Higher 2 (9173)	Cluster 1: Development, Economy and Environment	TMJC
Cluster 1 Lecture 1	Geography of the Global Economy – Structure of the Economy and NIDL	2025

What is the Global Economy?

The global economy is complex, characterised by dynamic geographies and interactions between multiple actors at different scales. The global economy connects places at different scales and creates interdependence between them.

We can think of the global economy as the flows of trade, capital and labour throughout the world.

Trade generally refers to the buying and selling of goods and services. International trade refers to the buying and selling of goods and services between countries.

Capital refers to money invested with the intent of generating more money.

Labour generally refers to the people who work for gain, often in terms of wages. Labour is often regarded as a location-specific factor of production that affects where a firm may choose to locate its relevant operations.

<u>How do levels of development vary across space?</u>

Development can be thought as an improvement from the current state. Development is a <u>MULTI-FACETED CONCEPT</u>

Economic Development: Improvement in Gross Domestic Product (GDP) or Gross National Product (GNP) of a country. Able to have economic prosperity, able to translate economic gains into social improvement.

Social Development: Improvement in the society, well-being of people in the country, better healthcare, higher literacy rate, higher Standard of Living, improvement in quality of life, better food and nutrition.

Environmental Development: Development in the environmental aspects – not polluting and overly exploiting the environment, but trying to improve air, water, land quality while allowing various ecosystems to thrive.

When we think of differences in levels of development, we tend to usually associate it with the idea of economic development, it is important to note that it is not the only form of development, but we will focus on economic development for now.

In essence, countries have different levels of economic development and a group of countries can also be considered a Macro-Region. For our syllabus, we will follow the definition of Macro-Region created by the World Bank.

World Bank Country and Lending Groups

For the current 2024 fiscal year:

Low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $1,135 or less in 2022;

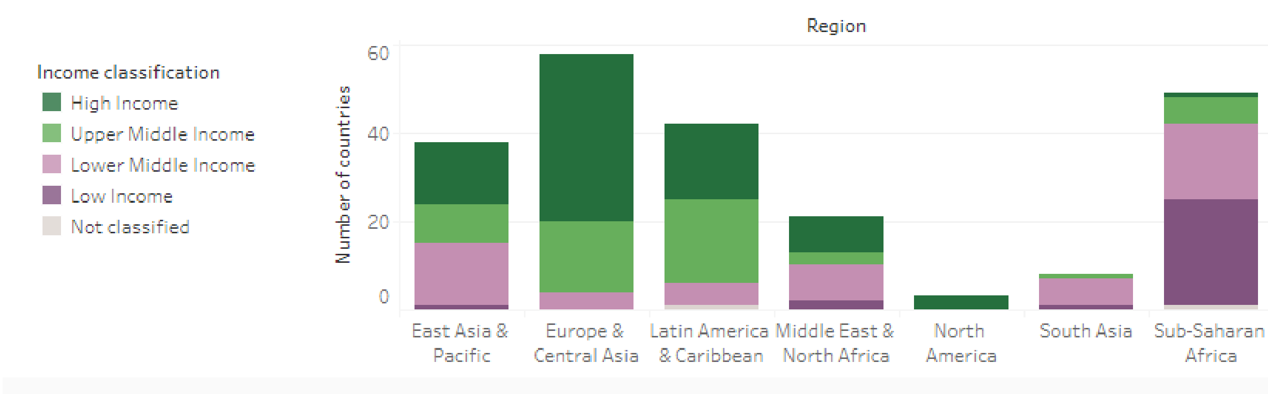
Lower middle-income economies are those with a GNI per capita between $1,136 and $4,465;

Upper middle-income economies are those with a GNI per capita between $4,466 and $13,845;

High-income economies are those with a GNI per capita of $13,845 or more

What Is Gross National Income (GNI)?

Gross National Income (GNI) is the total amount of money earned by a nation's people and businesses. It is used to measure and track a nation's wealth from year to year. The number includes the nation's gross domestic product (GDP) plus the income it receives from overseas sources. GNI per capita means the GNI divided by the population in the country.



For a more detailed idea and sensing → You can refer or google:

https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

Based on the dataset above, which are the more developed and less developed macro-regions?

