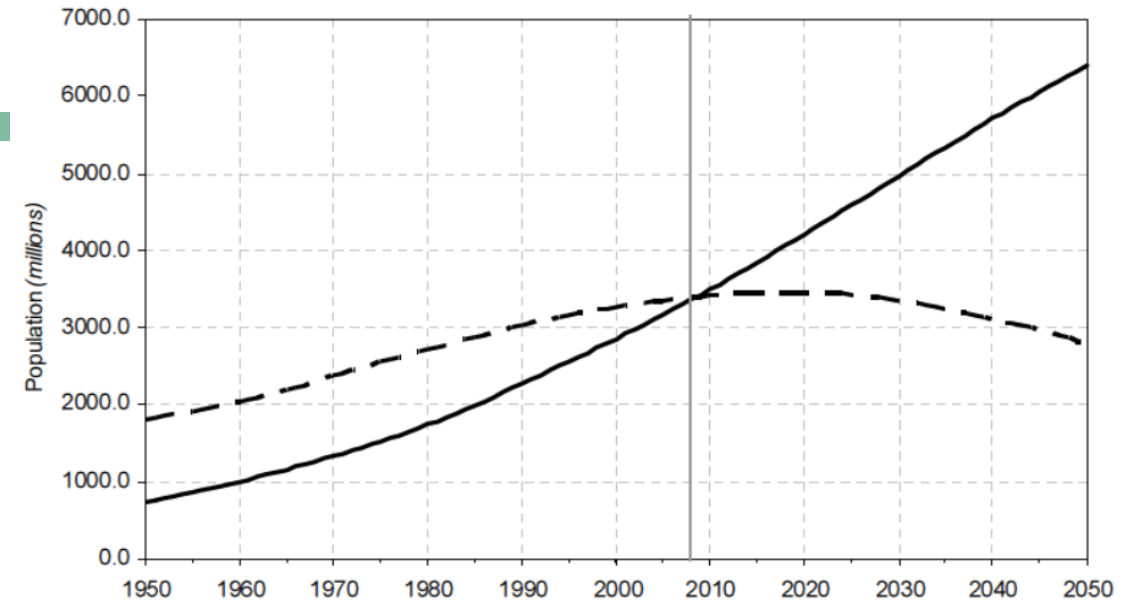
From a sociological perspective, the attention is directed towards **diversity, lack of personal connection, mutual reliance, and the standard of living.**



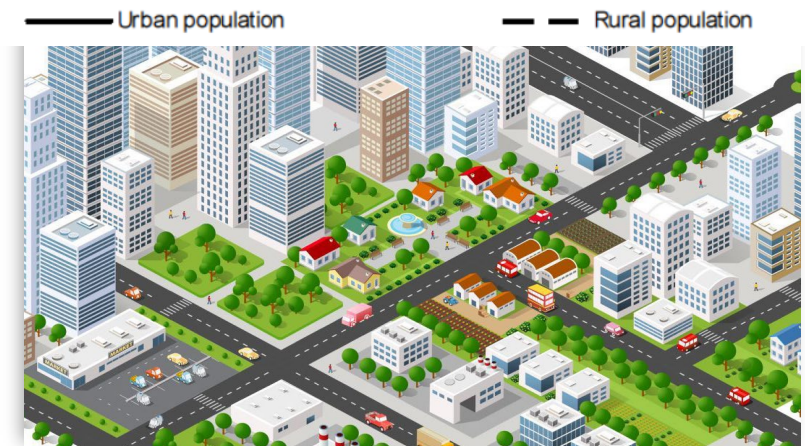
When explaining about urbanism -Max Weber (1961) and George Simmel (1950) have stressed on **dense living conditions, rapidity of change and impersonal interaction in urban settings.**

What is Urbanization?

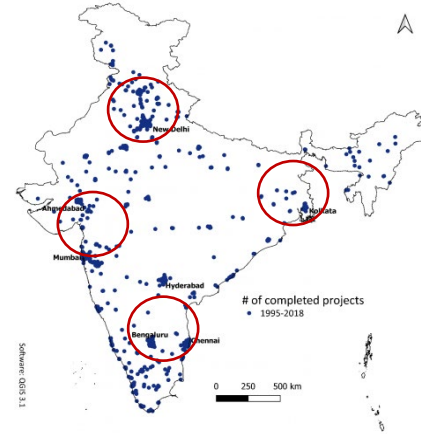
Urbanization refers to the **transition of populations from rural areas to cities, involving shifts from agriculture to urban activities like trade, industry, and management.** This process expands the interrelationships within a population's habitat and reflects on **populations behaviour**. Notably, the growth of urban population and non-agricultural urban centres are key aspects. Urbanization has accelerated significantly with industrialization and increased urban growth, shaping contemporary life (Hawley, 1978).



