Lecture 12
Geography of the Global Economy and Transnational Corporations (TNCs)

KEY QUESTION:

How do TNCs connect the global economy and impact places?

With the completion of this lecture, attached readings and tutorial, you should be able to discuss how:

- the global production networks of TNCs connect places within the global economy; and
- TNCs' global production networks impact home and host economies.

Lecture Outline

12.1 Introduction: The Transnational Corporation

12.2 What motivates firms to transnationalise?

- **12.2.1 Market-seeking**
- **12.2.2 Asset-seeking**
  - (a) Access to knowledge
  - (b) Access to labour

12.3 How do firms transnationalise?

12.4 What is the structure of TNCs?

- **12.5.1 Headquarters: Centres of strategic control and coordination**
- **12.5.2 Research and Development Centres**
- **12.5.3 Branch Offices: Marketing and Sales**
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12.5 What are some examples of GPNs?

12.6 What is the impact of TNCs' global production networks on host countries?

- **12.6.1 Socio-economic Impact**
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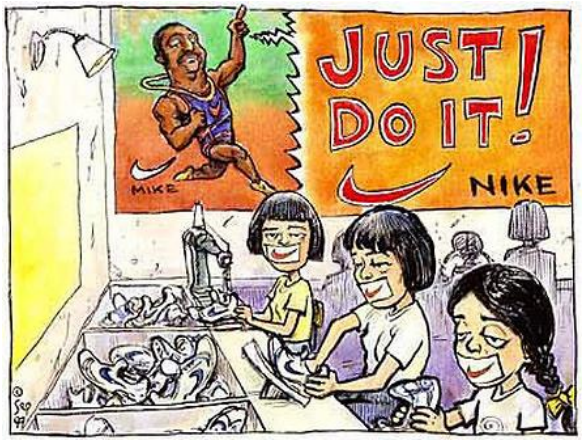
12.7 What is the impact of TNCs' global production networks on home countries?

- **12.8.1 Socio-economic Impact**
- **12.8.2 Environmental Impact**

12.8 Concluding remarks on TNC's impacts on countries in which they operate

Readings:

- After Indonesia retreat, GM retrenches in Thailand too, *CNA*, 27 Feb 2015
- GM reopens regional HQ here, *CNA*, 8 Aug 2014
- Nike: A Case Study



Many of us are consumers of Nike products. Beyond donning Nike shoes or apparel, we can use geographical lenses to help us understand the operations of Nike.

What does its produce its merchandise, how did it become as such, and should we be concerned about it?

Cartoon showing the unpleasant conditions Nike has been accused of allowing workers responsible for its products to operate in.

12.1Introduction: The Transnational Corporation

IMPT

A transnational corporation (TNC) are major business organisations with the power to coordinate and control operations in more than one country.

- The significance of the TNC lies in <u>three basic characteristics</u>:
  - i. its ability to **coordinate and control** various processes and transactions **within production networks**, **both within and between different countries**
  - ii. its potential ability to **take advantage of geographical differences** in the distribution of **factors of production** (for example, natural resources, labour, capital) and in **state policies** (for example, taxes, trade barriers, subsidies *etc*.) (see **Lect 12** on Role of the State)
  - iii. its potential **geographical flexibility** – an ability to **switch and re-switch** its resources and operations **between locations** on an international or even a global **scale** (see **Reading 2**)

- More than any other single institution, the transnational corporation has come to be seen as the **<u>primary shaper</u>** <u>of the contemporary global economy</u> and a **<u>major threat</u>** <u>to the economic autonomy of the nation-state</u>.
- The vast majority of TNCs mostly execute their international business by exporting their foreign direct investments (FDIs) to different countries worldwide. Therefore, TNC activity is often measured by the FDI, which is **direct investment across national boundaries,** that is, **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.**

  <u>Note</u>*: While FDI serves as a good proxy of TNC activities, the FDI data are based on ownership of assets, so they do not capture the increasingly intricate ways in which firms engage with transnational corporations. Also, FDI do not just come from TNCs.*
- Hence, much of the changing geography of the global economy is shaped by TNCs through their decisions to invest, or *not* to invest, in particular geographical locations. It is shaped, too, by the resulting **flows** – of materials, components, finished products, technological and organisational expertise, finance – between its geographically-dispersed operations**. Therefore, TNCs are not only actors in the global economy, but they also control the various process and transactions that take place within Global Production Networks (GPNs)** (see **12.3**)**.**

- Although the relative importance of TNCs varies considerably – from sector to sector, from country to country, and between different parts of the same country – there are now very few parts of the world in which TNC influence (whether direct or indirect) is not important. In some cases, indeed, TNC influence on an area's economic fortunes can be overwhelming.
  - As of 2016, the number of TNCs is estimated at about 60,000, with about 500,000 branches being spread all over the world. Many TNCs today had grown to huge proportions and their annual turnover exceeds the gross domestic product of most countries. The number of employees in the largest TNCs consists of several hundreds of thousands – E.g. General Motors in 2015 employed 708,000 workers.
- **Table 1** shows the world's largest TNCs by revenue in 2020. TNCs take on many different forms and cover a wide range of companies involved in the following **agricultural**, **manufacturing** and **service** activities:
  - Resource extraction, particularly in the mining sector, for materials such as oil and gas
  - Manufacturing in three main sectors:
    - high-tech industries such as computers, scientific instruments, microelectronics, pharmaceuticals
    - large-volume consumer goods such as motor vehicles, tyres, televisions and other electrical goods
    - mass-produced consumer goods such as cigarettes, drinks, breakfast cereals, cosmetics, branded goods
  - Services such as banking/finance, advertising, freight transport, hotels and fast-food operations

Table 1. The World's 10 Largest Corporations in 2020, by Revenue

Rank	Company	Revenues (US$ million)	Profits (US$ million)	Assets (US$ million)	Employees	Sector	HQ
1	Walmart Stores	559,151.0	13,510.0	252,496.0	2,300,000	Retail	US
2	State Grid	386,617.7	5,580.4	666,088.5	896,360	Energy	China
3	Amazon	386,064.0	21,331.0	321,195.0	1,298,000	Retail	US
4	China Nat'l Petroleum	283,957.6	4,575.2	626,616.7	1,242,245	Energy	China
5	Sinopec Group	283,727.6	6,205.2	343,289.0	553,833	Energy	China
6	Apple	274,515.0	57,411.0	323,888.0	147,000	Electronics	US
7	CVS Health	268,706.0	7,197.0	230,715.0	256,500	Healthcare & Insurance	US
8	UnitedHealth Group	257,141.0	15,403.0	197,289.0	330,000	Healthcare & Insurance	US
9	Toyota Motor	256,721.7	21,180.1	562,994.0	366,283	Automobile	Japan
10	Volkswagen	253,965.0	10,103.5	608,368.1	662,575	Automobile	Germany

Source: *Fortune*, Aug/Sept 2021

12.2 What motivates firms to transnationalise?

- Most TNCs are private *capitalist* enterprises. As such, they must behave according to the basic 'rules' of capitalism. The most fundamental is the drive for *profit* in a highly competitive environment, which is both increasingly global in its extent and also extremely volatile. The growth in value also rests on the exploitation of labour (surplus value extraction) in the production process.
- Especially by investing abroad, TNCs have increased their turnover in recent decades and in this way developed into superior transnational economic players.
- We can classify reasons why firms transnationalise into two broad categories – *market-seeking* (**Section 12.2.1**) and *asset-seeking* (**Section 12.2.2**).

12.2.1 Market-seeking

- Most FDI, whether engaged in producing goods or services or in marketing and sale, is *designed to serve a specific geographic market by locating inside that market*. (The good or service produced abroad may be virtually identical to that being produced in the firm's home country, although there may well be modifications to suit the specific local tastes or requirements.)
- Three attributes of markets are especially important:
  i. **Size**: the most obvious attraction measured, for example, in terms of **population size**. Populous countries such as China, India and Indonesia provide potentially huge markets for TNCs.
  ii. **Income Levels**: however, income levels is another important determinant of the attractiveness of a market. Countries with different income levels constitute the markets for different types of goods. Populations in countries with low-income levels tend to spend a larger proportion of their income on basic necessities while, conversely, people in countries with high income levels spend a higher proportion of their income on 'higher-order' manufactured goods and services. *Growth* in income, and not just its level, therefore is highly significant in attracting foreign investment, hence the attraction of the fast-growing emerging market economies of East Asia in particular as they become viable markets for higher-order manufactured goods.
  iii. **Accessibility**: in the past, a major barrier was the cost of transportation. Today, this is far less significant, although not totally unimportant, especially for some products. However, political constraints in the form of various kinds of trade barrier do remain highly significant (see **Lect 12** on Role of the State).

12.2.2 Asset-seeking

- Most of the assets needed by a firm to produce and sell its specific products and services are unevenly distributed geographically. This is most obviously the case in the natural resource industries, where firms must, of necessity, locate their extractive activities at the sources of supply.

- Technological changes in production processes and in transportation have evened out the significance of location for some of the traditionally important factors of production.
- At the global scale, arguably the two most important location-specific factors today are socially created, rather than occurring in nature (think: comparative advantage):
  - access to *knowledge*;
  - access to *labour*.

(a) Access to Knowledge

- The strong tendency for knowledge creation, dissemination and technological innovation to appear in geographical clusters creates a major locational incentive.
- Particularly in those activities in which technological change is especially rapid and unpredictable, the incentive to locate 'where the knowledge and the action are' becomes very powerful. Such knowledge may be based in specific kinds of institutions (such as universities, research institutes, industry associations). Fundamentally, however, it derives from the skills and knowledge embodied in people.