Are there also variations in levels of development between countries within a Macro Region?

Yes. There are high income and low income countries within a Macro Region, with the exception of North America where all three of the countries within (United States, Canada and Bermuda) are considered high income, there are variations (refer to the excel sheet online) **or the world bank macro-region and income map provided with this lecture.**

Are there variations across space in levels of development between different places within a country?

For countries, especially larger countries the economic disparity between within the country can be quite apparent due to the different type of economic activity or sector that part of the country is engaged in. The disparity can also occur between rural and urban areas within a country where the rural areas are generally less economically developed compared to the urban areas.

For example, for USA, states like Montana have a much lower GDP that states like California. This is due to California having many technology firms and also the film industry such as Hollywood compared to Montana which mainly has agriculture, mining, forestry and energy production as its main economic drivers.

For China, Shanghai has a much higher GDP than Xinjiang. This is because of Shanghai serving as the economic capital and financial hub of China compared to Xinjiang.

In the subsequent part of the lecture, we aim to explore what are the reasons for these variations of development across space.

SECTORS OF THE GLOBAL ECONOMY

The economy consists mainly of the primary, secondary and service sectors.

Primary Sector [i.e. Agriculture]: harvest of raw material for conversion into commodities or products e.g. mining, fishing, agriculture, forestry

Secondary Sector [i.e. Manufacturing]: Industries that take the raw materials produced by the primary sector and process them into manufactured goods and products e.g.

- Heavy manufacturing
- Light manufacturing
- Food processing
- Oil refining
- Energy production

Tertiary/Quaternary [i.e. Service Sector]: Services are activities that do not produce or modify goods. The service sector is labour-intensive and the quality of product (i.e. service rendered) depends on the quality of labour. The rise of the service sector is part of the process of **tertiarisation**.

Services are extremely important in providing support to manufacturing activities and have grown in importance in the economies of many countries in recent years, especially in DCs.

In general, there are 3 main types of services:

(i) Tertiary Sector

These are services provided to the general public which are profit driven. It is also known as **consumer services**. Such services include retailing, tourism related services and personal banking.

(ii) Quaternary Sector

These are knowledge-based services provided to firms and businesses which are profit driven. These are also known as **producer services**. Examples include market research, financial services, advertising, legal functions, insurance and logistics services.

These are also government led consumer services and tend to be non-profit driven. Examples often include social services such as healthcare, education, elderly-care services and volunteer work.

How does global pattern of flow of trade, capital and labor vary across space?

Particularly before World War 2 and the 1950s, the global pattern of trade, capital and labor were highly skewed and advantageous towards countries that were the colonial masters or countries such as USA.

Most of the raw material and labor were going from the colonies to these colonial countries. Such as agriculture products from Singapore, India to UK. Raw materials from different African countries to various colonies such as Senegal and Ivory Coast to France. Furthermore, capital was not spread out throughout the world but concentrated in these already more economically developed countries.

In this aspect trade between countries mainly happened between the developed countries or within the countries in the continent due to distance and the inadequacies of transport and communication technology at the time. There was a huge unevenness in the pattern of trade across space.

-**How has there been a shift in the global economy (trade, capital and labor) occur after the 1950s**

Since the 1950s, there has been a shift in the global economy, namely due to globalization (or economic-globalisation) that allowed the less developing countries to become developing countries and even developed countries. The ability to progress through these hierarchies depends on a country’s ability to increase trade (import and export) attract capital and provide/attract labour.

For example, China began to attract a lot of capital in the form of Foreign Direct Investments (FDIs) from the 1990s onwards and it joined the World Trade Organisation (WTO) in 2001, allowing to have a huge increase in trade partners (other countries) and with its large pool of labour willing to work in the manufacturing sector – China quickly became the factory of the world and it’s economy grew to become the second largest economy in the world today.

The shift in the global economy can also be thought of as the concept of globalisation…

(A) WHAT IS GLOBALISATION?

Globalisation is a result of processes through which the world becomes more ***functionally integrated* and *interdependent*.**

The concept of globalisation refers to the breakdown of **spatial barriers** around the world. Globalisation refers to the range of processes and impacts that occur at the global level. It can be physical processes (e.g. global warming) or human processes (e.g. economic development, diffusion of culture etc.).