Moving to cities → *Changing from agriculture to other pursuits common to cities* → *Changes of behavior patterns*



Formation and growth of cities are influenced by complex social, economic, and historical factors. But it is 'clustering' that plays a crucial role in the existence and vitality of cities.



Cities as nodes of accumulation

CLUSTERING/AGGLOMERATION

It refers to the spatial concentration or grouping of similar or related entities in a specific geographic area. In the context of urban studies and economics, clustering often involves the gathering of businesses, industries, institutions, or people near one another.

Agglomeration in urban areas offers - **efficient trade, cost-effective production, and access to a wide range of services and opportunities.** It is a fundamental principle, where the benefits of proximity drive economic and social interactions.

Economic Opportunities

Trade and Commerce

Social and Cultural Centers

Innovation and Entrepreneurship

Education and Research

Governance and Administration

Healthcare and Services

Infrastructure and Connectivity

Social Networking and Community

Facilitating Trade (in Goods and Ideas)

- *Comparison Shopping*
- *Exchange of Ideas and Socialization*
- *Cities as Large Markets*
- *Better Transportation*

Facilitating Production

- *Economies of Scale*
- *Proximity to Jobs*
- *Clustering of Firms*

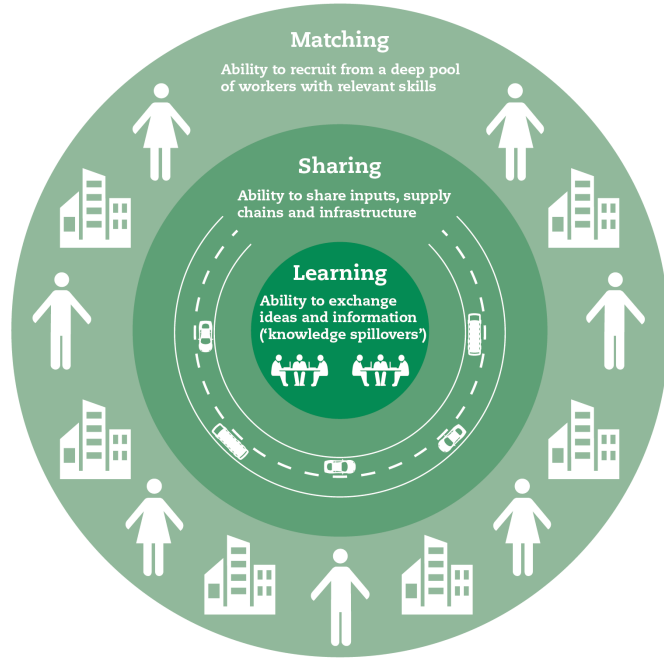
Facilitating Consumption

- *Variety of Services*
- *Economies of Agglomeration*

*The benefits that come when firms and people locate near one another

The Role of economics in city formation

Comparative advantage plays a significant role in influencing the specialization and growth of cities.

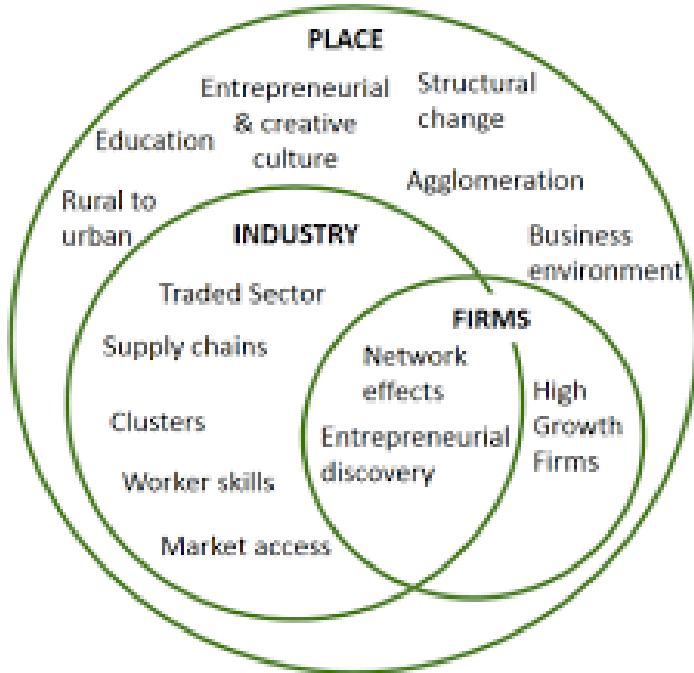


It is the unique strengths or advantages that a particular region or locality possesses, making it well-suited for certain economic activities or functions.