(b) Access to Labour

- For some activities, it is cheap, unskilled, non-unionised labour that is sought; for others, it is highly skilled and educated 'knowledge workers'. In general terms, however, four especially important attributes of labour show large geographical variations:
  - **Knowledge and skills**. Knowledge and skills depend on conditions such as the breadth and depth of education and in the particular history of an area's development. As a result, there are wide geographical variations in educational levels (e.g. extent of literacy, enrolment in various stages of education, public expenditure on education, etc.) (See **Fig. 1**)

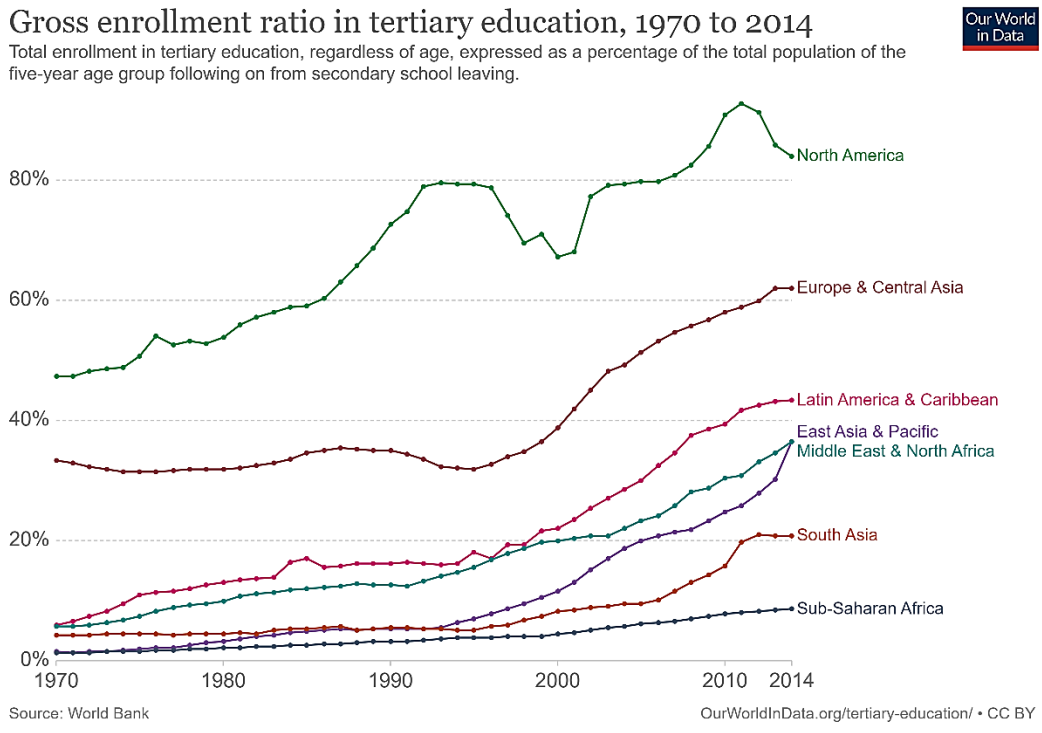


Fig 1. Enrolment in Tertiary Education

- **Wage costs**. International differences in wage levels can be staggeringly wide, as **Fig. 2** shows. These figures should be treated with some caution; they are averages across the whole of *manufacturing* industry (i.e. excludes services) and are therefore affected by the specific industry mix. Some industries have much higher wage levels than others. Even so, the contrasts are striking.
- **Labour productivity**. Spatial variations in wage costs are only a partial indication of the geographical importance of labour as a production factor. What matters from a firm's perspective is the scale of output per worker for a given wage or salary. The productivity of labour varies enormously from place to place, a reflection of a number of influences including: education, training, skill, motivation, as well as the kind of capital equipment (machinery, etc) in use. Simply chasing low wage costs, without taking into account differences in productivity, is not a good corporate strategy.
- **Labour 'controllability'**. Largely because of historical circumstances, there are considerable geographical differences in the degree of labour 'militancy' and in the extent to which labour is organised through labour unions (see **Lect 13**). The proportion of the workers who are members of labour unions has declined markedly in some countries. The fact that many firms are very wary of 'highly organised' labour regions is demonstrated by their tendency to relocate from such regions or to make new investments in places where labour is regarded as more malleable.

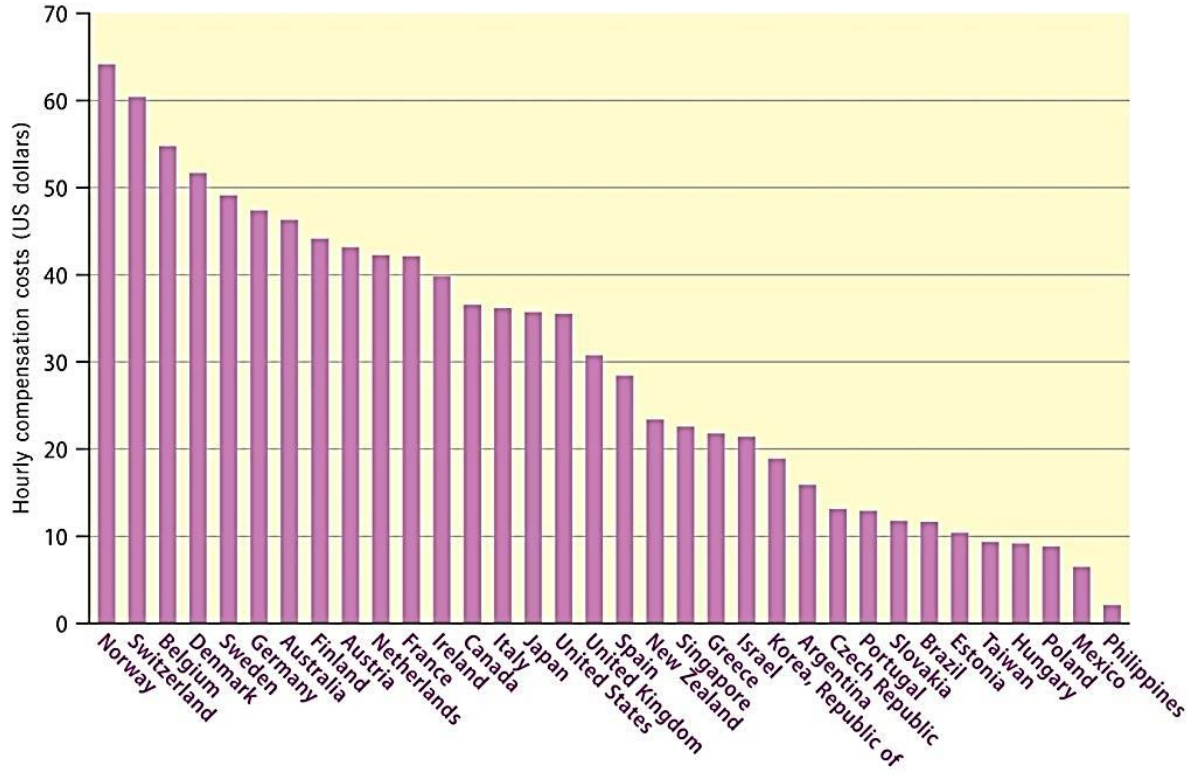


Fig 2. Geographical Variations in Hourly Compensation Costs in Manufacturing

- Global variations in production costs are a highly significant element in the transnational investment-location decision. This is obviously the case for asset-oriented investments but it is also a critical consideration for market-oriented investments.
- In that case there is always a trade-off to be made between the benefits of market proximity on the one hand and geographical variations in production costs on the other.

12.3 How do firms transnationalise?

The basics – inputs, transformation, distribution and consumption…

- Every economic activity can be thought of as a **production circuit** – *an interconnected series of functions, operations and transactions through which a specific commodity, good or service is produced, distributed and consumed* (see **Fig. 3a**).
  - In very simple terms, material and non-material inputs must first be sourced. They are then combined and transformed through some kind of production process, leading to a new good or service that needs to be distributed or delivered to the customer who then consumes it.
  - Consumption, in turn, is not just a single act of purchase, but an ongoing process that may include maintenance, repair, waste disposal, recycling and the like.
- But note that the processes are **two-way**. It is a **circuit**, rather than a chain, in which
  - materials, semi-finished goods and final products flow in *one* direction
  - information (the demands of customers – tastes, preferences etc.) and money (payments for goods and services) flow in the *other* direction.
- This basic model holds true whether it is a physical ***good*** – such as television or bicycle – being produced, or a ***service*** such as a haircut or insurance policy, with the difference coming in the relative balance of tangible and intangible elements in the production circuit.

… the additional inputs…

- While simple circuits can be thought of in linear terms, in reality, as **Fig. 3b** shows, they are enmeshed within much wider ***networks*** of **inter-firm** relationships (see **Section 12.5**) involving a broad range of other functions that are necessary for economic activities to take place: for example, research and development, market research, technological inputs, logistics, services, advertising, legal services, accounting, personnel management, software, security and so on.

… plus the control systems

- In turn, as **Fig 3c** shows, these inter-firm relationships are embedded in broader financial and regulatory systems that may bring non-firm entities such as the state and its many institutions into view (see **Lect 12**).
- The term **production network** refers to ***the full mesh of relationships that lies behind any economic activity*** described above. The production network reflects the structural and relational nature of the production, distribution and consumption of a specific product or service and how it has been organised.

- Depending on organisational/technological forces and location-specific factors, TNCs may choose to locate their productive assets and capabilities differently. Different parts of the TNCs may have different locational needs, and their locational outcome will have to be decided carefully. This is a fundamental issue for all TNCs, regardless of the kind of business they are in; whether they produce manufactured goods or business services; whether their product is 'hard', like cars or semiconductors or food, or 'soft', like information or money (another kind of information) or retailing.
- As a result, TNCs maintain **global production networks** (GPN). A GPN refers to **the extensive webs of intra-, inter- and extra-firm connections through which commodities are produced, distributed, sold and consumed. These networks are geographically extensive and functionally integrated across national boundaries**.
- Global Production Networks vary greatly (see the example of coffee, **Section 12.5.1** versus the example of laptops, in **Section 12.5.2**).

