Welcome to Jeff’s economic test review :D

Key issues 1 and 2

The Human development index (HDI) measures the level of development in every country, from 0 to 1, with 1 being the highest value. This factors in:

1. A decent standard of living. This has 5 subcategories:
   1. Income: Gross national income ***(GOODS +SERVICES + (EXPORTS -IMPORTS))*** and the Gross national product (includes wealth gained when money comes from other countries for exports) is the value of the output of goods and services produced in a country in a year. Purchasing power parity is an adjustment made to the GNI to account for differences among countries in the cost of goods. Gross domestic product (GOODS + SERVICES) is the value of the output of goods and services produced in a country in a year, not accounting for the money that leaves and enters the country.
   2. Economic structure: Jobs in a country fall into 3 sectors:
      1. Primary sector: jobs that directly extract materials from earth, like farms/mine.
      2. Secondary sector: jobs that manufacture things, like clothes
      3. Tertiary sector: service jobs. Most developed countries have large tertiary sectors, so they make higher average per capita income.
   3. Productivity: Productivity is the value of a product compared to the amount of labor used to make it. The value added is the gross value of a product minus the costs of raw materials and energy. Workers are more productive in developed countries because of their tools.
   4. Inequality adjusted HDI: is an indicator of development that modifies the HDI to account for inequality in a country. If the IHDI and HDI are equal there is perfect equality, if the IHDI is lower than the HDI there is inequality
   5. Consumer goods: wealth from a country used to purchase goods and services, like vehicles, telephones, computers.
2. A long and heathy life: The most important factor is life expectancy at birth. People in developed countries are healthier because there is more wealth provided to care for them.
3. Access to knowledge: contains:
   1. Quantity of schooling: Years of schooling: number of years the average person age 25 or older has spent in school. The expected years of schooling is the number of years that and 5-year-old child will spend in school. The average kid goes to college in developed countries, but won’t finish high school in developing.
   2. Quality of schooling: one factor is the pupil/teacher ratio. Another is the literacy rate, which is the percentage of a country’s people that can read and write.

The gender inequality Index measures the extent of each country’s gender inequality. The higher the GII score, the greater the inequality. (0 to 1). 3 factors:

1. Empowerment: The ability to achieve improvements to their own status. Measured by:
   1. The percentage of seats held by women in the national legislature
   2. The percentage of women who have completed high school
2. Labor force: The female labor force participation rate is the percentage of women holding full-time jobs outside home. It is 75% in developed countries and 65% in developing.
3. Reproductive health: Is based on:
   1. Maternal mortality ratio: the number of women who die giving birth per every 100,000 births. It is 15 to 100000 in developed countries and 140 in developing
   2. Adolescent fertility rate: the number of births per 1000 women ages 15 to 19. It is 20 out of 1000 in developed countries and 60 in developing.

Key issues 3 and 4

Most of the energy resources used by humans are nonrenewable

Most of the world’s energy consists of coal, petroleum, and natural gas. These are also known as fossil fuels, which is an energy source formed from the residue of buried plants and animals.

Developed countries have more demand over fossil fuels, and some developing regions have large supplies of them.

Demand for energy comes from businesses, homes, transportation

Renewable energy sources have an unlimited supply and are not depleted when used, nonrenewable energy forms so slowly that it cannot be renewed

A proven reserve is the supply of energy remaining in deposits that have been discovered. A potential reserve is supply in deposits that are undiscovered but are thought to exist.

OPEC was formed in 1950 by developing countries to gain more power over their resource.

The 2 largest alternative energy sources are nuclear, which is not renewable, and hydroelectric, which is. Nuclear energy can Have potential accidents, radioactive waste, it can form bomb material, it has limited reserves of uranium, and there is a high cost.

The renewable sources:

Hydroelectric power is generating electricity from the movement of water, it is renewable. Biomass is fuel derived from plant material and animal waste. Biomass sources include wood and crops. Wind power can also have moving air turn turbines. Geothermal energy is energy from heated steam from water that is underground, commonly found near where plates meet. Nuclear fusion is power created when the fusing of hydrogen atoms to form helium happens.

