**Case Study – Sector shifts in two countries**

**UK & China**

The relative importance of economic sectors changes over time. As a country develops, the proportion employed in the primary sector decreases and the proportion employed in the secondary and tertiary sector increases. As the economy develops even further, numbers in the primary and secondary sectors fall further. After the tertiary sector becomes the largest employer, so a quaternary sector begins to emerge.

Development pathway explained – The sequence starts as agriculture becomes mechanized, more commercial an shifts away from subsistence farming. This releases labour to take on other forms of work. People are free to move from the countryside and into urban settlements where traditional craft industries are replaced by factories. The wages earned in the factories lead to there being more disposable income and much of this is spent on services. Gradually, the range of services available to people expands and the tertiary sector becomes dominant both in terms of employment and generating economic wealth.

**China – rapidly emerging**

* China is a giant country in terms of its area and its population.
* Its economy has developed rapidly since 1980.
* Deng Xioping moved to wards a more market oreientated system. The end of isolation and the encouragement of FDI. Special economic zones were set up at the coast (SEZs) to encourage TNCs – through tax incentives, cheap labour, good infrastructure & communications)
* It is now the second largest economy in the world.
* China's economy is growing at roughly 8% a year, easily outperforming G7 countries. Economists think it could overtake the United States as the world's biggest economy by mid-century.
* It has a bigger trade surplus with the US than Japan, Asia's last miracle growth story, and last year it displaced Britain as the world's fifth biggest exporter.
* In per capita terms it is still a lower middle income country.
* Secondary sector accounts for half the country’s GDP, but only a quarter of its labour force.
* 1990 – Agri 53%, Manu 13%, services 16%
* 2002 – Agri 44%, Manu 11%, services 25%
* Divide between rural and urban ( rural - 69% Agri & only 7.5% services, whereas urban – 1.8% agri, 19% services)
* Industrial success based on cheap labour and energy.
* Real wages have been static for a decade, but there is no shortage of workers.
* Manufacturers now come here to be near their suppliers and buyers, not because of the tax breaks that fuelled early growth.
* Foreign firms investing in China do so partly to tap its growing consumer market, but overwhelmingly to produce for export
* The wealth created is already beginning to encourage the growth in the tertiary sector.

**UK – post industrial economy**

* World’s first industrial nation. It led the Industrial Revolution.
* 50 years ago – manufacturing produced 40% of the country’s economic wealth and employed third of workforce.
* Today – only 24% wealth and employs only 18% of the workforce.
* This is due to the global shift in manufacturing and the UK has de-industrialised. Many goods once manufactured in the UK are now made in China, India and other countries.
* **Some of the main reasons behind the decline in UK manufacturing industries were:**

**1. Increased competition from abroad** – initially came from countries such as the USA, Germany and Japan and latterly from the newly industrialising countries like Brazil, South Korea and Taiwan. The UK was unable to compete with the cheap labour costs and up-todate manufacturing techniques available in these countries. The availability of cheap labour impacted on industries such as textiles whereas the modern manufacturing techniques impacted on industries such as car manufacturing.

**2. Over-reliance on foreign investment –** the UK has been criticized for being too quick to accept foreign firms instead of investing money in building up its own manufacturing companies.

**3. Problems with trade unions –** trade unions are organisations that are established to represent workers’ rights including rates of pay, working hours and unfair dismissal. In the 1980’s they were seen as having too much power. A series of strikes in the UK, e.g. the coalminers’ strikes of the 1980s, created a negative image of the UK. This made the UK less attractive as a labour market for foreign firms who preferred to locate in countries where trade unions were less powerful or even banned.

* In the space of just five years between 1979–84, the UK lost 25% of its manufacturing jobs.
* Today UK economy is very much service based – provides 80% jobs and creates 75% of the national economic wealth ( this figures include quaternary sector). Hard to distinguish. Guess quaternary 10-15%.
* Agriculture – produces 60% of the country’s food supply. Low labour % due to mechanization and low GDP % due to low price of farm products relative to manufactured goods and services.