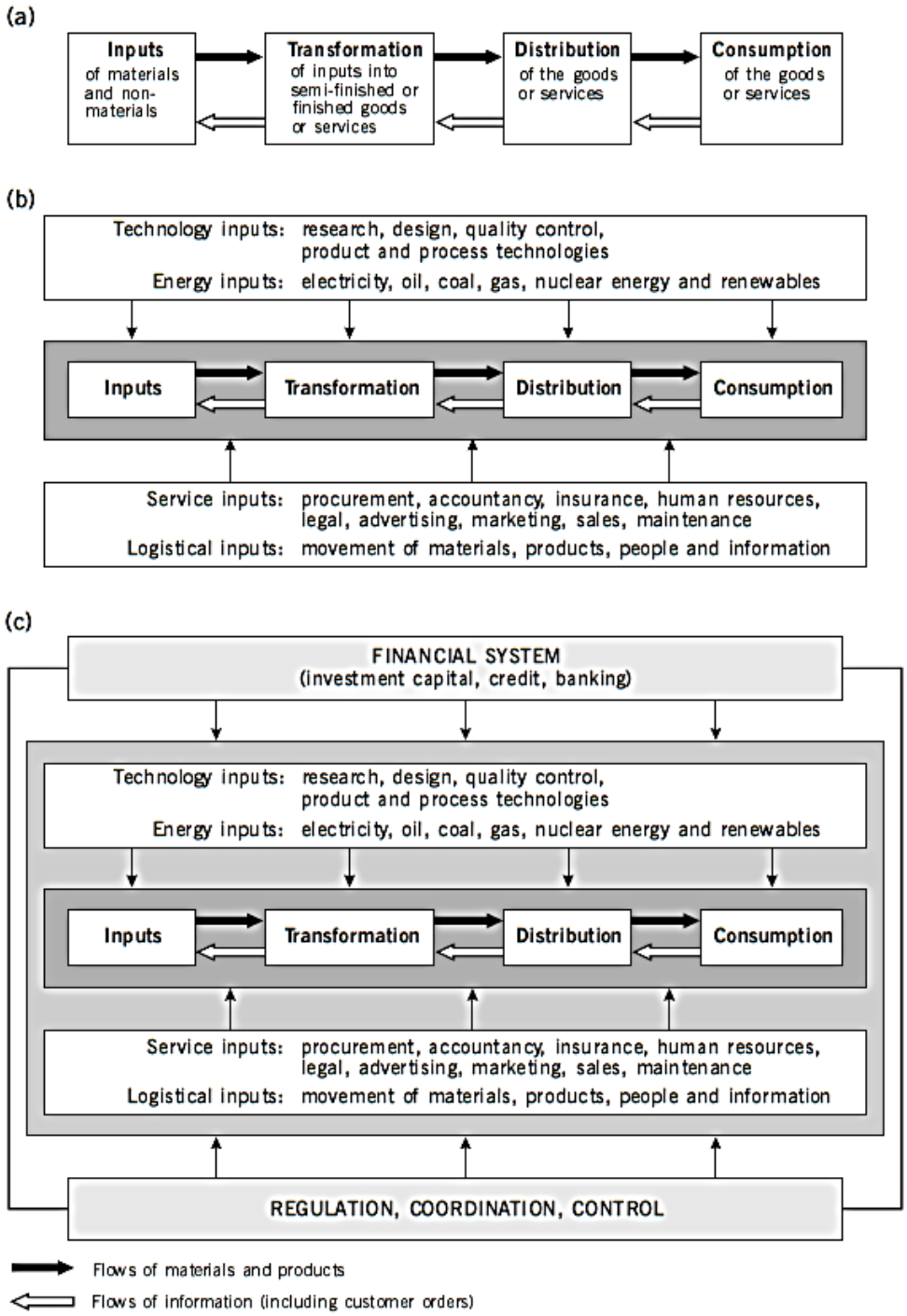


Fig. 3 A Simplified Representation of a Production Network

12.4 What is the Structure of TNCs?

A TNC is made up of its:

(a) headquarters, **(b)** research and development centres, **(c)** branch offices, and **(d)** branch plants

12.4.1 Headquarters: Centres of strategic control and coordination

(a) Corporate Headquarters Offices

- The corporate headquarters (HQ) is the **locus of overall control** of the entire TNC, where important strategies are formulated and decisions are made.
- It is the **strategic** centre responsible for **all** the major investment and disinvestment decisions that shape and direct the enterprise: where and how to source inputs, which products and markets to enter or leave, whether to expand or contract particular parts of the enterprise, whether to acquire other firms or sell off existing parts, etc
- The corporate headquarters is also the **legal** core of the TNC, responsible for complying with all the legal, financial and regulatory functions required of the firm by the various national jurisdictions in which it operates.
- One of its key roles is **financial**: the corporate headquarters ultimately holds the purse strings and decides the allocation of the corporate budget between its component units.
- Headquarters offices are, above all, **handlers, processors and transmitters of information to and from other parts of the enterprise and also between similarly high-level organisations outside**. The most important of these are the major business services on which the corporation depends (financial, legal, advertising) and also, very often, major departments of government, both foreign and domestic.
- Some TNCs may maintain regional headquarters (RHQ) offices, which constitute an intermediate level in the corporate organisational structure, having a geographical sphere of influence encompassing several countries. For example:
    - Dell currently operates its Asia Pacific headquarters in Singapore, using the country as a test bed and launch pad for its services and solutions to the region.
    - Singapore is the regional headquarters for Procter and Gamble's (P&G) operations in Asia Pacific. It carries out brand and business management activities covering manufacturing, marketing, supply chain management, research and development, finance and other corporate functions and talent development across the region.

(b) Where are these HQs and RHQs located?

- These characteristic functions of corporate and regional headquarters define their particular *locational requirements*:
    - A **strategic location on the global transportation and communications network** in order to keep in close contact with other, geographically dispersed, parts of the organisation.
    - **Access to high-quality external services and a particular range of labour market skills**, especially people skilled in information processing.
    - Since much corporate headquarters activity involves interaction with the head offices of other organisations, there are **strong agglomerative (or gathering, clustering) forces** involved. Face-to-face contacts with the top executives of other high-level organisations (including government) are facilitated by close geographical proximity. Such high-powered executives invariably prefer a location that is **rich in social and cultural amenities**.

- These location criteria are met in only a small number of major cities in the world. In particular the so-called **'global cities'** exert a huge pull on the locational decisions of TNCs, not least because they contain all the major high-level advanced business and financial services.
    - For example, not only are the headquarters of the world's largest TNCs located in a relatively small number of cities, but three cities – New York, Tokyo, London – stand head and shoulders above all the others. (See **Fig. 4** below)
    - For such reasons, these three global cities are sometimes described as the geographical 'control points' of the global economy. Before them is a tier of other key headquarters cities in each of the three major economic regions of the world: Europe (e.g. Amsterdam, Brussels, Dusseldorf, Frankfurt); North America (e.g. Atlanta, Chicago, Houston, Los Angeles, Montreal, San Francisco, Toronto); Asia (e.g. Beijing, Hong Kong, Osaka, Seoul, Shanghai, Singapore and Taipei).
- One of the striking features of the geography of corporate HQ is that **very few, if any, major TNC have moved their ultimate decision-making operations outside their home country.** This allows TNCs to retain distinctive characteristics derived from their country of origin.
- Yet, there has been substantial decentralisation of corporate HQ out of the city centres of New York and London to the less congested outer reaches.

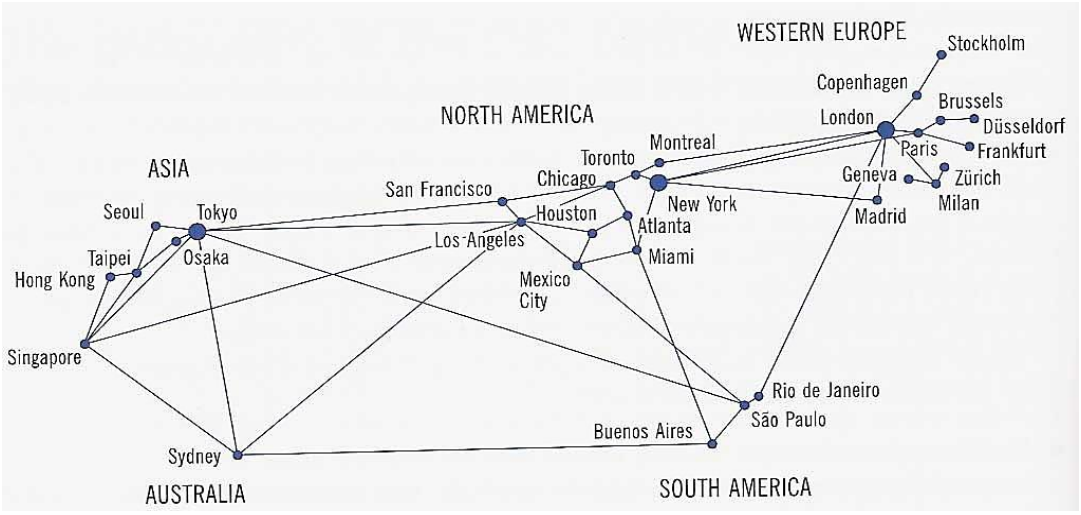


Fig. 4 Global cities. New York, London and Tokyo are the 'control points' of the global economy.

12.4.2 Research and Development Centres

- Given the constant need for firms to innovate, the process of research and development (R&D) is absolutely fundamental.
- R&D facilities encompass activities such as product development, new process technologies, operational research etc. They provide important knowledge and expertise to keep the TNC competitive in the global marketplace.
- It is a **complex sequence of operations** (see **Fig. 5**) **consisting of three major phases, each of which tends to have rather different locational requirements**, although, in each case, the TNC has to reconcile a number of factors.

- One is the advantage of gaining scale economies from concentrating R&D in one or a few large establishments.
- Another is the possible benefit of locating R&D close to corporate headquarters, or, alternatively, close to production units (see later) to enhance communications and the sharing of ideas.
- Yet another possible locational pull is to markets, in order to benefit from closeness to customer needs, tastes and preferences. These locally integrated R&D labs tend to be oriented toward local market and regulatory requirements that are not necessarily found in other markets.
- For cutting edge research, there are strong pulls to locations with science-intensive institutions and people.