- **Gains from Trade:** It refers to the ability of individuals, regions, or nations to produce goods or services at a lower opportunity cost compared to others. When regions or groups of people possess different comparative advantages, there are gains from trade.
- **Specialization:** These gains from trade encourage regions where resources are put to specialized use to maximize efficiency.
- **Economies of Scale in Exchange:** It is more efficient to have intermediaries, such as trading firms or marketplaces, that facilitate transactions between buyers and sellers.
- **Concentration of Trading Firms:** Because trading firms can streamline the process of collecting and distributing goods, they tend to concentrate in areas that facilitate these activities. Hence, forming trading cities.

The Role of economics in city formation

Economies of Scale in Production describes the cost advantages a business or organization can achieve as it increases the scale or volume of its production. In simpler terms, it means that as a company produces more of a particular good or service, the average cost per unit of production decreases.



Resource Concentration: Given the cost advantages associated with economies of scale, it makes sense to concentrate resources, including labor and capital, in one location, typically a factory or manufacturing facility.



Proximity of Workers: Workers tend to locate near these production facilities to reduce transportation costs and increase efficiency.



Formation of Cities: As a result of these factors, cities emerge. These cities are characterized by the concentration of factories and production facilities, often centered around a specific industry or manufacturing sector.

Externalities

The unintended and often indirect consequences of urban activities that affect individuals, groups, or the environment without being reflected in market prices.

Externalities can be positive or negative and typically arise due to the interdependence of urban systems and the shared use of resources and spaces within a city.

Example of Positive Externalities in cities



Public Parks: Well-maintained public parks in a city provide recreational opportunities, green spaces, and improved air quality for residents, benefiting the community as a whole.



Public Transportation: Investment in efficient public transportation systems can reduce traffic congestion and pollution, benefiting both users and non-users.



Education: High-quality urban schools can lead to a more educated and skilled workforce, benefiting the entire city by attracting businesses and contributing to economic growth.



Cultural Institutions: Museums, theaters, and cultural events contribute to a vibrant cultural scene that can enhance the quality of life and attract tourists.

Externalities

The unintended and often indirect consequences of urban activities that affect individuals, groups, or the environment without being reflected in market prices.

Example of Negative Externalities in cities



Traffic Congestion: Increased urban traffic results in longer commute times and air pollution, negatively affecting the well-being of residents and the environment.



Air Pollution: Industrial and vehicular emissions can lead to poor air quality, posing health risks for urban populations.



Noise Pollution: Urban activities, such as construction and traffic, can generate noise that disturbs residents in nearby areas.



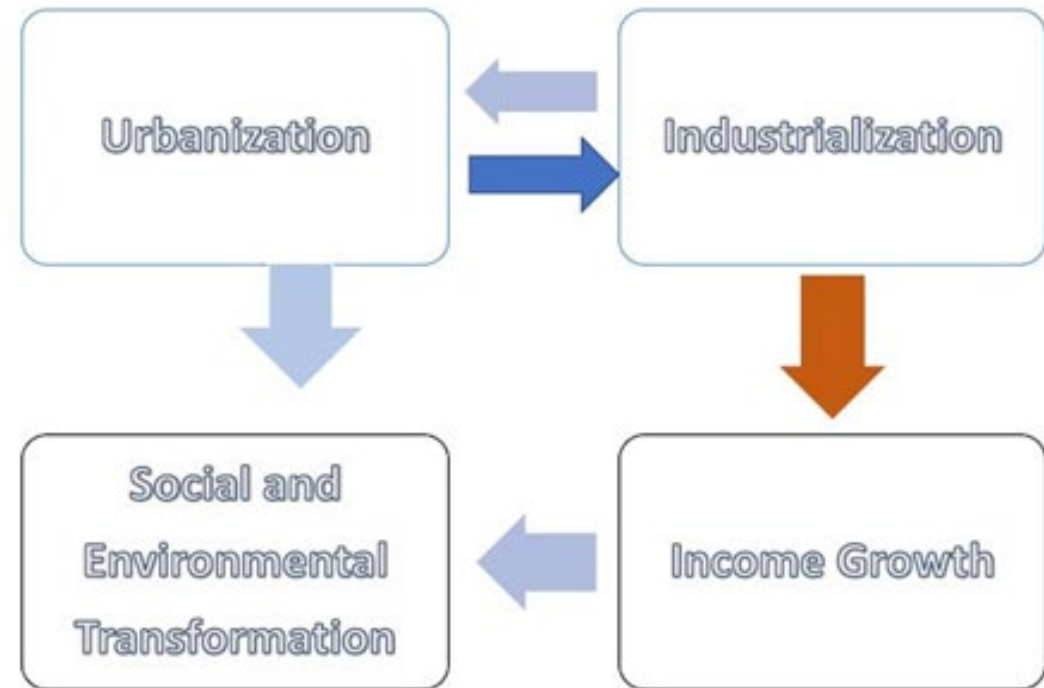
Urban Sprawl: The expansion of urban areas into previously undeveloped land can lead to habitat destruction and increased demand for resources, affecting the natural environment.