**Decline in primary activity – S. Wales**

* The raw materials needed to make iron & steel are iron ore, coal and limestone.
* The early nineteenth century iron industry was located near or upon coal fields, especially those that contained bands of iron ore.
* South Wales valleys were a major producing region. Coal & iron found together in the valleys, limestone quarried nearby, rivers for energy.
* Valley led to coastal ports where products could be exported.
* Industry was centred on places like Ebbw Vale and Merthyr Tydfil.
* 1850 – 35 iron works in the area.
* Whole villages, constructed in linear patterns along the valley floors, were totally dependent upon the local ironworks.
* 1856 – improvement in iron smelting meant that It became economic to manufacture steel rather than brittle iron.
* 1970 – only 2 steel works existed at the coast – Port Talbort and Llanwern – location changed as raw materials had to be imported.
* Iron ore exhausted, only few coal mines open & expensive to extract.
* The valleys went into a cycle of decline – job losses …..
* Llanwern was closed in 2001, due to oversea competition, global overproduction and a fall in the price of steel.

**Changes today – The new South Wales**

* South Wales was in decline – The Welsh Development Agency was set up in 1976 to attract industry to Wales. The region became a Development Area and had help from the government and the EU.
* In the 1980s , lots of companies came to South Wales – 130 USA, 130 EU and 20 Japanese.
* New industry attracted included biotechnology, IT , electronics and financial services.
* Most urban areas in South Wales now have modern business parks.
* Money invested in declining valleys to regenerate them.
* In Ystrad Mynach (valley town) – transformed colliery (Penalta) into a new urban village. Old colliery buildings refurbished in the area.
* Better transport also provided, Country park improved and a new business developments at Tredomen Business park.

**Decline of manufacturing in Newcastle**

* 1500s a commodity was discovered which would carry the name of Newcastle around the world, - coal.
* From this discovery industry began to build up along the river Tyne.
* Newcastle was once famous for its traditional industries of coal mining, ship building and heavy engineering. At the end of the 1800s firms such as Armstrong, Palmer and Parsons supplied countries around the world with ships, turbines and armaments from their works on the banks of the Tyne.
* 1823 George & Robert Stephenson opened the world’s first locomotive engine factory in Newcastle. Also where Stephenson’s rocket was developed.
* As the city of Newcastle prospered during the industrial revolution – developments moved away from the Quayside, causing it to fall into decline.
* Between the 2 World Wars the country was hit by a depression as the industries which it depended on declined – coal mining, engineering, ship building. They also faced intense competition from overseas. Newcastle was badly hit.
* 1978-84 manufacturing fell 43% in Newcastle. Today shipbuilding has almost disappeared and heavy engineering struggles to win orders.
* The parts that have been worst hit are the communities that are located along the banks of the Tyne.

**Impacts:**

* PHYSICAL – Old industrial sites left derelict and polluted by industrial waste.
* ECONOMIC – Unemployment 34% in the West End. Lower Scotswood 50% during the 80s & early 90s.
* SOCIAL – Large number of one parent families.
* Significant crime problem 84 per 1000 households reported burglaries in 1994.
* Crisis point reached in 1991 – rioting broke out in Scotswood & Elswick.

**Changes – Newcastle Today**

Established in 1987 the Tyne & Wear development Corporation ( government funded agency) charged with task of regenerating 50km of riverside in the NE of England.

* Invested millions of pounds acquiring and clearing derelict land, laying on new infrastructure and setting up major schemes.
* From the mid 80s onwards the Quayside has undergone redevelopment as waterside properties became fashionable again. The shift away from the Quayside 130 years ago meant this area was ripe for redevelopment**.**
* Quayside developments include: Newcastle Business park, Newcastle Arena ( Hold sporting events & music concerts), new bars and restaurants opened on the Quayside ( Old fish market turned into Sea Night Club), Old warehouses turned into offices for accountancy firms, 4\* hotels built – Copthorne & Hilton. On the Gateshead side of the river – New Baltic modern art gallery built in old flour warehouse, New Sage music centre.
* Government incentives were also provided for businesses to set up in the NE, which attracted Siemens. Also the Regional Development Agency was set with the task of attracting businesses to the NE region – one success being Nissan at Sunderland.
* Tyneside’s workforce had to evolve, Newcastle becoming a centre of retail & service industries.

**Location of hi- tech industries case study**

**M4 corridor**

**\*High-technology industry** involves a highly-skilled workforce and its products require a high proportion of research and development.

\*High-technology industry is relatively footloose since access to raw materials is not very important. The ‘raw materials’ that are required are usually lightweight electronic components.

**M4 Corridor**

\*England’s ‘silicon valley’.

\*It’s spine is provided by the M4 motorway, which stretches westward from London, along the main railway line to Bristol and Cardiff.