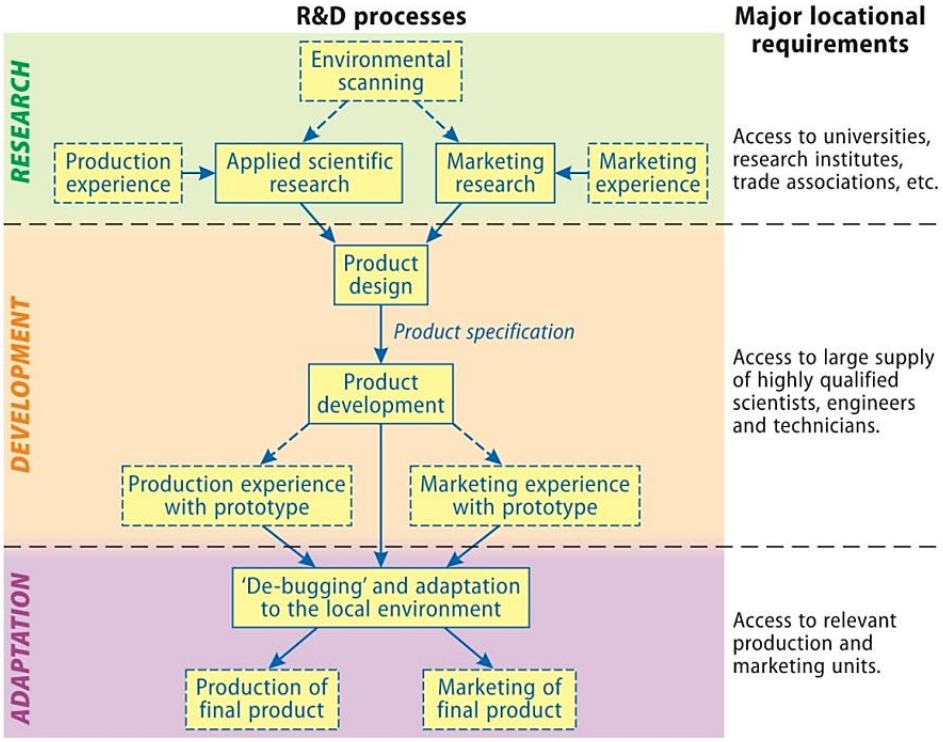


Fig 5. Corporate R&D processes

12.4.3 Branch Offices: Marketing and Sales

- Of all the various TNC functions, it is the marketing, and especially the sales, units that are the **most geographically dispersed**. The reason is obvious.
- These functions need to be as close as possible to the firm's markets. They must be sensitive to local conditions to feedback relevant information to the headquarters. They help tailor the firms' products to local tastes. Not least, they prevent the firm from making costly, and often embarrassing, mistakes in misreading the various consumer cultures in which the firms are operating.

12.4.4 Branch Plants: Manufacturing

- There are clearly some geographical similarities in the patterns of TNC headquarters, R&D, and marketing and sales activities, regardless of the activities in which they are involved. This is because their **locational needs** are broadly similar for all firms.
- This is **not so** for branch plants whose locational requirements vary not only according to the *role* they perform within the TNC (e.g. as a testbed for R&D ideas, they would have to be located closer to R&D centres), but also with the geographical distribution of the relevant location-specific *resources* they need. In other words, branch plants often **source for** and **transform the inputs** for a TNC and hence may need to be located near natural resources.
- Branch plants may be **wholly owned by a TNC**. They may also be **owned by TNCs that are in a partnership**. At the same time, branch plants may be **operated by independent suppliers**. **For example**, Adidas and Nike do not own their branch plants; production is undertaken by independent suppliers.
- **It is certainly true that, compared with corporate headquarters and R&D, branch plants of TNCs have become increasingly dispersed geographically**. But there is no single and simple pattern of dispersal, either at the global scale or within individual countries; the pattern varies greatly from one industry to another.

- Some main patterns include:
  - **All production is concentrated at a single geographical location** (or, at least, within a single country) and exported to world markets through the TNC's marketing and sales networks. (See **Fig. 6a**) Example: Today, we still find Toyota's Lexus series of automobiles to be entirely manufactured in Japan and exported to the rest of the world. With this pattern, the GPN of TNCs connect different places through:
    - *distribution of products to different places*
    - *consumption of products in different places*

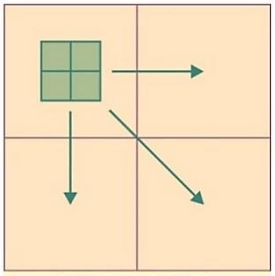


Fig. 6a All production occurs at a single location. Products are exported to world markets.

  - **Production in located in, and aimed towards, different host markets.** Each operation in the host country is predominantly local in its business orientation and very sensitive to local demand. (See **Fig. 6b**) The specific locational criteria for the setting up of host-market units are:
    - size and sophistication of the market;
    - structure of demand and consumer tastes;
    - cost-related advantages of locating directly in the market;
    - government-imposed barriers to market entry. Example: Nissan, Toyota and Honda located assembly plants in UK so that their cars can avoid being treated as a foreign import and therefore subjected to import duties.

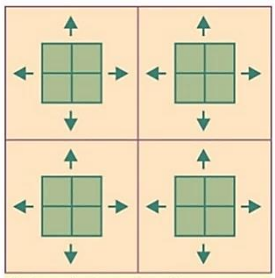
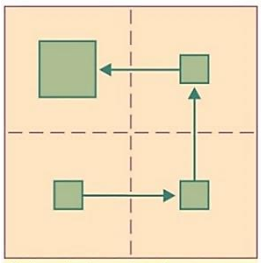


Fig. 6b Each production unit produces a range of products and serves the national market in which it is located. No sales across national boundaries. Individual plant size limited by the size of the national market.

With this pattern, the GPN of TNCs connect different places through:

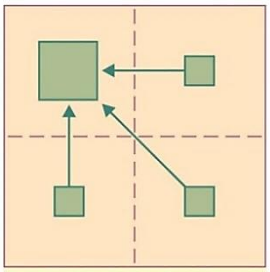
- *sourcing of inputs from different places*
- *transformation of inputs into products at different places*
- *distribution of products to different places*
- *consumption of products in different places*

- **Production process is fragmented into several parts, so that each of these parts can be located in different parts of the world.** Materials, semi-finished products, components and finished products are transported between geographically dispersed production units in a highly complex web of flows. TNCs can locate production units in this manner to take advantage of geographical variations in production costs at a global scale.
  - The output of a manufacturing plant in one country may become the input for a plant belonging to the same firm located in another country. (See **Fig. 6c**)
  - Alternatively, the finished product may be exported to a third-country market or to the home market of the parent firm. (See **Fig. 6d**)
  - Example: Laptops and mobile phones are assembled using a large number of components (e.g. chips, display, battery) sourced from different countries. The entire production process may exhibit characteristics in both Figs 5c and 5d.
- With this pattern, the GPN of TNCs connect different places through:
  - *sourcing of inputs from different places*
  - *transformation of inputs into products at different places*
  - *distribution of products to different places*
  - *consumption of products in different places*



Each production unit performs a separate part of a production sequence. Units are linked across national boundaries in a 'chain-like' sequence – the output of one plant is the input of the next plant.

Fig. 6c



Each production unit performs a separate operation in a production process and ships its output to a final assembly plant in another country.

Fig. 6d

This is a good place to pause, and read the case-study of NIKE at the end of this set of notes.

Be familiar with how NIKE organises its global production network.

12.5 - Examples of GPNs

12.5.1 Coffee

- The coffee production network is relatively straightforward and is represented schematically in **Fig. 10**. Even so, coffee travels a long way and changes hands (i.e. usually supplier firms and sub-contractors) several times on the journey from bean to cup.

- The major participants in the network are depicted by *boxes*, and the transactions that move coffee in its different forms between participants are shown by *arrows*.
- Coffee flows up the network from the growers, who in effect begin the system, to the consumers who represent the end point.

- Coffee – which comes in two main types, Arabica and Robusta – is generally grown on small farms or estates in the developing world. Once basic processing has extracted the 'green' coffee beans from picked coffee cherries, they will pass in 60-kg bags from an exporter to a developed country importer, trader or broker, then on to a roaster or instant coffee manufacturer, and then finally to a consumer via either a supermarket shelf or a café.

12.5.2 Laptop computers

- Laptop computers are the outcome of a complicated production network that brings together hundreds of different components into the finished product. It is estimated, for example, that a laptop may contain around 2,200 separate parts.
- The personal computer (PC) industry is therefore a complex network of firms involved in a wide range of different industry segments – from microprocessors and other electronic components to applications and systems software providers – and covering a wide range of activities: R&D and design, manufacturing, assembly, logistics, distribution, sales, marketing, service and support. (See again, **Fig. 3c**)
- How these functions are split between different companies has changed over time. Historically, in the computer industry, *vertically integrated* (see **Fig. 12**) giants such as IBM, HP and Siemens operated in all the industry segments and carried out the key functions of product innovation, manufacturing and customer relations internally. Now, companies external to these giants are involved in the overall production network.
- For an infographic that shows where parts of the Apple iPhones are sourced from, visit http://financesonline.com/how-iphone-is-made/