Growth and Structural Transformation

- Urbanization is a consequence of economic development, and urbanization rates are used as indicators of income per capita.
- Economic development involves a transition from agriculture to manufacturing and services, leading to a migration of labor from rural to urban areas.

This shift in economic activity can be attributed to two main factors:

1. "**Push**" factors, driven by improvements in agricultural productivity that encourage labor to move into urban jobs.
2. "**Pull**" factors, influenced by enhanced productivity in non-agricultural sectors, which attract labor to urban regions.



The significance of cities in the global or regional economy is not solely determined by their **economic size** but is also closely tied to their **specific roles**.

Lo and Marcotullio in their work published in 2001 (pages 97-106) identified four categories of major cities in the Asia and Pacific area based on their roles:

1 Post-industrial capital-exporting cities: Tokyo and Seoul stand out as hubs hosting numerous headquarters of ***transnational corporations, multinational banks, and producer services***. These cities serve as global and regional command-and-control centers.

2 Industrial cities: Bangkok, Jakarta, and Manila continue to be manufacturing hubs for the region and the world. This is primarily due to ***substantial foreign direct investments in export-oriented manufacturing*** within these urban centers.

3 Entrepôt or boundary-less cities: Hong Kong, China, and Singapore serve as pivotal points within ***extensive cross-border economic regions***, encompassing the Hong Kong-Pearl-River Delta-Fujian-Taiwan Province of China region and the Singapore-Johore-Riau growth triangle.

4 Amenity cities: Sydney has transitioned to a ***post-industrial economy, capitalizing on its integration into the regional economy and offering a substantial array of amenities designed to draw investments and economic activities***.

Cities exhibit inherent differences, and even the most groundbreaking strategy can never attain widespread influence.

According to **Harvard Business Review** cities can be divided into four distinct categories



According to **Harvard Business Review** cities can be divided into four distinct categories

Developed Economy, Legacy City

- Slow demographic growth
- zero-sum situation
- High GDP
- Innovations takes place
- where entrepreneurs can create solutions that improve quality of life — without added government expense
- Any intervention in a legacy city must dismantle something that existed before

Emerging Economy, Legacy City

- Fast-growing populations and severe congestion
- Opportunity to create value by improving efficiency and livability as there is a market of customers with cash to pay for these benefits.
- Focus on public-private partnerships (PPP)
- Most physical and institutional structures are already in place in these megacities

Emerging Economy, New City

- High population growth
- High growth rates in GDP per capita
- Demographic and economic tailwinds that help to boost returns
- The urban areas have few existing physical or social structures to dismantle as they grow, hence obstacles for new development.

Developed Economy, New City

- Such cities are very rare
- “new cities” in the developed world are large, integrated real-estate developments with an urban theme, usually near a true municipality
- These cities provide employment opportunity for the existing municipality

Type of cities based on its size and function:

Global cities-

- Epicenters of human activity that help drive the global economy
- They are also center of cultural innovation, trade and commerce
- very high density in terms of buildings and population
- Examples- New York, London, and Tokyo

National cities-

- These cities are political, commercial, or cultural capitals
- Most resemble global cities but operate at a smaller scale.
- Washington, D.C., is a center for US government