(B) WHAT IS ECONOMIC GLOBALISATION?

The International Monetary Fund (IMF) **defines globalisation as growing economic interdependence of countries worldwide through increasing volume and variety of cross-border transactions in goods and services, free international capital flows, and more rapid and widespread diffusion of technology.**

It involves the development of global financial systems. These include:

- creation and increasing influence of international organisations such as the World Trade Organisation (WTO) and World Bank (WB).
- prevalence of international banks. E.g: Citibank, HSBC, Standard Chartered.
- increase of transnational economic activities such as joint ventures, strategic alliances and outsourcing by transnational corporations (TNCs).
- functional integration of internationally dispersed economic activities.

(C) WHAT ARE THE CHARACTERISTICS OF ECONOMIC GLOBALISATION?

Globalisation manifests itself in many forms and can be characterised by features such as:

(i) Increased Trade, Mobility and Flexibility

Improvement in transport and communication technology, as well as relaxation of policies, help to facilitate the **transfers of labour, information, capital, goods and services**. This has allowed for an increase in trade over the years. According to World Trade Organisation (WTO), **the volume of world trade increased 27- fold from $296 billion in 1950 to $8 trillion in 2005**.

Firms have greater mobility as they become more footloose – i.e. they are now able to operate and locate activities over a wider range of location. They can be sited anywhere and are not constrained by the need to be near the suppliers or raw materials (contrast this with mining activities or fishery industry). This has enabled them to maximise their business operations). **Corporations are more global.**

However, not all firms are footloose. Some countries still practice ***protectionism*** to restrict trade. There are also initiatives for exclusive economic practices such as Intra-regional trade, such as in trading blocs and customs unions. The effect of the state (government) and such supranational bodies will be examined subsequently in this topic.

(ii) Shrinkage of Distance

Improvement in transport and communication technology helps to facilitate greater connectivity from place to place and over a shorter period of time. People, information, goods and services can be transported from one place to another over a reduced period of time. This phenomenon is referred to as **space-time compression or shrinking world** as shown in Fig 1. However, Fig 1 is misleading in that it represents even shrinkage of the world. In reality, there is uneven shrinkage as some places are better connected than others. The extent of shrinkage thus depends on the level of connectedness between two places.