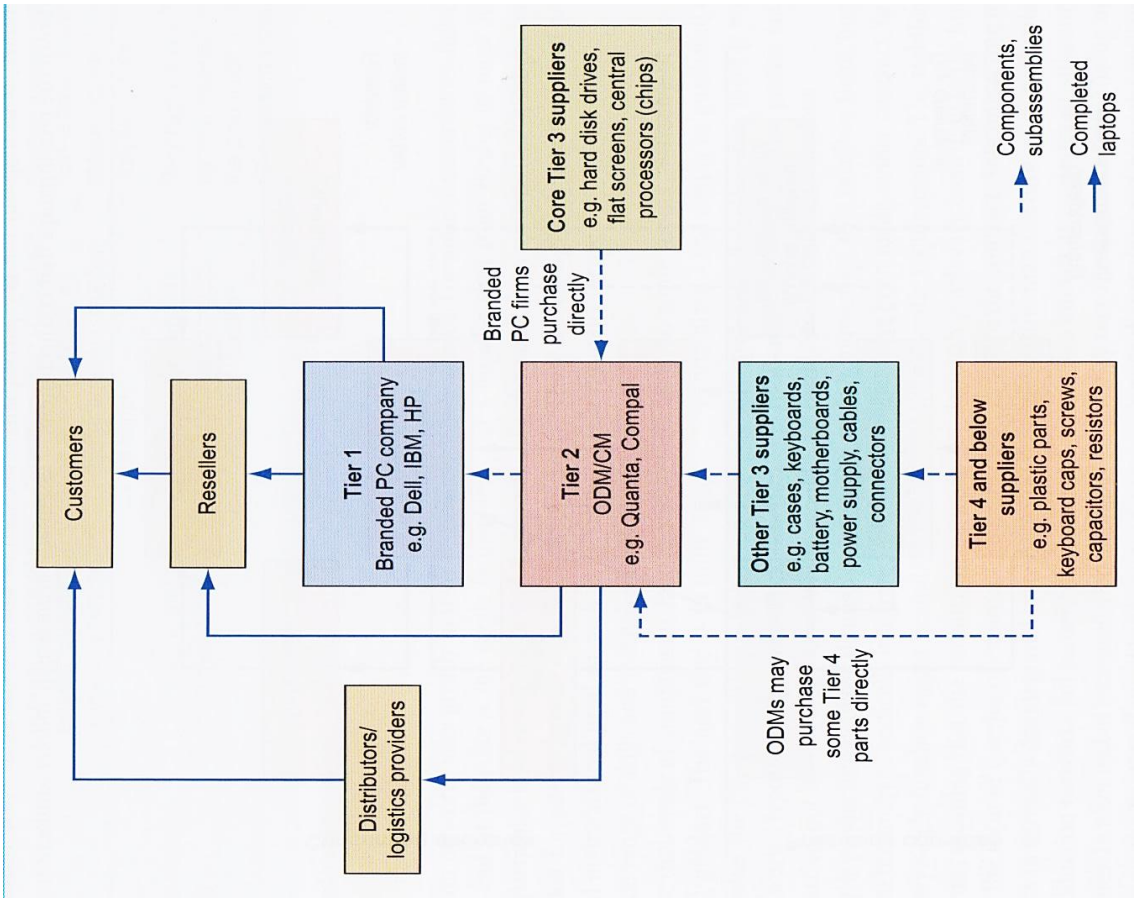


Fig. 11 The laptop production network, highly simplified. Note that certain components, such as the hard disk drive and the flat screen, may itself have its own production network involving several tiers of firms and assemblies, not captured here.

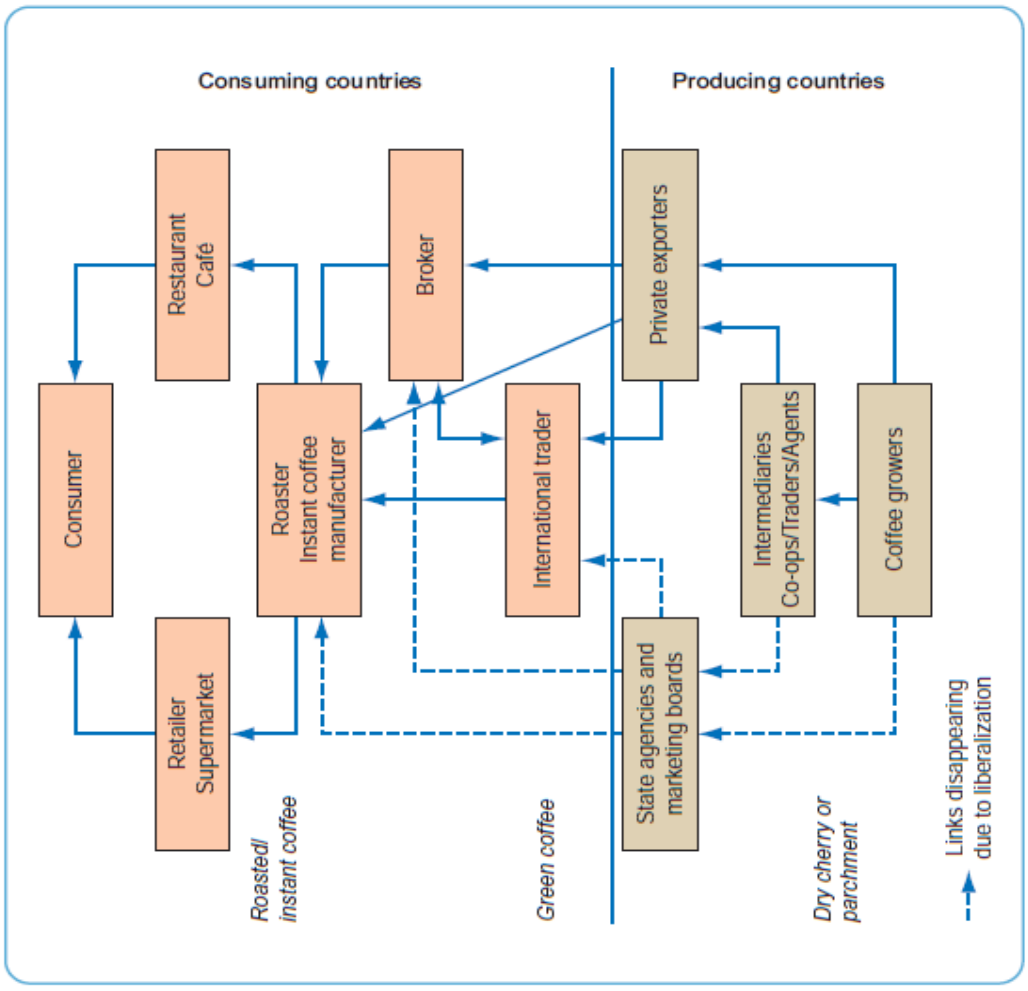


Fig. 10 The coffee production network.

12.6 What is the impact of TNCs' GPN on *host countries*?

12.6.1 Socio-economic Impact

12.6.1.1 Pros for Host Countries

(a) Employment

- Huge numbers of relatively well-paid jobs may be created. Despite many claims of exploitation, particularly in LDCs, TNCs often pay their employees above the average local rate. This is an important point because 'cheap' labour does not always mean exploited labour. It may just be cheap in comparison to rates in the home country.
- In LDCs, most jobs are production jobs and, particularly in Export Processing Zones (EPZs, more on this in **Lect 13**), these are often low skilled roles. (Again, refer to NIKE for an example)
- In DCs, TNCs often geographically separate different types of production. For example, in the UK,
    - 869 projects were initiated by foreign companies in 2000-01, generating over 71,000 jobs. This may seem relatively small compared with a total UK workforce of over 20 million, but it must be remembered that investment in such developments came largely from outside the UK.
    - Higher order employment opportunities are often concentrated in and around London, whereas low order employment opportunities are often in plants in Wales, North England and Scotland.

(b) Cumulative Causation

- Investment by a TNC here can trigger the process of **cumulative causation**, which refers to the spiral build-up of advantages that occurs in specific geographic settings, bringing more wealth and development there. For instance, transnationals may set up in a new country and this may rapidly attract many more businesses into the area, which then generates extra industries, incomes and employment. **Fig. 12** illustrates the spillover benefits as a result of the initial location of the new industry into a particular locality.
- If the TNC is made to use local supplies or components, and particularly if these materials or components have to be of high quality or precision, then both the level and quality of output of the local industry may simultaneously increase. Such industries may become more competitive internationally and local staff may also leave the TNC or their old home employers to set up business themselves. Thus, the TNC can be said to stimulate home based entrepreneurs.

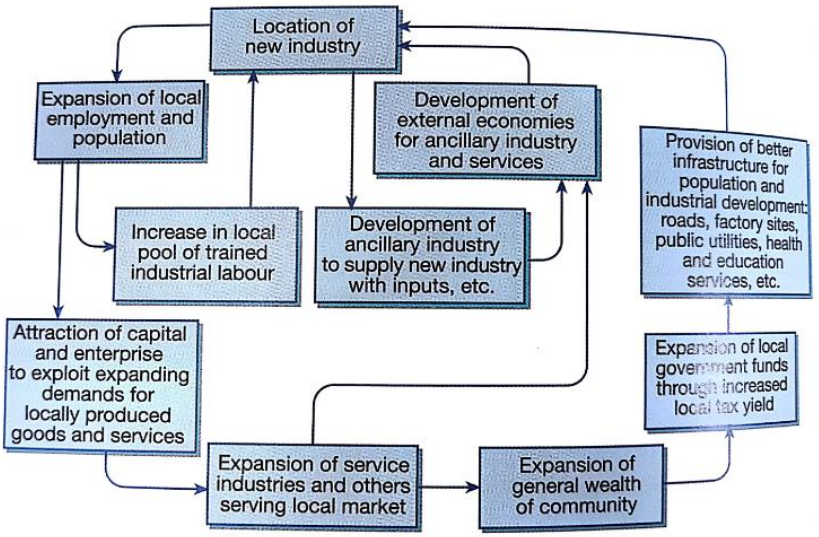


Fig. 12 Regional Cumulative Causation

- The location of a TNC in a region has the potential to increase jobs through linkage, providing business for local **small-medium enterprises**:
  - Companies that supply components to the new plant,
  - Companies that distribute goods from the new plant,
  - Companies that supply services to the new plant, from servicing plant machinery down to supplying the canteen.

(c) National Income

- TNCs may bring huge inflows of capital, either directly, or from taxes and this may significantly improve a country's balance of payments.
- In developing countries, TNCs tend to export more than their local counterparts. This is not surprising since many TNCs have specifically set up as export platforms.
- However, TNCs in DCs usually end up with a higher corresponding level of imports than local firms. Increasingly, host governments, particularly of LDCs, are insisting that a certain proportion of a TNC's profits are reinvested in the host country.
  - TNCs may resort to transfer pricing to reduce its 'profit' (see **12.6.1.2(c)**)

(d) Transfer of Technology

- TNCs have been responsible for the introduction of new technology to both DCs and LDCs. This can take the form of management expertise, technological processes or simply of machinery.
- This geographical transfer of technology and knowledge can be a huge advantage for the receiving host country. Such technology can be copied and therefore become economically useful throughout the country. The skill level of the local population may also rise.
- In practice, this has been most effective when host countries have insisted that the TNC introduces both manufacturing and research and development plants. This helps to ensure that the host country receives not only 'know how' but 'know why'.

- Some of the technologies which have been introduced to developing countries by TNCs – fertilisers, wood processing technology, pharmaceuticals etc. – have played an important part in raising the standards of living and improving the health of significant parts of the host country's population.

