

Notes on Industrial and Economic Development

The use of terms to describe countries (first world, third world, developed, developing, underdeveloped, haves, have-nots, rich/poor) created some issues, and had some limitations. Currently popular terms are “more developed countries” (MDC) and “less developed countries” (LDC).

Measures of Development: (de Blij)

- National Product per person
- Occupational structure of the labor force
- Productivity per worker
- Consumption of energy per person
- Transportation and communications facilities per person
- Consumption of manufactured metals per person
- Rates

Immanuel Wallerstein's World Systems Theory promoted the core-periphery concept.

Core-periphery model: (see Rubenstein - Figure 9-14, p. 329)

- Core regions are those that achieved high levels of socioeconomic prosperity and are dominant players in the global economic game.
- Periphery regions are poor regions that are dependent in significant ways on the core and do not have as much control over their own affairs
- Semi-periphery consists of regions that exert more power than peripheral regions but are dominated to some degree by the core regions.

Categories of development based on income: (de Blij)

- low income economies - (Africa, south, southeast, east Asia: poorest: Cambodia, Mozambique, Ethiopia, Chad, Tanzania, Congo – about 56 countries in total including Guyana, Haiti, Honduras, and Nicaragua in the Western Hemisphere
- Middle Income nations – approximately 65 in total divided between:
 - lower-middle-income economies (47)
 - upper-middle-income economies (18)
- high-income economies

Walt Rostow's *modernization model* - Stages of Development

Stage 1 Traditional society

- dominant activity is subsistence farming
- rigid social structure
- resistance to technological change

Stage 2 Preconditions of take-off

- progressive leadership
- greater flexibility openness, diversification

Stage 3 Take off

- industrial revolution conditions
- sustained growth
- urbanization increases
- industrialization proceeds
- technological and mass-production breakthroughs occur

Stage 4 Drive to maturity

- Technologies diffuse
- Industrial specialization occurs throughout the nation
- International trade expands
- Modernization is evident in the core areas
- Rate of population growth is reduced

Stage 5 High mass consumption

- High incomes
- Widespread production of many goods and services
- Majority of workers enter the service sector of the economy

Technological Development:

- The level of technological development of a culture will affect its recognition of resources or its ability to exploit them. Technology refers to the totality of tools and methods available to and used by a culture group in producing items essential to its subsistence and comfort.
- Political decisions may encourage or discourage technological development through subsidies, protective tariffs, or production restrictions patterns of economic activity.
- Production is controlled by economic factors of demand whether that demand is expressed through free market government instruction, or consumption requirements of a single family producing for its own needs.

Categories of Activity:

- Primary Activities
 - Agriculture
 - Gathering Industries
 - Extractive Industries

- Secondary Activities
 - Manufacturing
 - Processing
 - Construction
 - Power construction

- Tertiary Activities
 - Retail and Wholesale Trade
 - Personal and Professional Services

- Quaternary Activities
 - Information
 - Research
 - Management

- Quinary Activities
 - Executive Decision Makers

Revisiting Levels of Industrialization (de Blij)

examples:

- The Soviet Union under Stalin poured huge quantities of resources into industrialization. What was the result?
- Countries such as Egypt built their own steel mills, and many countries have their own national air line (Cameroon) to serve as symbols of progress.
- Some nations do not opt for the cosmetic appearance of economic progress. Concentrating on agriculture, they realize that to truly progress a transformation of an entire society is necessary. Recall the linkage between agricultural advancement and the development of industries, cities experienced in Western Europe and the United States.
- The peripheral countries suffer greatly because of rapid population growth, limited capital, and suffer with upward shifts of market such as demand, prices, or tariffs. An excellent scenario to revisit is the impact that the rise in oil prices in the 1970s had on nations.

Today change is occurring, although in some countries it is localized.

- Improvements in population growth
- Improvements in education levels
- Improvements in the percentage of workers in nonagricultural jobs
- Political and economic changes in some countries contribute to the improvement.

Through the 1980s there were 3 political/economic blocs:

- Capitalist First World
- Communist Second World
- Uncommitted Third World with many mixed economies
- The rivalry of the Cold War found the Capitalists and Communists vying for influence, and often encouraged leaders to adopt versions of their economic models, which oftentimes were not suitable to local conditions.
- The collapse of the Soviet Union has brought with it a period of uncertain transition.
- China's communist experience with the collectivization of agriculture was successful against famine, and with the challenge of democratization put down by the military. But even China is experiencing a market liberalization producing rapid changes in some parts of the country and undermining the state's grip on all aspects of the economy. [What role did the return of Hong Kong play in this?]
- Remember too that there is a linkage between politics and economics. There were hard line communist states; there were also less rigid systems (Yugoslavia is one example). The mixed systems of capitalism and socialism in some countries also present some interesting results.

LOCATION THEORY

- Came about as an attempt to answer the reasons behind the location of economic activity.
- Example: during the second half of the 20th century Hong Kong developed one of the world's most powerful economies based upon secondary and tertiary industries. The Portuguese colony of Macao was nearby but did not develop. Why?
- What geographic factors contribute to the economic success of a particular area?