\*Contains well established cities and towns with significant manufacturing, such as Reading ( beer, biscuits & bulbs), Swindon with the railway workshops, Bristol, with its port related industries and Cardiff, port, famous for exporting coal, iron & steel and now home to the Welsh Assembly.

\* 1950s onwards the character of the corridor changed. The M4 corridor was opened and railway line upgraded, plus the population grew, as people moved out of London to seek cheaper & better housing.

\*New industries called hi-tech industries appeared. Firms such as Compaq, NEC and Intel are located there. All business interests firmly in the quaternary sector.

\*Reading is home to a mix of businesses – Microsoft, ING, Direct, Prudential & Ericsson.

**Factors which have encouraged this concentration of hi-tech industries:**

* **Transport & accessibility –** M4 corridor and high-speed railway link between London & S.Wales. Heathrow airport ( Europe’s major airline hub) is an important factor in the equation. The nature of much high-tech activity is essentially international. Both staff and products need to move to London with its government offices and financial institutions are also an advantage.
* **Labour –** the need is mainly for graduate labour. Suitably qualified and experienced workers enjoy large salaries. They can afford to choose here they live. The corridor is able to offer many **attractive residential locations**, for example the Chilterns & Cotswolds.
* **Universities –** many of the companies in the corridor are involved in research and development and for this reason ‘ feed off’ links with universities and research establishments. The corridor contains at least three universities with high research rankings – Reading, Bristol and Cardiff. Not far outside the corridor to the north is Oxford University.
* **Incentives –** firms have been encouraged to set up here by various incentives offered by local government authorities, the UK government and also the EU. The incentives include earmarked greenfield sites at reduced prices and tax exemptions.

**Bangalore, India – Hi-Tech hub**

**\***Bangalore has been called the Silicon Valley of India. Over 200,000 people are employed in the technology sector and this number is expected to rise, which will rival Silicon Valley.

\*Electronics City in Bangalore is India’s first science park. It is home to about 100 companies including Siemens, Hewlett Packard and Motorola. Infoys was the first Indian firm to float on the US Stock Exchange.

**Factors which have encouraged this concentration of hi-tech industries:**

\***Government incentives –** The state government offers incentives, such as reductions in the cost of land & tax incentives to companies which create over 250 jobs.

\***Research centres –** Companies like access to a trained workforce, latest innovation and troubleshooting. The Indian institute of Science and the national Aerospace laboratory are just 2 of many research bodies in Bangalore.

**\* Labour –** Wealth of highly trained graduates.

\***Other companies –** Companies like to cluster. Corporate giants such as IBM & Compaq attract others.

\***Cosmopolitan city –** English widely spoken and a wide range of leisure and entertainment facilities available.

\***Physical environment –** Comfortable climate, with an abundance of greenery. Called the ‘Garden city of India’.

\***Technology parks –** Purpose built offices with appropriate infrastructure available to literally ‘plug and play’.

**Case Study of a Hi-Tech Company**

**Ford, India**

\*The Ford Motor Company is the world’s second largest car manufacturer.

\*Ford employs +300,000 people world wide.

\* Late 1990s – Ford was manufacturing and assembling their cars worldwide, locating new factories in LICs, making different parts for different models, in different countries.

**India**

* 1995 – Went into partnership with Mahindra & Mahindra Ltd in India.
* 1999- opened an integrated hi-tech manufacturing planet 45km north of Chennai.
* The site is huge -140 hectares & can make 100,000 vehicles a year.
* Employs 1,800 people.
* Has 64 Indian suppliers and 33 dealerships in India.
* + half million cars were sold in India in 2001.
* Developed a new car for the India market – Ford Ikon ( higher rook for Turbans and special doors to ensure saris don’t get trapped).

**Why India?**

* It has a huge population +1bn people – so a large market for cars.
* NIC and growing middle class.
* Labour costs much cheaper than HICs.
* English widely spoken and many highly skilled graduates available.
* Government incentives

**People and environment**

* Ford provides jobs and pays its workers more than other workers in similar industries.
* All workers offered training.
* Almost ¾ of the goods and services that Ford India buys, come from India. And 70% of those come from the Chennai area.
* Ford India contributes to development projects. Like a health centre for people around Maraimalai and disaster relief for victims of earthquakes and floods.
* Working towards sustainable use of resources – water and energy.
* Ford India treats all the waste water from its plant and then reuses it. Other waste products are sold and recycled.