Solar energy is the ultimate renewable resource for sustainable development. It contains: passive solar energy, which harness the power without special devices, so these are like windows that heat and light up buildings. Active solar energy collect solar energy and coverts it into heat energy or electricity.

Developing countries face some obstacles to development, including: Adopting policies that successfully promote development, and finding funds to pay for development.

The 2 paths to development:

1. Self-sufficiency: countries encourage domestic production of goods, discourage foreign ownership of businesses and resources to protect their businesses. The key elements are that barriers, such as tariffs, quotas, and licenses to restrict the number of legal importers block the import of goods from other places. Small businesses are nursed to success, investment is spread equally, incomes in the country side keep pace with those in the city.

The challenges here are that the government protects inefficient businesses (businesses don’t have competition so they don’t have incentive to improve it), and a need for large bureaucracy (lots of room for inefficiency, abuse, and corruption.

2. International trade path: Countries open themselves to foreign investment and international markets. A country needs to identify important resources that it has and needs to sell it. The sale of more resources creates money to fund other development. There are the four Asian Dragons, consisting of South Korea, Singapore, Taiwan, and Hong Kong, which promoted manufactured goods (thanks to FDI), and the Petroleum rich Arabian Peninsula states, making use of the petroleum they had.

The main challenges are that there may be uneven resources distribution (selling weak priced items), increased development in developed countries (less goods for own people), and market decline (products can fall dramatically in price).

The Rostow model was a model that showed the stages of development a country needed to go to utilize the international trade path. The stages:

1. Traditional society: lots of people doing subsistence agriculture, wasting resources on military and religion
2. Preconditions for takeoff: country starts to use new tech and infrastructure; plantation agriculture is used more.
3. Takeoff: lots of industrialization, lots of manufacturing in urban areas
4. Drive to maturity: more modern technology, more industries, workers are more skilled
5. Age of mass consumption: economy shifts from stuff like steel and energy to consumer goods like motor vehicles and refrigerators, more people in the tertiary sector, exploit LDCs

Generally international trade has been the preferred method for development.

The World Trade Organization (WTO) helped promote the international trade development model, reducing barriers to international trade, reducing or eliminating restrictions on the international movement of money, and enforcing agreements.

Developing countries lack money to fund development, so they obtain financial support from developed countries. An investment made by a foreign company in the economy of another is known as a foreign direct investment. The major loans are made by the World Band and International Monetary Fund.

The Stimulus strategy fights economic downturn, saying governments should spend more money than they collect in taxes. People should be put to work on infrastructure

The austerity strategy also fights economic downturn, the government should sharply reduce taxes so the economy can be revived by spending their tax savings. Government should try to not increase debt

Fair trade is a variation of the international trade model of development that promotes sustainability. Fair trade is commerce in which products are made and traded according to standards that protect workers and small businesses in developing countries. The developing country gains more money for the product, workers are treated fairly, and microfinance is utilized

The progress in reducing the gap in level of development between developed and developing countries are based on: infant mortality rate, life expectancy, GNI per capita.

Millennium development goals were some goals set by the UN to reduce disparities between developed and developing countries.

TLDR of the ROSTOW mod



The periphery are the least developed countries and are exploited by the core for labor, resources, and agriculture, but they depend on the core for investment.

The semi-periphery are the intermediate states that are exploited by the core, but exploit the periphery. These are expanding manufacturing.

The core are the exploiters, using military, social, and economic power to enforce inequality.

This was created by Immanuel Wallerstein

Key issues 1 and 2

The industrial revolution was a series of improvements in industrial technology that transformed the process of manufacture. It originated in northern England and southern Scotland. Industry before was usually a cottage industry system, which is industry in a person’s home. The industrial revolution helped population growth, revolutionized the economy, society, and politics.

1. Watt’s steam engine heated up Iron, heating it up constantly.
2. Coal replaced timber for heating up ovens.
3. Railroads and canals improved transportation.
4. The cotton gin and reapers allowed for more textiles, and Richard Arkwright invented machines that untangled cotton.
5. Chemicals were created to bleach and color cloth. Garbetts made on of the first dying industries.
6. Nicolas Appert figured out how to can foods in glass bottles for food processing.