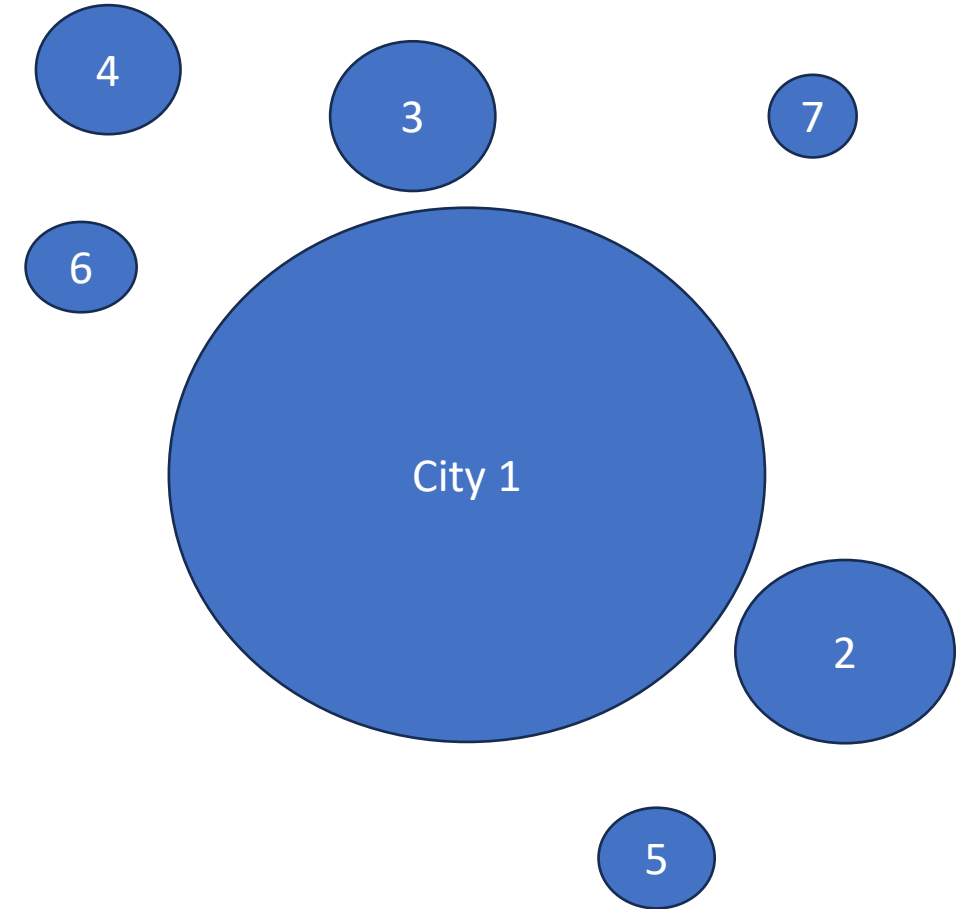
Regional cities

- Smaller in size and sphere of influence than national cities
- They are the traditional cores of local regions. Eg : Cleveland



PRIMACY/ PRIMATE CITY

- A [primate city](#) is a major city that works as the *financial, political, and population center of a country and is not rivaled in any of these aspects by any other city in that country.*
- Normally, a primate city must be at least **twice as populous as the second largest city in the country.**
- The capital becomes the dominant city controlling trade between smaller urban areas as well as with international markets.
- It becomes a symbol of the nation's achievements.
- The large share of national population reinforces their concentrated wealth, power and status.
- The phenomenon is present in many small sized countries such as: France (Paris), Greece (Athens), Iraq (Baghdad), Thailand (Bangkok)

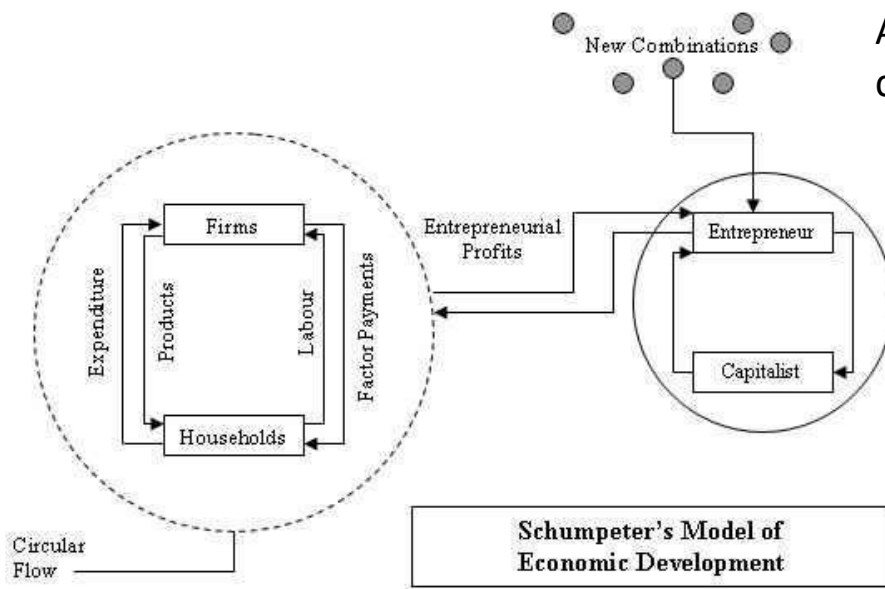


Twice as populous as the second largest city

Model of Economic Growth

Schumpeter's Theory of Economic Evolution

- Schumpeter assumes a perfectly competitive economy which is in stationary equilibrium. In such a state, there is perfect competitive equilibrium, no profits, no interest rates, no savings, no investments and no involuntary unemployment.
- This equilibrium is characterized by the term "**circular flow**", continues to repeat itself every year.