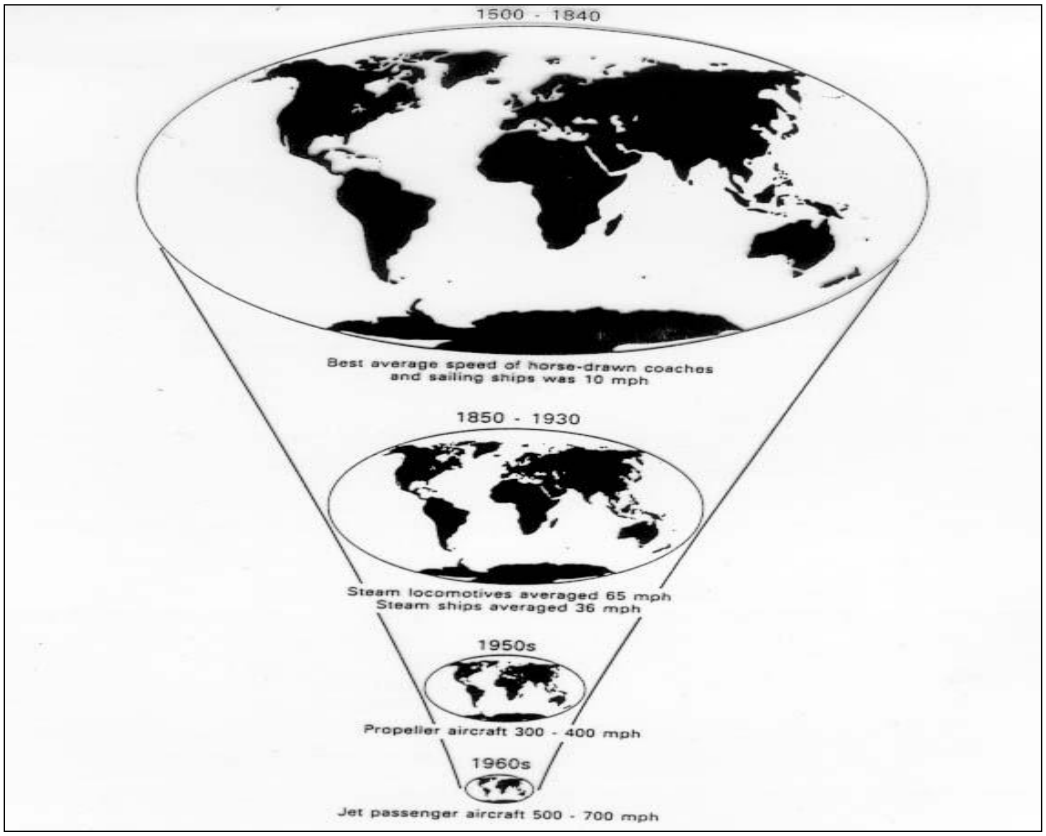


Fig. 1: Space-Time Compression

(iii) Spatial Interdependence

A globalised economy is characterised by *spatial integration* and *interdependency*. The countries are interdependent on one another in a number of ways:

- **Global Production**: Production activities such as Research & Development (R&D) and manufacturing are done in different countries (footloose) functionally integrated via control by HQ.
- **Global Markets**: Firms tap on foreign markets as sources of raw materials and consumer markets. Firms and individuals are also able to tap on foreign markets for producer services (e.g. accounting, banking, advertising, insurance, etc).
- **Global Finance**: There is increasing freedom of movement and transfer of money and capital across the globe.

However, there remain parts of the world, for example, in Africa, that are being left out of global capital flows and thus being marginalised as a result of globalisation.

(iv) Spatial Division of the Global Economy

Globalisation is also characterised by spatial division of the global economy. This means that there is a pattern to places taking up certain forms of economic activities. Such a pattern is known as the **New International Division of Labour**. This concept will be explored in the next lecture.

(D) HOW ARE COUNTRIES CLASSIFIED IN THE GLOBALISING WORLD?

There are three main categories in which countries are classified in the context of a globalising world.

Developed countries : DCs are characterised with high level of economic development and are often countries which have achieved high income

Developing countries : Can be countries that have upper middle income (refer to map)

Less Developed countries (LDCs): LDCs are countries that exhibit low levels of socioeconomic development. They are characterised by low or negative economic progress, poor standard of living with a large proportion of the people involved in the primary / agriculture industry. Somalia, Chad, Bangladesh are examples of LDCs. -Lower middle income and low income)

*** HOWEVER, these classifications are based mainly on the economic development of a place, hence we need to be careful when we classify countries as “developed countries” or “less developed countries” as the nature and understanding of development is complex and multi-faceted.

Important: For the purpose of our syllabus, we will try to classify it into two categories

Developed Countries	Developing and Less Developed (more interchangeable)
USA **Canada** **Germany** **South Korea** **Japan** **Singapore**	**Brazil** **Russia** **India** **China** Malaysia, Thailand, Myanmar, Indonesia, Mexico, Thailand, Vietnam, Cambodia Chad, Ethiopia, Kenya, Somalia, Iraq

WHAT ARE THE CAUSES OF ECONOMIC GLOBALISATION?

The globalisation of economic activities is best understood as the outcome of actions taken by the **<u>4 key influencing actors of globalisation</u>**:

(a) Transnational Corporations (TNCs)
(b) State / Government
(c) Multilateral Institutions/ Supranational Organisations (SNOs)
(d) Labour Characteristics and Labour Unions

These actors act to collectively produce **<u>5 factors</u>** that have been identified as the reasons for globalisation. These are

(a) Advancements in Technology (Space shrinking technology – increase accessibility and mobility due to advancements in transport, communications and digital technologies e.g. handphones and internet connection allow one to transcend space)
(b) Differences in Comparative Advantages
(c) Presence of Markets
(d) Actions of the Government/ State
(e) Actions of Supranational Organisations

All these contribute to the rise of and continue to drive the process of globalisation in the world today.

