SimEconomy

Globalisation, living conditions in industrial and emerging nations

What does it mean? The term globalisation describes the increasing international coherence and enhancement of global relationships, e. g. in business, due to advanced communication technology. Among the countries a considerable deviation in living conditions can be observed. The emerging nations show low wages as well as low cost of living while in the developed nations high wages move in line with the cost of living. Therefore companies start shifting their production to cheaper countries in terms of wages. However, the companies have to bear in mind that the quality of education and production technology in developed countries are usually better.

How is that illustrated within the simulation? The production is based at two different locations. One production area is located in Europe while the other one is placed in Asia, where the wages and cost of living are likely to be cheaper. The different quality in technology is illustrated in the kind of employed tools: The Asian workforce has to use nail scissors and unhandy coloured crayons while the European employees use normal ones. This is likely to have an impact on the quality of produced goods.

Division of work

What does it mean? Today, the production of goods is usually not done by one person but rather split into separate pieces which are done by specialised employees each.

How is that illustrated within the simulation? Up to the actual sale, the goods run through different production steps: The employee produces the mobile in several steps, the owner controls the process and sells the mobiles to the intermediary who is responsible for the import while the retail chains are in charge of selling the mobiles to the consumers. Thereby e. g. the employee finds out that dividing the production of the mobiles in different steps (one employee paints, the other cuts) might increase the quantity of produced mobiles.

Demand and supply

What does it mean? In a market suppliers usually want to sell their goods at a maximum price while consumers want to buy those at a minimum price. In order to close a purchase agreement, the parties need to engage in negotiation. Usually the higher the price, the more are the suppliers offering and the less are the consumers demanding. If the market is in equilibrium, supply and demand are the same at a certain price.

How is that illustrated within the simulation? This can be observed at several stages within the simulation: The negotiation of the wages between the workforce and the owner, the negotiation of the price between the owners and the intermediaries as well as between the intermediaries and the retail chains.

Economic cycle

What does it mean? The condition of the whole economy of a certain country as well as the global economy changes year by year. This process is called economic cycle. Within a boom in such cycle, the quantity of sold products increases, unemployment decreases and profits of the companies increase. In a depression, the quantity of goods sold declines, unemployment increases and profits decline.

How is that illustrated within the simulation? The quantity of sold mobiles fluctuates during the simulation. During the first year a boom is simulated. The retail chains are hardly able to meet the demand. Within the following years, the demand of consumers weakens. The consequences are depending on the reaction of the different parties. An increased price competition is likely as well as high losses for the retail chains and decreasing wages for the employees.

Fixed vs. variable costs

What does it mean? Certain costs in companies are depending on the quantity of production. Those are e.g. costs for material and are called variable costs. Costs which are independent of the produced quantity are called fixed costs. Those are e.g. the rent for the production facility or the wages. The different kinds of costs have an impact on the way products are priced.

How is that illustrated within the simulation? The producers as well as the retail chains have both fixed and variable costs. So if the owners want to determine the minimum price they should charge for their mobiles they have to consider the variable costs per unit as well as the fixed costs per unit, which decline with amount of sold goods. The intermediaries have just variable costs which makes calculating easier and less risky.

Learning curve effect

What does it mean? The learning curve effect is an important concept within production: The more goods have been produced in the past the more efficient becomes the production. This leads to decreasing costs per unit.

How is that illustrated within the simulation? The total quantity of mobiles each employee produced during the simulation is constantly increasing. Thereby they become more and more experienced in cutting and painting and thus the production speed is accelerated. Therefore the owner is able to sell more goods which can be sold at a lower price as the fixed costs are distributed over higher quantity of goods.

Illegal and questionable business activities

What does it mean? Not all parties stick to the rules which were set up to protect the function of markets. Forbidden are e. g. cartels. Those are agreements between firms. Cartel members may agree on such matters as price fixing, total industry output, market shares etc. Thereby they are illegally discriminating other parties, esp. the consumers.

How is that illustrated within the simulation? Possibly some players have acted in a way which is forbidden in reality. Thus some player might feel discriminated by these activities. Employees might have gone on with the production through the break which might be seen as illicit work. Also the intermediaries might have fixed the prices and thereby exploited the retail chains. There are various examples…

Inflation

What does it mean? Inflation means a continuous increase in prices. This happens usually, if the amount of money increases quicker than the value of the produced goods. For measuring this effect an index is employed which is based on the cost of living. Usually a basket of goods of an average household is priced regularly in order to measure the inflation rate.

How is that illustrated within the simulation? The increase in prices is illustrated by the yearly increase of the cost of living for the employees. They need a higher wage each year in order to buy the same goods.