According to Schumpeter economic development is "spontaneous and discontinuous change in the channels of circular flow."

Development consists of carrying out of **new combinations** of possibilities in stationary state. These possibilities come in the form of **INNOVATIONS**.



INNOVATION consists of:

- Creation of a new product
- The use of new technologies of production,
- Use the new organization of production,
- Opening new markets and sources of raw materials

Model of Economic Growth

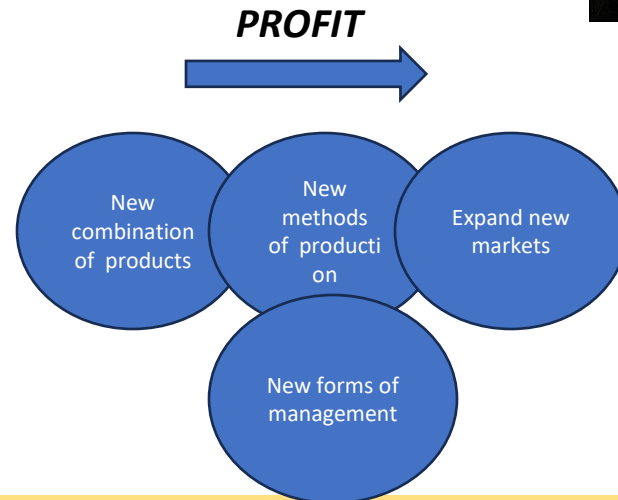
Schumpeter's Theory of Economic Evolution

Development in his theory was - An **ENTREPRENEUR** is an **economic entity**, which is different from the capitalist and the worker. It has a '**special gift**', a character feature of human nature which does not depend on class or social status.

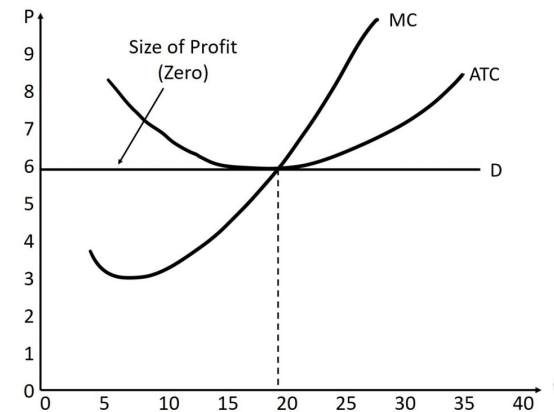


This type of character includes the following features:

- Self-reliance
- Preference for risk
- The value of own independence
- Focus on own opinion
- The need to achieve success
- Desire for innovation



Example: Internet



Did you know?
He used to call
dismantling of long term
practices as **CREATIVE
DISTRUCTION**

Entrepreneur **innovated to earn profits**. Under competitive equilibrium, the **price of each product just equals its cost of production** and there is **no profit**. Profits arise due to dynamic changes resulting from an **innovation and exist till the innovation becomes general**.

Location Theory

The analysis of land use patterns has long been one of geography's basic concerns.

Ever thought why Connaught Place in Delhi or any other city center is hustling bustling with people and tall commercial buildings?

BID-RENT CURVE

(Bidders bidding to get access to the land in exchange of rent)

The theory is based on microeconomics concept and is taken from the work of **Alonso (1964) & Muth (1969)**.

Dependent



Land use
pattern



Land Value



Accessibility

For Retail

1. Low Transportation Costs Near Central Business District (CBD):

- Proximity to the CBD results in lower transportation costs for firms.
- Businesses situated near the CBD find it cost-effective to operate due to reduced expenses associated with transportation.

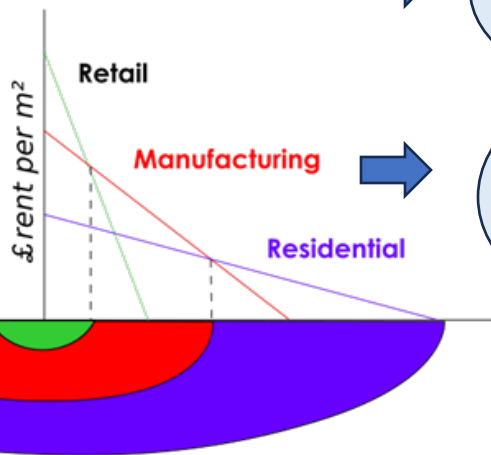
2. Higher Costs with Distance:

- As one moves farther away from the CBD, transportation costs tend to increase.
- Firms and retailers located at greater distances from the CBD face higher transportation expenses, which can affect their profitability.