(A) TECHNOLOGICAL CHANGES

Improvement in technology facilitates globalisation by making possible new organizational and geographical arrangements of economic activities. The two most significant technological changes to affect globalisation are those in the ***transport and communications.***

(i) Changes in Transport Technology

Technological improvement in transport such as **containerisation**, **air freight services** facilitates globalisation because raw materials, products and people can now be transferred from place to place more easily, faster and at a lower cost.

*Container ships are one of the lifeblood of the global economym

For example, horse-drawn carriages and sailing ships in 1500-1840 has a maximum speed of only 10mph. By 1930, invention of steam locomotives averages a speed of travel of 65mph. By the 1960s, jet passenger aircraft can reach a speed of 500-700mph. As seen from the above examples, there was not only an increase in speed of transport but also an increase in capacity of goods and people that can be transported; this enabled a larger amount of goods and services to be transported over a shorter time.

However, it is important to note that technological advancements in transport tend to be geographically concentrated, especially in the world's major cities. This causes globalisation to have an uneven impact, benefiting accessible places more than others.

(ii) Changes in Communication and Information Technology

Satellite technology and optical fibre technology facilitates globalisation as these have enabled global transmission of data and information at high speed via electronic media, e.g. radio, television and internet.

Plunging international costs of telecommunication and developments of facsimile (fax) and internet technology such as Voice/ Video Over Internet Protocol (VOIP) e.g. Skype have allowed the production process to be widespread on a global basis as it allowed for real-time monitoring of and communication of information without physically being present.

(B) DIFFERENCES IN COMPARATIVE ADVANTAGES

Possession of a particular comparative advantage (e.g. land, labour, services etc.) allows a place to be attractive to TNCs as the TNCs seek to exploit comparative advantages of a place to maximise profits and reduce production costs. This facilitates the process of globalisation by enabling internationalisation and specialisation of economic activities.

Comparative advantage refers to the cost advantage which a place has with respect to the factor endowment it possesses in comparison to other places. Comparative advantage is an economic term that refers to an economy's ability to produce goods and services at a lower opportunity cost than that of its trading partners. A comparative advantage gives a company the ability to sell goods and services at a lower price than its competitors and realise stronger sales margins.

There are different factor endowments such as land, labour, capital and enterprise in countries and regions across the world. This difference in factor endowments results in different costs of producing goods and services in different countries and regions. Hence, places and even some companies seek to develop a comparative advantage in these factor endowments to increase economic activities.

Due to this, the comparative advantage(s) which a place possesses is dynamic and changes over time. For example, in the 1950s, Britain used to possess comparative advantages in material and labour allowing them to prosper in the manufacturing of aircraft, shipbuilding, railway and motor vehicle. However, in the 1970s, rise of these comparative advantages in East Asian countries such as Japan, South Korea and at turn of the twentieth century, especially China, caused Britain to lose its comparative advantage in the manufacturing industry. This led to a decline of its manufacturing exports from 20% of the world's manufacturing exports in 1950s to just 2% in 2013.

Hence, a country or even a TNC, will constantly seek to develop comparative advantage to maintain economically competitive in the globalising world.

(C) PRESENCE OF MARKETS

The presence of markets for a particular industry leads to globalisation as it attracts industries to be set up there. The search for new unsaturated market provides TNCs with greater potential to reap profits from the untapped group of consumers. Also, by situating the industries near to its markets it allows the TNC to reduce cost of transportation of goods to the consumers.

For example, the rise of the Asian market economy has contributed significantly to the growth of automobile production notably in Japan, as well as Korea and China. There has been growth in automobile production in the emerging market economies of Eastern Europe, notably in Czech Republic, Poland, Hungary and Slovakia. Conversely, the former dominant producer of automobile, United States saw a decrease of world automobile production from 52% in 1960 to 12% in 2004.

(D) ROLE OF GOVERNMENT / STATE

Actions taken by governments such as development of business-friendly policies, reduction in tariffs, introduction of tax reliefs/ tax holidays make it attractive for Transnational Corporations (TNCs) to locate its operation in the country. State's investment in infrastructure such as telecommunications, port services, power supply or industrial land will help to reduce business costs and raise FDI. Subsidies for training and education raise productivity and lower unit cost of production. This facilitates globalisation as it allows for the division of labour in the global economy.