Industry is concentrated in EU, NA, and East Asia.

There are 2 determining factors of industry:

Situation factors: revolve around transporting materials to and from a factory. (Weber’s least cost theory)

Site factors: result from the unique characteristics of a location

* Situation factors:

**Proximity to inputs**: how close the factory is to their raw materials. These are also called a bulk-reducing industry, which is an industry where the inputs weigh more than the final product. These industries are located near the inputs.

Generally, these consist of alloys and minerals:

1. Minerals: minerals are either nonmetallic or metal. Metallic minerals are attractive to machine making, since they are malleable, and ductile. Nonmetallic consist of building stones and diamond
2. Alloys: there are 2 kinds: ferrous and nonferrous. Ferrous contains iron and nonferrous does not

**Proximity to market**: if the cost of transporting raw materials to the factory is less than the cost of transporting the final product to consumers, the factory will be closer to the market. These are also called a bulk-gaining industry, as the final product gains more weight through production. Separate parts are brought together to form one bigger product.

Some examples are fabricated metals and beverage production.

Specialized industries:

Single Market Manufactures are specialized into making/mass producing just one or two things are usually close to their consumers. An example would be manufacturers of buttons, zippers, clips. Another would be factories manufacturing parts of motor vehicles.

Perishable product factories must be located near the market. Bakers and milk producers must be close for rapid delivery into the market to stop spoiling. Newspapers are also perishable products due to the information on it.

Transportation:

1. Trucks: cheap, fast short distance delivery
2. Trains: destinations that take longer than one day. Long time to load, but doesn’t need rest
3. Ships: over sea transport and long distance, can go to other countries
4. Air: very expensive, can reach destination quickly. Used to deliver small expensive packages.
5. Pipeline: liquids and gas

The areas for each step of the production may vary, so the optimal location changes. An example of this is copper production. The first 3 steps are near the inputs, the last one is next to the markets. The steps:

1. Mining
2. Concentration crush and grind the ore to fine particles and mix them with water and chemicals to filter it.
3. Smelting filters it some more
4. The last step: the copper is refined in refineries.

Steel production needs 4 outputs: iron ore, coal, limestone, and water.

Site factors:

1. Labor is the most important site factor. Lowering labor costs is essential. Labor costs take up 11% of all manufacturing in the USA.
2. Capital: manufacturers need to have money to start their business. A business would need to borrow money from a bank.
3. Land: suitable land must be found, and there also needs to be enough space. Modern factories are typically built in suburbs.

Textiles: textiles or woven fabrics and apparel uses lots of low wage and less skilled workers. 3 steps:

1. Spinning fibers and other steps to make the yarn
2. Yarn is knitted and weaved into fabric as well as coloring it
3. Fabric is sewn and cut into clothing and other apparel.

Agglomeration: the clustering of industries

Weber’s theory of industrial location:

Industrialists choose location based no minimizing costs and maximizing profits. It assumes that the market is fixed, perfect competition exists and transportation costs are proportional to weight and distance. Location is the most important part of this. The weight and distance are all very important factors. Because high labor costs reduce profit, a business can locate farther away from inputs or market if cheap labor can make up added transportation costs.

Key issues 3 and 4

Air pollution is the when the concentration of important trace gasses in the atmosphere are at a greater level than the average. Most air pollution is generated from factories and power plants as well as motor vehicles.

Ozone damage: The ozone layer is part of the atmosphere and it absorbs harmful UV rays from the sun. If this was not here it would cause plant damage and skin cancer. It has decreased in size due to chlorofluorocarbons.

Air pollution happens at a global, regional, and locale scale, and at a global scale contributes to global warming.

- Global scale: The average temperature has increased by 2 Fahrenheit since 1880. Burning fossil fuels causes this by releasing carbon dioxide into the air, trapping heat inside the earth, causing the greenhouse effect. A few degrees can melt a lot of ice and raise the sea level by many meters, flooding cities and changing climates, with deserts with rain and some wet places dry.