12.6.1.2 Cons for Host Countries

(a) Local companies become less competitive

- The TNCs draws materials from the cheapest sources, manufactures or complete assembly in place with the cheapest labour and its managerial and technical resources are used as economically as possible. This allows it to stand out on the markets of countries very flexibly and efficiently. In competition with domestic firms, it therefore becomes very much more successful, which can lead to gradual weakening and disappearance of small and medium sized domestic firms.
- Local firms may become financially unattractive to host country lenders and may, therefore, find it difficult to borrow money for the establishment of new manufacturing plants or for modernisation purposes.
- Furthermore, some TNCs do not rely upon the host country's manufacturers to supply materials and there is then little multiplier effect.
- The presence of a TNC in either a DC or a LDC may lead to a reduction in the number of small or medium sized home companies or it may suppress the establishment of new small firms. This is because:
    - The economies of scale which TNCs can achieve mean that the unit cost of production is much less than that which medium or small firms can achieve.
    - TNCs usually benefit from superior management and marketing skills, particularly when they are planning to exploit overseas markets.
    - Financial resources may allow them to buy smaller competing firms or to outlast competition in price wars.
    - Paying workers above the local rate may encourage workers to leave their home employers, creating local hostility and possibly threatening the survival of local firms. TNCs have been accused of putting little importance on factors such as local trust and community responsibility.
- TNCs moving into a country may be in direct competition with local companies. If the local companies are less efficient, they will lose business and, ultimately, employees. For example, when Russian markets were opened up after the collapse of communism, the arrival of Western chocolate manufacturers had an adverse effect upon the home confectionery industry.

(b) Loss of autonomy and suppression of technical development

- There is a risk that a small country may lose some of its autonomy – its ability to self-govern – if it becomes too heavily dependent upon the TNC.
    - Once a TNC has become established in a particular country it can be very difficult for the government of that country to control the behaviour of the TNC, which may operate in many other countries and have its decision makers in a head office miles away.
    - The aims of a TNC are unlikely to be the same as those of a host government and it has been argued that a TNC might deliberately prevent technological advance of such a country so that this dependency is maintained (we will examine the relationship between the state and TNC in **Lect 13**)
    - Many critics have suggested that US TNCs have wielded too much influence in Canada, for example, resulting in Canada remaining 'industrially backward'.
- The spread of new technological processes and skills from the TNC may be very limited.
    - This may be because the TNC does not establish working links with other factories or because it refuses to share or demonstrate its technology. The technology may in fact be jealously guarded.
    - Even more importantly, few TNCs locate many of their creative and/or development plants – where new ideas and processes are developed – away from their home country. This prevents the host country developing its own ideas and knowledge.
- A dominant TNC may result in a large proportion of the workforce in the city, region or even country becoming overspecialised or economically dependent upon one form of production. This is extremely risky since transnational TNCs may close plants even when these plants are profitable, if greater profits can be made elsewhere (see **Reading 1**)
- Finally, the government of a poor country, heavily dependent upon one or more TNCs, may be tempted to relax worker safety regulations in order to accommodate the TNC. This may have disastrous social consequences.

(c) Transfer pricing

- The TNC will inevitably return earnings and profits back to the home country and these may exceed the initial inflow of capital. TNCs can hide the true profit which they make by overpricing or underpricing (see **Fig. 13**).
    - For example, the TNC will purchase components in order to manufacture its own product. A pharmaceutical company may have to purchase hundreds of different chemicals in order to make its own products. These component chemicals may be purchased – at a highly inflated price – from one of its own subsidiaries i.e. a different company within the TNC's intra-frim network but located elsewhere. This will increase costs, decrease profits and hence decrease taxes payable to the host county.
    - Conversely, the TNC may underprice its own products which are destined for export to one of its own subsidiaries. Again, this decreases profits and tax payable to the host country.

- The deliberate manipulation of pricing to reduce taxes to the host country is known as **transfer pricing** and is a major problem for all host countries irrespective of their level of development.
- An increasing percentage of world trade is now intra-TNC (i.e. between different branches of the same TNC) rather than inter-firms. It has been estimated, for example, that more than 50% of the total trade of Japan (imports and exports) occurs within TNCs.

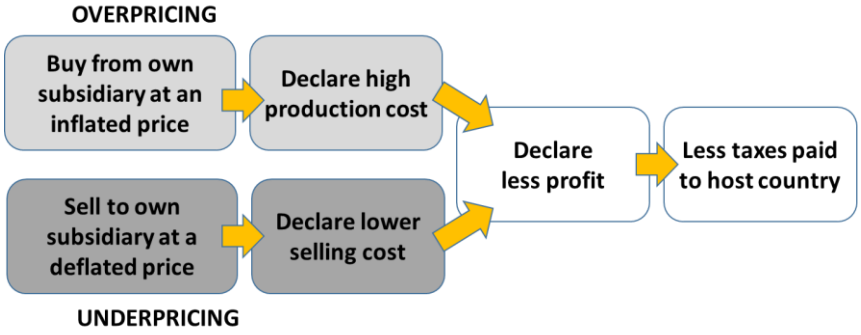


Fig. 13

(d) Financial cost to host country

- As we shall learn in **Lect 12** (for Role of the State), it often costs the host country huge sums of money to attract the TNC.
  - In LDCs, costs may include the development of new infrastructure such as roads, railways, docks, EPZs etc.
  - Developed countries may also have to offer financial incentives in order to attract TNCs to economically weaker areas within their countries. For example, the UK Government offered Siemens several million pounds to reduce capital costs to help construct its semiconductor plant in North Tyneside. Government incentives to tempt TNCs may mean that other sectors of the economy – for example agriculture – are neglected.

(e) Negative social impact

- The **goods** the TNC produces may be **inappropriate** to the needs of the host country.
  - The production of luxury cars, for example, which are expensive for all but a tiny minority of the population and which are unsuitable for local conditions.
  - Other products – such as beef burgers or Coca Cola – have been criticised because they exert a westernising influence and this may encourage the poor to spend less on healthier, basic foodstuffs.
- **Clashes between the business systems of TNCs and national cultures of host countries may also occur.** The host countries' local cultures, alternative consumption practices, and kinship and social relationships in different localities can pose a problem when there is insufficient appreciation of social and cultural differences on part of TNCs. Example: Dolce & Gabbana's failure to appreciate local cultural sensitivities in China in the 2018 advertisement which showed a Chinese model struggling to eat Italian food using chopsticks. The campaign was accused of trivialising Chinese culture and promoting unflattering stereotypes, suggesting a Chinese woman that embraces European fashion but is too uneducated to understand. The advertisement drew condemnation and calls to boycott the brand in China.

- **TNC products and operations can shape the host countries' citizens exposure through social, economic, psychosocial pathways that may cause detrimental health impacts.** This may be seen within a range of industry including food and beverages, tobacco, pharmaceuticals and extractive industries (See Lect 3). For example, the growth of fast food TNCs that manufacture, distribute and market these highly processed food on a global scale has correspondingly led to rising rates of obesity globally. In 2016, McDonald's was the most valuable fast food brand in the world and the availability of their outlets and the price of meals offered by them have been positively associated with obesity in the markets they have invested in.
- There have been allegations that TNCs **exploit cheap, flexible, non-unionised labour** forces in LDCs. NIKE, for example, has been challenged over the rates of pay offered by its subcontracting firms for shoe assembly. This is especially plausible when the government of a poor country, heavily dependent upon one or more TNCs, is tempted to relax worker safety regulations in order to accommodate the TNC. TNCs have also been accused of not training the local workforce but importing skilled and managerial personnel from the country of origin.

(f) Environmental Impact

- TNCs may bring **unwelcome environmental change** in the form of damage to the atmosphere, water and land. Many LDCs have less strict pollution laws than DCs. Agricultural land may be lost, along with habitats for wildlife. This results in a situation where human health is endangered as a result of exploitation with the threat of chemical and other environmental disasters. Even with laws put in place, TNCs will seek to circumvent the health and environmental standards set by the government. Essentially, the fate of the environment is in the hands of institutions that are not motivated by the concern for the welfare of the inhabitants or the Earth, but the desire for their own growth and profit.
- Increasingly, TNCs are under huge pressure from civil society to regulate the environmental impact of their activities, or do so as part of their corporate social responsibility (CSR) programmes. Many TNCs are implementing minimum standards and environmental auditing for their suppliers and sub-contractors. However, HQ policies are not necessarily implemented at the local level, due to the difficulty in controlling and coordinating suppliers and sub-contractors across different countries.

12.7 What is the Impact of TNCs' decisions on *home countries*?

- Compared to examining impacts of TNCs on host countries, the case for home countries is usually more frequently neglected and less clear.

12.7.1 Socio-economic Impact

- The impact of TNCs on their home countries is largely negative in a **socio-economic** sense.
  - When a company takes its production overseas, there is likely to be increased unemployment, both in that industry and in component suppliers. The amount of disposable income available within a region will decrease, leading to a downward spiral (vicious circle) – in other words, the multiplier effect working in reverse. This is particularly the case in traditional industrial regions within DCs, which might rely on only one or two industries for their economic base.
- The move by Dyson of the production of its vacuum cleaners from Malmesbury (Wiltshire), UK, to Asia cost 800 jobs (see **Fig. 14** for the news report). The company claimed that moving production to Malaysia would enable it to cut about 30% from production costs. Although a dated example, it illustrates the uncertainty that is possible even today.
- It is not only in manufacturing that employment can be moved abroad. British Airways, HSBC and Barclays all have administrative centres outside the UK, many in Asia. India, for example, is a popular location for **call-centres and back office jobs**.
- While it is convenient to therefore conclude that the impacts in home countries are negative, some economists argue the exact opposite, that overall, overseas investment by TNC's are capable of actually creating jobs in the home country. For example, more higher-salary and/or managerial jobs will be created in head offices even as production line jobs have been displaced. Dyson, for example, intended to retain around 800 research and development staff at Malmesbury (see again, **Fig. 14**).
- The overall net effect can therefore be very difficult to calculate. Numerous studies have shown that the establishment of an overseas TNC will have both positive and negative employment effects in the home country. Jobs will be created in some geographical areas and lost in others. Some types of employment will be created (e.g. in the quaternary sector) and some lost (e.g. manufacturing and call-centre services) and such changes will not affect everyone equally. Some kind of workers, often women or those from minorities, may well be affected the most.