More on the role of government/ state will be discussed in subsequent lecture on the Role of State. (State as Regulator of economy, Container of comparative advantages and institutional advantages, competitor & collaborator with other states and firms)

(E) ROLE OF MULTILATERAL INSTITUTIONS

Formation of Multilateral Institutions such as ASEAN, World Trade Organisation (WTO) and World Bank can influence countries ability to participate in the Global Economy.

A huge role in enabling globalisation or global shift is the presence of Multilateral Institution such as the **World Trade Organisation, which allow member governments** to lower their trade barriers through negotiations

With adoption of trade liberalising strategies by States and the setting up of WTO, there is a gradual removal of barriers to world trade. This facilitates the process of globalisation as it encourages internationalisation of economic activities, increasing world trade and foreign direct investment.

Foreign direct investment (FDI) refers to the injection of monetary capital of a firm from one country into another country, with the intention of gaining greater control over the firm's operations with the expectation of monetary gains. This occurs when a firm from one country buys a controlling investment in a firm in another country, or where a firm sets up a branch or subsidiary in another country.

More on the role of SNOs will be discussed later in lecture on: Multilateral Institutions.

HOW EXACTLY DOES ECONOMIC GLOBALISATION MANIFEST ITESELF? →

NEW INTERNATIONAL DIVISION OF LABOUR (NIDL)

(A) What is the New International Division of Labour (NIDL)?

The New International Division of Labour (NIDL) is the *spatial separation of tasks* which previously have been done on the same site or within the same country.

New – Production not confined to DCs, **shift** from DCs to LDCs
International – Across the globe, across international boundaries
Division of Labour – Separation of low skilled workers in LDCs who work on the assembly lines doing menial routine tasks which require little or no training, compared with high technically skilled, highly educated workers in DCs responsible for the research and development and administration/executive roles in running the companies found at their HQ (main office)

NIDL is characterised by the spatial shift of labour intensive industries, particularly in manufacturing industries from DCs to developing/less developed. Such a shift is observed by deindustrialisation in DC cities and simultaneous industrialisation in developing/less developed countries.

Deindustrialisation refers to the loss of manufacturing activities and employment. This could be due to **automation** (use of machines in secondary/manufacturing industries) or closure of these industries due to loss of comparative advantage of cheap, abundant labour which are appropriately educated and skilled.

For example, the deindustrialisation of industrial cities such as Detroit in the rust belt of USA, which used to specialise in automobile production pre-1970s, was due to industrialisation in many Asian cities such as those in Japan, South Korea and Malaysia.

(B) WHAT CAUSE THE EMERGENCE OF NIDL?

The emergence of NIDL is due to the globalisation of economic activities whereby there is functional specialisation on an international scale (across countries). The operation of TNCs to maximise its profits and to minimise loss facilitates the creation of NIDL.

Hence the emergence of NIDL can be explained by GSMTC, particularly:

(i) Differences in Comparative Advantages

The main driver of NIDL is the differences in comparative advantages globally. This is because TNCs are profit maximization. Since TNCs are in constant pursuit of profit maximization, rationalisation efforts by the TNCs involves reducing workforces, closing inefficient plants and relocating production to other countries which have a comparative advantage in a specific factor endowment (land/labour/capital/enterprise) as this helps to lower their operational cost and increase profits. It also increases productivity and competitiveness of the firm.

As a result, there is a shift in spatial distribution of the type of labour involved in different operational functions of a TNC. Often, low skilled, labour intensive productions (e.g. assembly work, garment manufacturing) are done in LDCs while high skilled, capital intensive functions (e.g. automobile manufacturing) are carried out in DCs. There is internationalisation and specialisation of economic activities.

For example, the abundance of cheap labour in Mexico, particularly in the Maquiladoras, whereby Mexican manufacturing wages were 25% of US wages, resulted in a shift of manufacturing industries from US to Mexico after 1970s, causing up to 2 million US job losses.

(ii) Improvement in Technology

The improvement in transport and communications technology has enabled NIDL to occur as it allows production processes to be broken up into different parts and carried out in different locations.

NIDL often means an increase in the cost of transporting various intermediate products between different locations. It also incurs additional costs such as the cost for communications between units of the TNC in different parts of the world. As such, the *technological developments in transport and communications*, which have reduced the cost of transport and communications, also play an important role in facilitating the growth of NIDL.