3. Value of Central Location:

- Companies near the CBD are willing to pay premium prices for land in these central areas.
- They do so because being centrally located helps minimize their transportation costs, making it economically advantageous.

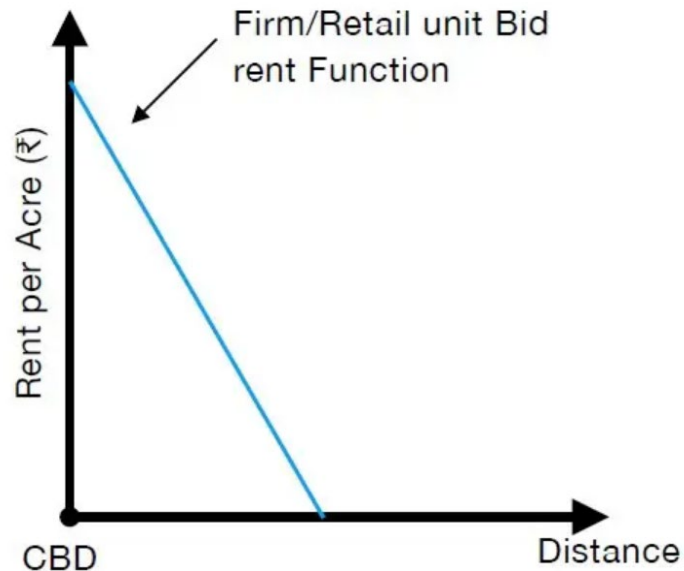
Bid Rent Curve



Consequence on land use

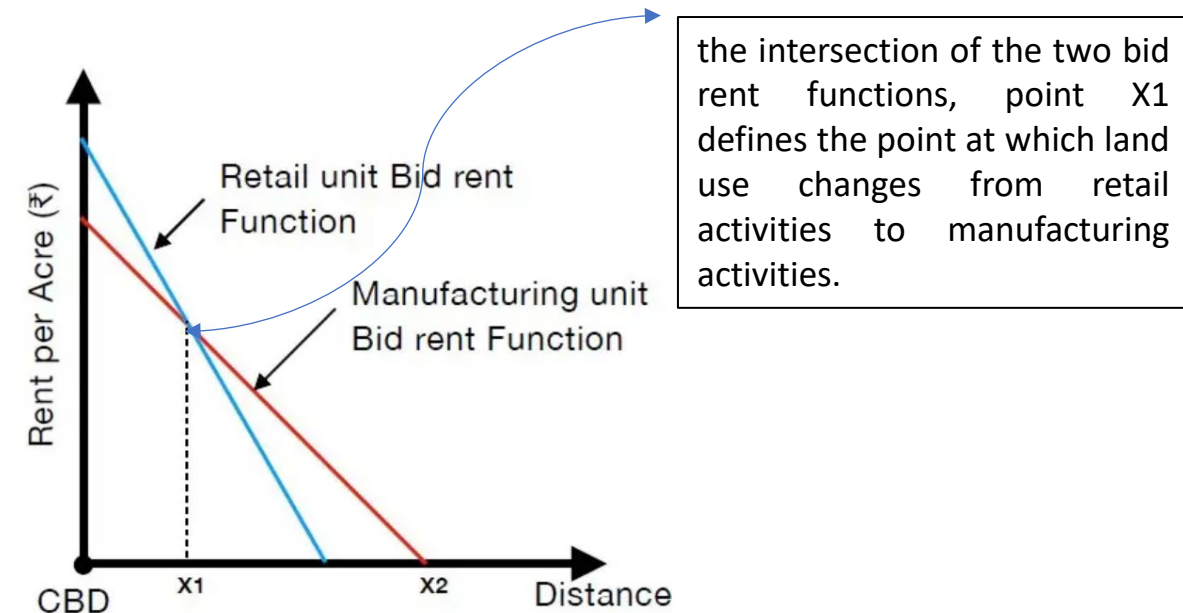
4. Impact on Land Prices:

- Businesses situated at more distant locations are less willing to pay high prices for land.
- This reluctance is due to the added transportation costs they would incur and the potential loss of accessibility to customers as they move away from the CBD.