6 February 2002

800 jobs to go as 'sad' Dyson moves factory to Far East

JAMES DYSON, multi-millionaire inventor and champion of British engineering, is to move production of his bagless vacuum cleaners from Wiltshire to the Far East. It means the loss of 800 jobs at his Malmesbury headquarters.

Since he started production of his vacuum cleaners in 1993, Mr Dyson has become the leading evangelist of British manufacturing. He said: "No one could have tried harder to make it work in Britain. I feel very sad but we are minnows

in comparison with our multinational competitors and we need to make substantial savings to take them on." Moving production to Malaysia, where Dyson Appliances already produces two of its four vacuum cleaner models, or possibly to China, would shave about 30% from production costs, Mr Dyson said.

"We need an enormous amount of cash to invest in new technology, to launch into new markets and to launch more products faster. Most of our suppliers are also in the Far East. And our markets are there too. We're the best-selling vacuum cleaner in Australia and New Zealand. We are doing well in Japan and we are about to open in America. It makes more sense for us to produce in the Far East."

About 800 research and development staff will remain at Malmesbury where Dyson has invested £32 million in the past two years. Another 150 staff will continue production of the company's range of contrarotator washing machines in Wiltshire.

Fig. 14. Adapted from a report in the *Daily Telegraph*, a UK newspaper

12.7.2 Environmental Impact

- By locating their production plants away from home countries and in host countries in LDCs, TNCs are thus locating the negative environmental impact from production *away* from home countries. Yet, TNCs' positive impact on the environment in home countries comes at the expense of environmental damage in host countries, many of which often have less strict pollution laws than DCs.
- Refer to Example 6: Oil extraction in Bayelsa state, Niger Delta, Nigeria in **Lect 9**.

12.8 Concluding remarks on a TNC's impacts on the countries in which they operate

- With every TNC there is the potential for both positive and negative effects on both the home and host nation. Arguably, the true impact of a TNC's activity cannot be evaluated unless we can be sure of what would have happened without the TNC.
    - For example, if a particular TNC had not established in country x the question is 'Would that market niche have remained unfilled?' or would another TNC or 'home' company have become established. Arguments which are based on "What if...." scenarios are known as **counter factual** arguments.
- What is more certain, is that it is extremely difficult to imagine a country being able to opt out of international trade, or be associated with TNC activity, altogether. TNCs therefore seem likely to increase their already large share of world trade and perhaps, effective guidelines or international regulations on the activities of TNCs are now what is needed. The existing guidelines – from bodies such as the OECD, the International Labour Organisation and the United Nations – are all voluntary. Clearly, with so much influence, TNCs must also be forced to take a responsible approach towards how they conduct their activities.

27 February 2015, Channel NewsAsia

After Indonesia retreat, GM retrenches in Thailand, too

A day after announcing it is to stop making GM-branded cars in Indonesia, General Motors said on Friday it would cease production of its Chevrolet Sonic in Thailand by the middle of this year.

While GM will still sell cars like the Cruze sedan in parts of Southeast Asia, an emerging markets battleground for global automakers, it is shifting focus to push the 'American heritage' of its SUVs and pickups such as the Trailblazer and Colorado.

The restructuring - under Executive Vice President Stefan Jacoby, who oversees markets beyond the Americas, Europe and China - marks a retrenchment in Asia by the U.S. automaker. While business grows in China, the world's biggest autos market, GM has struggled in other parts of its international operations unit, which doesn't include China.

The Detroit-based automaker has signaled overall restructuring charges of about US$700 million this year, and said last month it expected an improved consolidated operating performance from Jacoby's International Operations unit.

GM's Thai plant in Rayong, an industrial city southeast of Bangkok, will be scaled down from current annual capacity of 180,000 vehicles. The company did not elaborate, but said it would initiate a "voluntary separation program" for staff. In total, GM employs around 3,200 people in Thailand.

In Indonesia, GM said on Thursday it would cease production of the Chevrolet Spin by end-June and shutter a factory at Bekasi, just outside Jakarta, which employs around 500 people.

JAPANESE DOMINATION

After eight decades in Indonesia, GM's market share is below one percent, according to LMC Automotive. It sold fewer than 11,000 vehicles there last year, while Toyota Motor and its Daihatsu affiliate shifted more than 578,000 vehicles. Toyota and other Japanese makers together control more than 90 percent of the Indonesian market.

Jacoby acknowledged GM got it wrong in going head-to-head with the Japanese in a market he dubs their "backyard". The Spin, a strategic, small "people mover" van that has done well in Brazil, was too costly to make to be profitable in Indonesia as most of the parts had to be imported.

"We could not ramp up Spin production to boost the volume as we had expected ... although the product was really good," Jacoby told Reuters. "The logistics chain of the Spin was too complex; we had low volume so we could not localize the car accordingly, and from the cost point of view we were just not competitive."

In Thailand, GM sold close to 26,000 vehicles last year, giving it 3 percent market share, according to LMC Automotive, which puts the combined market share of major Japanese rivals at more than 60 percent. GM said it will phase out sales of the Spin and the Sonic in Thailand by June.

While GM is broadly repositioning the Chevrolet brand in parts of Southeast Asia, it is driving into Indonesia with its Chinese partners, including SAIC Motor Corp . They plan to set up a manufacturing facility near Jakarta for their no-frills Wuling brand, but aren't interested in taking over GM's Bekasi plant, a person close to the joint venture said.

The overhaul in Indonesia and Thailand follows GM's 2013 retreat from car production in Australia, and industry analysts now expect GM to restructure its manufacturing operations in South Korea, a big production hub for the U.S. firm.

Susquehanna Financial Group analyst Matthew Stover said South Korea has shifted from a developing-market cost structure over the last decade to being almost as expensive for car production as Japan.

"I don't think what's happening in Korea is even close to (being) done. It's the biggest problem," Stover said.

Reading 2

8 Aug 2014, The Straits Times

GM reopens regional HQ here

China's automotive market will reach saturation point in the near future, leaving the rest of Asia and Africa as the only major growth areas.

American automotive giant General Motors (GM) cited this as a reason for re-establishing a regional headquarters in Singapore - 10 years after relocating to Shanghai.

GM international operations president Stefan Jacoby told The Straits Times at the official opening of the office yesterday: "When we moved out of Singapore for China, we were not the only ones that moved. Many in other industries also moved. But things have changed. China has grown so big and become so important that it needed its own dedicated management."

That means GM needed a set-up outside China to focus on the next growth regions.

When GM left Singapore for Shanghai in 2004, it envisioned Chinese sales to grow by 40 per cent to 280,000 units that year. Last year, it sold nearly 3.2 million vehicles there - more than in America, its home market. "At some point, China will become satisfied, and will then be a developed market, like Europe and America," Mr Jacoby said. "And the markets that will grow will be ASEAN, India and Africa," he added.

GM sells 800,000 to 900,000 vehicles a year in these regions, but Mr Jacoby would not say what number he is gunning for in the medium term. "Rather than volume, we want to focus on returning to profitability," he said.

The auto giant has been affected by the unrest in Thailand. Mr Jacoby said the Thai vehicle market had shrunk from 1.4 million units in 2012 to around 850,000 last year. "We were hit hard," he noted.

Political stability, good infrastructure and a sizeable talent pool were reasons GM picked Singapore as regional HQ over other cities, Mr Jacoby said. "Singapore is stable and transparent... the only other option for us was Dubai, but it does not have the talent pool Singapore has."

The Singapore office in OUE Bayfront - which will be responsible for nearly 100 markets in Africa, South-east Asia, Australia, India, the Middle East and South Korea - will have around 200 people by the year end, up from 120 now. They include 25 transferred from the Shanghai office and 45 expatriates.

"We intend to localise many of these expat positions," Mr Jacoby said, adding that it will be hiring 100 people from Singapore.

The regional HQ will serve functions such as information technology, finance, product planning, logistics and purchasing. It will continue to run a parts logistics centre here but will not distribute vehicles. Mr Jacoby said: "The main difference (from its last office here) is that we will have a much better grip of our markets... and we will raise the level of localisation." He said GM will launch 40 new models in the region from now until the end of next year.

Economic Development Board (EDB) deputy managing director Quek Swee Kuan said at the opening ceremony that the auto giant was well positioned to capitalise on regional growth markets. Citing an EY report, he said Asia will account for two-thirds of the world's middle class by 2030.

He also reiterated that Singapore aims to grow its automotive sector, including the supply of components and research and development.

Nike: A Case-Study

A transnational corporation (TNC) is a firm with the power to coordinate and control operations in more than one country, even if it does not own them. This control and coordination is possible because a TNC owns its subsidiaries abroad or because it is the single largest buyer of outputs from these foreign firms. Nike provides as excellent example of a contemporary TNC.

Spatial Organisation

Headquartered in Beaverton, Oregon, the company focuses on the design, R&D, and marketing of sports products. It is the world's largest and leading atheletic brand, with revenues of $34.4 billion in 2017. Apart from manufacturing its Air-Sole cushioning materials and components in two wholly-owned facilities in Beaverton, Oregon, and St. Charles, Missouri, Nike outsources all the production of its thousands of products to contract factories worldwide (see **Fig. 15** below). Nike has a reputation of searching out cheap pools of labour for manufacturing work while retaining its expertise and focus on design and marketing. As of March 2015, Nike had contracts with over 600 factories in 42 countries that employed more than 1 million workers (http://manufacturingmap.Nikeinc.com/#). In terms of geographical extensiveness it is certainly global. However there is a strong bias towards East Asia (see **Fig. 16**), which contains more than 60% of total suppliers. Of these, the vast majority are located in China (167 factories), followed by Vietnam and Thailand. Indonesia and Malaysia are also significant elements in the network. Only around 8% of the total suppliers are in South Asia (mostly in Sri Lanka and India); 12% in Central/Latin America (mostly in Mexico and Brazil); 5% in Europe (Turkey has the most).

Through this seemingly straightforward outsourcing arrangement, Nike was able to achieve profit margins of 44-46% between 2006 and 2011. These impressive margins, however, mask the enormous complexity and potential risks inherent in its global outsourcing arrangement.