The Pre-Industrial World

- India & China possessed a substantial industrial base long before the Industrial Revolution. Britain sought legislative protection from Indian textiles in the 1700s, and availability of Egyptian cotton on the world market was also controlled.
- Europe's products may have lacked in quality of other areas, but their merchants were aggressive. The Dutch and British India companies laid the groundwork for European colonial expansion and the resulting rivalries.
- The Industrial World
- The inventions and innovations such as the steam engine, use of coal instead of charcoal transformed industries such as the textile industry and transportation and communications.
- Densely populated and heavily urbanized industrial regions began to develop near energy sources such as the coalfields of Europe. Perhaps England's advantage was that the coalfields, iron ore deposits, and availability of ports (remember Britain is an island) were all in close proximity
- The spatial character of the location of primary industries then is the location of resources.
- Secondary industries are less dependent upon resource location: raw materials can be transported to distant locations and converted via manufactured process ***if the profit outweighs the cost.***
- Secondary industrial location is not easily worked by model because of the impact of human behavior and decision making, cultural, political, and economic factors. Economic geographers, in attempting to present a model *assume that decision makers are trying to maximize advantage over their competitors, and to make as much profit as possible while taking into account variable costs such as: energy supply, transportation expenses, and labor costs.*

WEBER'S LEAST COST MODEL

- Model for the location of manufacturing establishments
- Owner's desire to minimize 3 categories of costs:
 - Transportation – raw materials in, finished product out to the market
 - Labor – higher labor costs reduce margin of profit so a factory might be better farther away from the raw material source and markets if labor made up for transport costs. (Today's Pacific Rim economic boom is based largely on low labor costs – and opened a new set of issues in some countries!)
 - Agglomeration – when a substantial number of enterprises cluster in the same area, they can provide assistance to each other through shared talents, services, and facilities.
- This model created some spirited debate given the possibility of substitution issues, and issues of taxation (recall the location of industries in our era – and tax abatement enticements?)

FACTORS OF INDUSTRIAL LOCATION

- Raw Materials
- Labor
- Transportation
- Infrastructure
- Energy
- Other factors such as agglomeration, uncertain or unstable political situation, personal reasons, environmental conditions,

MAJOR INDUSTRIAL REGIONS

- Western and Central Europe
- Eastern North America
- Russia and Ukraine
- Eastern Asia

Factors in the rise of the SERVICE SECTOR (Tertiary Industries)

- Challenges to the early 20th Century manufacturing boom – partially caused by the assembly line/mass production proposed by Henry Ford
- Initial challenges
- Post WWII growth and saturation of consumer markets
- Growth of government activity
- Increasing labor activism
- Declines in costs of transportation and communication
- Increased pressure brought on by decline in global economy due to:
- 1970s upward shift in oil (fuel) prices
- Inflation
- Core industrial regions could not sustain their competitive advantage without readjustment
- Result: post-industrialization
- movement toward mechanization
- development of service and information industries
- creation of new markets

SERVICE INDUSTRIES

- Do not generate an actual, tangible product
- Broad range of services
- Tertiary: usually exchange economy – retailing, restaurant/hotel, transportation, communication, utilities
- Quaternary: collection, processing and manipulation of information, capital (finance, administration, insurance, legal services, computer services). People in this sector appear to have high levels of specialized knowledge or technical skills.
- Quinary Industries: complex decision makers, research, high-level management, heads of corporations, top government officials, research professors

New International Division of Labor

- United States and United Kingdom are not longer as significant in the core areas of the manufacturing base. This base has broadened.
 - Japan's manufacturing ability has grown dramatically
 - The 4 Tigers – South Korea, Taiwan, Hong Kong, Singapore
 - Brazil and Mexico
 - Countries on the southwestern and southeastern edges of Europe
- This change is partially due to the shift toward the service and away from heavy manufacturing industries, and the growth of multinational corporations, and the development of elaborate trading networks and financial relations.
- the dominant flow of trade is among the core countries and between those countries and newly industrializing countries.
- The core countries are those with the highest levels of demand, as well as major suppliers of manufactured good and newly industrializing countries are key exporters of manufactured goods used in the industries of the core.
- By contrast the level of trade between peripheral countries, even between newly industrializing countries is low because the dominant flow of exports is to the core, not to other peripheral countries.
- Some peripheral countries compete with each other in producing commodities for the core.

New Influences on Location

- The growth of the service sector and information technologies
- Many service industries are not tied to raw materials, nor require large amounts of energy. These factors of production are less important for service industries.
- Market accessibility is more relevant for the service sector, but advances in telecommunications have rendered even that factor less important for some types of service industries.
 - Conference calls
 - Internet and emails
 - PDAs and notebook computers
 - cell phones

Specialization Patterns of Economic Concentration and Interaction

- World Cities
- Special Economic Zones such as manufacturing export zones, high tech corridors (*technopole*, DeBlij), off-shore companies
- High tech industries have become a symbol of the postindustrial world and are such a *plum* that local, regional, and national governments pursue aggressive policies to attract these apparently pollution free firms. (But some firms do require toxic chemicals and large amounts of water, or some require that land must be cleared for buildings – as opposed to being able to utilize structures already standing).

TIME-SPACE COMPRESSION

- Coined by geographer David Harvey
- A set of developments that have dramatically changed the way we think about time and space in the global economic arena.
- An off-shoot of time-space convergence which refers to a reduction in the importance of distance when, for example, a transportation innovation makes it possible for people or good to move from one place to another more easily or more cheaply.
- Rise of World Wide Web
- *The sense of a shrinking world is so strong that a few commentators have proposed that we are entering an era characterized by the 'end of geography'.*