For Manufacturers:

- Manufacturers rely on access to markets to sell their products but can draw labor from a wider geographical area. They require larger land holdings to set up production facilities and warehousing.
- The bid rent function for manufacturing tends to have a flatter slope. Manufacturers prioritize larger land holdings for their operations and can afford to be located at somewhat greater distances from the city center because their market access is less location-sensitive than that of retailers.



For Residential

1. Location of Households:

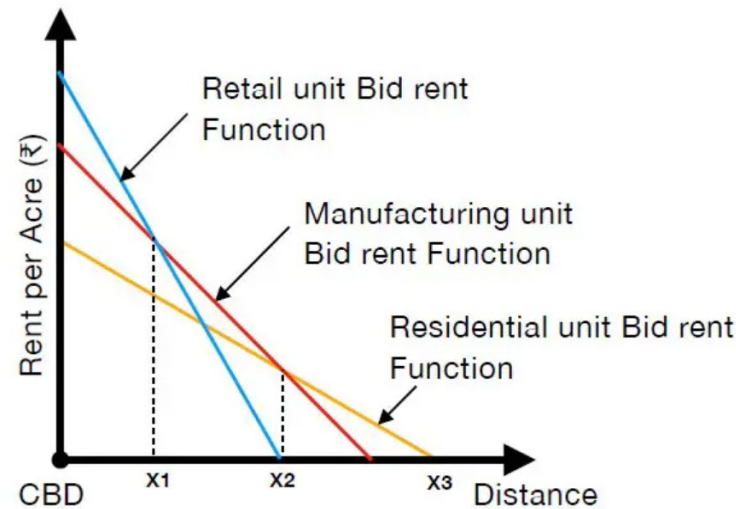
- Households tend to settle in various locations within a city or region.
- The choice of location for households is influenced by factors different from those affecting industrial or commercial properties.

2. Accessibility and Attractiveness of Land:

- The attractiveness of land to industries diminishes as one moves farther away from the city center.
- Distant land areas typically lack convenient access to markets and transportation infrastructure.

3. Household Land Purchase:

- Households often choose to purchase land in areas that are farther from the urban core.
- These locations are favored by households because they do not rely heavily on factors like proximity to markets and transportation, and **land tends to be more affordable there.**



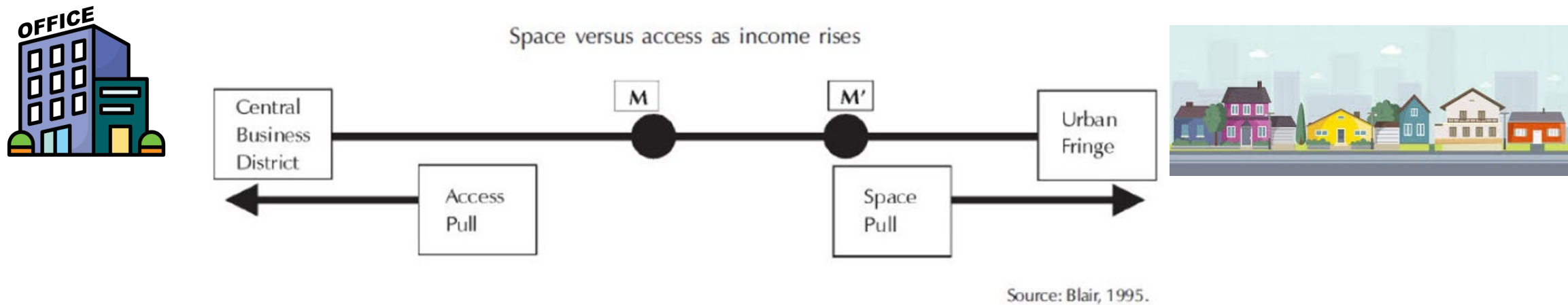
Assumptions of the model

- All land is privately owned & there is evenly distributed population across the city
- All individuals participating in the bidding process possess complete knowledge regarding the expenses associated with different locations.
- There is a Linear Functioning of Transportation cost to that of the Distance

Location Theory

The analysis of land use patterns has long been one of geography's basic concerns.

Trade-off Model:



1. Trade-off Model by Muth (1969):

- Muth's trade-off model explains the prevalence of high-quality housing on the outskirts of a city.
- It focuses on the delicate balance between two factors: **access to central locations and the space desired by households.**

2. Space Versus Access/Travel Cost Minimization Theory (Balchin, Bull & Kiev, 1995):

- This theory, proposed by Balchin, Bull, and Kiev in 1995, can also be termed as the minimization of space versus access or travel costs.
- It suggests that when the **costs associated with commuting to work are extremely low or nonexistent, households are willing to pay the highest rents or property prices for their accommodation.**

Thank You!



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