- Regional Scale (country): a region’s vegetation and water could be damaged by air pollution. It also causes acidic rain, which is deadly to plants, fish, and wildlife. Acidic rain can appear far away from the factories that cause it.

- Local Scale Air Pollution: Carbon monoxide reduces the oxygen level in blood, impairs vision and energy. It threatens those with breathing problems. Hydrocarbons form photochemical smog, causing respiratory problems, stinging eyes, and a very bad haze over cities. Particulates are dust and smoke particles, including the smoke from factories or exhaust from trucks. Pollution occurs when there’s no wind, clear skies and a temp inversion, Wind spreads the pollution, sunlight shines onto the smog. Temp inversions cause pollutants to be trapped inside the warm air. The most polluted cities are in Iran (has 4) and India (has 1)

The average person in the US has 4 pounds of waste a day.

- Sanitary Landfill: very common, half of the waste is trucked to fills and buried under soil, but this is declining, due to alternatives like incineration, which can also cause energy.

- Hazardous wastes: this is to get rid of harmful substances like mercury, cadmium, and acids. A lot of this is released into the environment. They should be contained in a protective container in order to prevent contamination.

Water Damage: Many manufactures need water. Water has many purposes, cooking, thirst, etc. People use a lot of water, but it can be polluted easily. There are 2 types of water pollution: Point source and nonpoint source.

- Point source: These are small in quantity and easy to control. Manufacturers like steel and chemicals may accidently mix with the water and contaminate it. Municipal sewage is when the water goes to a municipal plant after being used by a person and is cleaned off and dumped into a lake. Developed countries have a hard trouble cleaning their water.

- nonpoint source: comes from a large area and is harder to control, because of greater quantities. Fertilizers/pesticides may spread, going into rivers or lakes. This pollutes rivers and lakes, killing many fish. The Aral Sea is an example of this, it was a large lake, but it has almost dried out.

Fish die because the waste in the water blocks oxygen to the fish, making them die.

In the US, industry is moving northeast to the south and west. In EU, they are moving to economically stressed areas.

There are less manufacturing jobs in the USA now. Industry in the south has grown, because of the setback it had in the civil war.

A “right to work law” helped bait in workers to the south. It says that a factory must maintain an open shop (enables people to work without joining the union) and no closed shops (forces people to join the union in order to work in the factory) are allowed.

Transnational corporations use low wage workers. If their process can be -performed by low skilled and low wage workers, the factory might be based in a developing country. The low labor costs balance out the high distance fees. This is called outsourcing, which is turning over much of the responsibility for production to the suppliers, the opposite of vertical integration (company controls all production)

The North American Free Trade Agreement (NAFTA) eliminated trade barriers between Mexico and other countries in North America. Since it is the lowest wage country close to the US, Mexico attracts labor intensive industries close to the USA.

A banking firm called “Goldman Sachs” made the acronym BRIC to indicate the countries expected to dominate in global manufacturing in the 21st century. Brazil, Russia, India, and China are the 4 BRIC countries. These countries are expected to have very high GDP. South America was asked to join them, making it BRICS, but it can compete with the other four.

Most industries are looking for skilled workers now. Factories usually have workers do one thing repeatedly, called mass production or Fordist production. Nor industries use the post-Fordist production. The steps: (1) Workers are put into teams. (2) A problem is addressed. (3) Factory workers are treated alike. (4) Skilled operators use machines. These machines need to have highly skilled workers to operate.

Just in Time Delivery: Proximity to the market is very important for manufacturers. Just in time delivery utilizes that factor. Just in time delivery is the shipment of parts and materials and they arrive just moments before they are needed. This enables less money to be spent on wasteful inventory. The size of the factory is also decreased. There are 3 disruptions: (1) Labor unrest like a strike can stop production (2) Traffic can delay deliveries to just in time manufacturers. (3) Natural hazards like blizzards and floods can close roads.

Levels of development

- First World: Industrialized and service-based economies, high level of productivity and standard of life

- Second world: communist countries like Cuba and North Korea

-Third World: agricultural and resource based economies. Underdeveloped states

- Fourth world: third world states that have faced economic crisis that immobilized the economy

- Fifth World: Third-World states that lack a functioning economy and have no government.