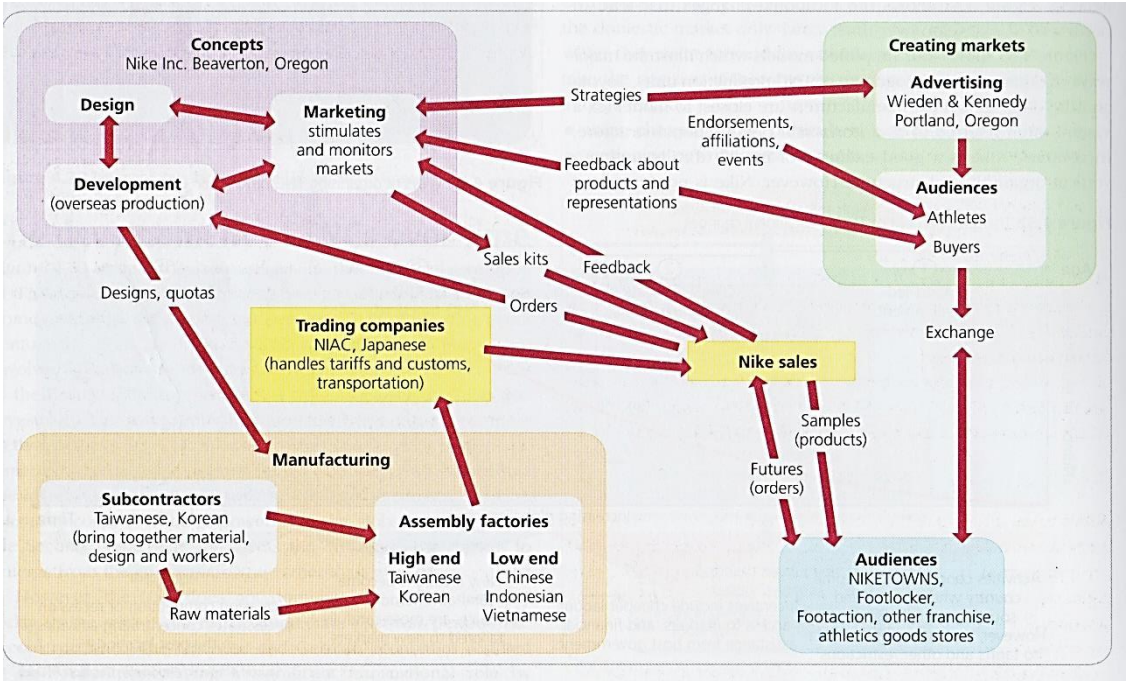


Fig. 15 Organisation of the Nike production network

Fig. 16 Nike's global supplier network in 2012

Social Impact

Nike's success and unique outsourcing model was coming under increasing scrutiny by the beginning of the 2000s mostly as a consequence of mounting pressure from the media and civil society activists concerned about sweatshop and child labour. NGOs and other activitists targeted Nike in particular for three reasons:

- ✓ Complaints and exposés had highlighted poor working conditions for its factory workers;
- ✓ Its high profitability and thus the apparent affordability of implementing improvements;
- ✓ And its "demonstration effect" as an industry leader.

As a result, in 2005, Nike became the first TNC in its industry to disclose its list of contract factories in the United States and worldwide. Asian factories have been a particular focus of attention. In 2010, for example, **Vietnam** accounted for 37% of Nike's global footwear production, with 40 active contract factories employing some 84,000 workers.

Nike ran into trouble with working conditions in its contract factories almost as soon as it moved in Vietnam in 1995. In 1998, several of its contract workers in Chien Bien Hoa experienced serious labour abuses, with young female workers being punished with running laps around factories. While things seemingly improved after Nike stepped in with factory audits, nearly a decade later, Nike's labour troubles returned. Some 13,000 workers of Tae Kwang Vina, a South Korean-owned contract factory for Nike, went on strike for five days in November 2007 to protest against low wages, significantly disrupting footwear supply to Nike in advance of the very busy Christmas season. In April 2008, more than 20,000 workers at Ching Luh, a Taiwanese-owned factory in Vietnam, went on strike on demand a 20% pay rise to cope with inflation, and better canteen lunches.

Fig. 17 Female labour at a manufacturing plant for Nike products

Yet, through its range of corporate social responsibility (CSR) programmes, Nike has tried to improve the lives of many in the communities or countries they have factories in. For example, acknowledging that the internal migrants have contributed much to China's economic growth, *Let Me Play in China* sees Nike partnering with a local NGO on empowering migrant youth and providing teaching training, curriculum and sports equipment to use in physical education classes. Since its launch in 2007, the program grew to reach more than 235,000 youth in 360 schools in seven cities (Beijing, Guangzhou, Zhongshan, Nanjing, Chengdu and Wuhan) by the end of 2009. Furthermore, it promotes social understanding between migrants and the urban population by engaging hundreds of university students annually as volunteer PE teaching assistants. The program, and Nike's involvement of renowned athletes such as LeBron James, has raised awareness about the situation for migrant youth and the power of sport to help them.

Economic Impact

The relocation of manufacturing jobs from the US to Asian countries, particularly South Korea and Taiwan, have started since the 1980s, and it has been estimated that this resulted in 65,000 US workers losing their jobs. However, as South Korea and Taiwan saw strengthened workers' unions and raised wages, Nike looked for other locations such as Vietnam, China and Indonesia, to tap on the supply of cheap labour.

Indeed, factories contracted by Nike provided employment for a significant number of locals. As of March 2015, for example: there were 67 factories in Vietnam, with more than 333,000 workers; in China, 182 factories with about 237,000 workers; and in Indonesia, 41 factories with about 177,500 workers. However, Nike has been accused of exploiting and underpaying employees. According to the Campaign for Labour Rights (CLR), a Washington D.C.-based organisation, "most of the shoe workers in Asia are teenagers and unmarried young women from ages 17 to 30. The average worker produces 4.3 pairs of shoes a day, and only gets the minimum wage of US$2.50 a day in Indonesia. The daily liveable wage in Indonesia is between US$4.00 to 4.50, yet Nike still pays minimum wage to the workers who make the shoes that sell for over $100." In fact, in early 2012, an Indonesian trade union managed to obtain a settlement of US$1 million from Nike in compensation

for about 4,500 workers, for almost 600,000 hours of unpaid overtime work at PT Nikomas plant in Serang, Banten province.

The impact of a TNC on host country will partly depend on the nature of the employment generated. The low-skill production work that Nike provides in countries such as Vietnam has particular negative implications for development. Employment will not necessarily be beneficial for workers in terms of pay, working conditions or skills enhancement; the low-tech nature of the work does not hold much scope for useful technology transfer; nor will it bring many local linkages, since few local suppliers are used; trade advantages will be moderate, as the country is mainly used as an export platform and the government may provide tax incentives.

In Oregon, US, where Nike is headquartered, a significant portion of the economy relies on this TNC. Nike is the second largest employer in Oregon. Its expenditures of US$1.15 billion on its Oregon full-time and part-time employees, contract service providers and vendors; its investments in its Oregon facilities; its tax payments to the government, and its contributions to Oregon charities represent nine cents of every dollar of Nike's worldwide revenues. This spending has a multiplier effect throughout the state, resulting in nearly US$2 billion in economic activity in Oregon.

Environmental Impact

Nike's main products are shoes and apparels. The production processes behind these goods involve the heavy use of different materials (e.g. polyester and rubber) and chemicals (e.g. PVC and phthalates). While Nike, through their *Considered Design* concept, has pledged their commitment towards using environmentally friendlier materials and more sustainable practices such as designing for recycling, there exists much criticism on Nike's lack of transparency of the actual range of resources used to make its products, and also how poorly it has ensured that the factories they use comply to the practices. Hence, Nike remains associated with impacting the environment in a negative way.

Environmental NGO released a report *Dirty Laundry* in 2011 which profiles the problem of toxic water pollution resulting from the release of hazardous chemicals by the textile industry in China. The investigations focused on two facilities that were found to be discharging a range of hazardous and persistent chemicals with hormone-disrupting properties. Nike was listed as one of few TNCs which has contracted one of these facilities – Youngor Textile Complex, which is located on the Yangtze River Delta – as part of its production network, and hence is responsible for the increased polluted state of rivers in China. Nike denied that the facility had been contracted for 'wet processes' behind Nike products. But this report had suggested that Nike does not have in place comprehensive chemicals management policies that would allow it to have a complete overview of the hazardous chemicals used and released across their entire supply chain and to act on this information. As brand owners, they are in the best position to influence the environmental impacts of production and to work together with their suppliers to eliminate the releases of all hazardous chemicals from the production

process and their products. Thus, brands such as Nike need to take some responsibility for the use and release of persistent, hormone-disrupting chemicals into Chinese rivers.

Indeed, Nike's inability to ensure that its contracted factories abide by environmentally friendly practices is seen elsewhere too. In Indonesia, it was also found that Nike scrap shoe rubber were not managed according to Nike's publicised waste management policy. Instead of being recycled, factories have sent the scrap shoe rubber various dumpsites to be burned, and these sites could be in villages around the factories. Taking into account the materials that went into making of the scrap show rubber and what eventually gets released with burning, there are clear environmental impacts that would also affect the health of locals, as a result of Nike's production network.

Fig. 19 Scrap shoe rubber from Nike shoes

Fig. 20 Burning of scrap shoe rubber at a rubbish dump

Concluding Remarks

The social and environmental challenges faced by Nike discussed above vividly illustrates the enormous organisational complexity and operating risks faced by today's TNCs when they expand internationally. The lack of adequate management supervision and control systems over its contract factories has underpinned Nike's woes in Vietnam, China, Indonesia and elsewhere in Asia. The influence of its head office clearly diminishes with the number of time zones traversed. What we have here, then, is a case of a global firm finding it increasingly difficult to control and coordinate adequately its constituent elements (most not directly owned) in different continents and regions, with potentially disastrous consequences. However, Nike has exhibited ways it is a positive and powerful influence to countries it operates in too, such as through its impact on the economy of both host and home countries, and also its efforts in improving the lives of many people, especially in the LDCs.