Invention of large container ships which provide efficient loading and unloading of large numbers of smaller portable items, improved speed of jet air transport for people, and high-value low-weight perishable goods has resulted in significant reduction in cost of transport of TNCs' goods and services. Hence, cost of transporting materials from component manufacturers to assembly plant to market has become relatively low. For example, transport only accounts for 5% of production cost in a typical light industry today, compared to 40% about 100 years ago. This allowed TNCs to become footloose, allowing for a shift in production from the original DCs to LDCs. 90% of the world's cargo is shipped by container ships.

In addition, electronic communication via optic cables, Internet access, text messaging and Skype greatly improved communications and allowed for monitoring of production and efficient transmission of information. This too facilitated the shift of production from DCs to LDCs.

Other reasons include:

(iii) Exploitation of New Markets

The desire of TNCs to exploit new markets also results in NIDL. TNCs seek to remain competitive by capturing as large a market share as possible; hence they set up operations in untapped markets. For example, TNCs may choose to locate branch plants or R&D centres in China and India as there is a potential of reaching out to 36% of the world's population by locating operations there.

(iv) Actions of the State and Multilateral Institutions

Actions of state and SNOs to attract TNCs via policies that facilitate production, trade and business activities allows for specialisation of tasks in particular areas. For example, Singapore actively promotes export-oriented trade via adoption of policies and also active engagement in negotiations of trade agreements. It also seeks to develop itself into a medical and research hub through development of science parks (e.g. One North, Biopolis).

(C) WHAT ARE THE IMPACTS OF NIDL ON THE GLOBAL ECONOMY? How does it create changes in the sectors of the economy of countries?

The rise of NIDL has resulted in changes in type and spatial organisation of economic activities, global production methods, as well as, labour processes.

(i) Changes in type and spatial organisation of global economic activities

The NIDL leads to a spatial division of economic activities globally whereby there is functional specialisation with different parts of the world specialising in different functions. Due to deindustrialisation, industrial hollowing occurs in these DC cities, industrialisation occurs in developing and less developed cities.

In order to cope with the decline in economic activities due to deindustrialisation, many DC cities engage in reindustrialisation in order to revive their economic activities. In addition, tertiarisation also occurs.

Reindustrialisation refers to re-emergence of manufacturing industry in regions or countries that have suffered from deindustrialisation. Such industries usually involve high-tech, capital intensive manufacturing industries such as those in IT and biotechnology. Due to this, lower skilled, labour intensive industries are located in Developing/ LDC cities, while high-tech, capital intensive industries tend to be located in DC cities.

Tertiarisation refers to the emergence of producer and consumer service industries globally. Rise of producer service occur due to rationalisation by TNCs which result in subcontracting of internal services (catering, accountancy, cleaning, and market research) to other firms. Rise of consumer service occur due to increase in amount of disposable income which allows them to spend on services such as leisure, transport and education. Particularly in DCs, deindustrialisation has led to the growth of the tertiary sector as manufacturing employees are ‘forced’ into the service sector.

(ii) Changes in labour processes

With NIDL and changes in production methods, deskilling and reskilling of workers can occur.

Deskilling refers to the rendering of skill set of workers obsolete due to introduction of new technologies. It is usually associated with mass production techniques whereby automation techniques such as industrial robots and conveyor belts and has led to the reduction in real wages of workers as their work becomes ever more fragmented.

Reskilling refers to the improvement in skills whereby workers are involved in multi-task operations to allow for product differentiation/customization Reskilled workers are able to add value to the production process by providing human input when necessary. For example, in the production of Dell computers, reskilled workers are required when product differentiation is needed such as during the phase where different types of software are installed based on customers' requirement.

<u>Questions to ponder (but may only be able to answer after lecture 5)</u>

1. Why are there variations across space in the levels of development between countries?

2. Why was there unevenness across space in the global patterns of flows of trade, capital and labour in the before 1950s and now?

3. What is the influence of global patterns of flow of trade, capital and labour on variations in levels of development across space?

4. What is the influence of the variations in levels of development across space on global patterns of flow of trade, capital, and labour?