

There are large differences across countries in...

- a. absolute and relative productivity levels (Ricardian model)
- b. supplies of inputs that are useful for only some goods and services (Specific Factors model)
- c. endowments of general factors of production (Heckscher-Ohlin model)
- d. regulation of labor standards and the environment
- e. savings and investment rates (the balance of payments)
- f. the availability of particular types of differentiated goods (monopolistic competition model)
- g. experience or output levels for industries with increasing returns to scale (strategic trade)

These differences lead to differences across countries in **autarky** prices. (Autarky prices are the prices that goods, services, and factors of production sell for in a closed economy.) One of the main things we have focused on in this class is how the above differences across countries lead to differences in autarky prices.

Once countries open their markets to exchange, these autarky price differences create **arbitrage** opportunities in which profit maximizing entrepreneurs can move *something* in order to profit from the difference. What something?

- a. merchandise or services (international trade)
- b. labor (international migration)
- c. capital (international investment)
- d. ideas (technology transfer)

In some instances, one type of flow is a close substitute for another type. If autarky differences are caused by differences in the supply of unskilled labor, money can be made either by unskilled labor migrating, or by firms producing goods using unskilled labor in countries where it is abundant and exporting it to countries where it is scarce. Pharmaceutical companies can export finished drugs, or they can export the molecular designs (and patents) for those drugs to another country where they can be produced.

This process of arbitrage often leads to **convergence**. The availability of particular technologies and products becomes more similar (you can get McDonalds or ipods or penicillin anywhere). The supply of goods (including supply originating both from domestic and foreign sources) becomes more similar. This causes the prices of factor inputs to become more similar.

Because trade is based on mutual exchange, countries as a whole are almost always better off under free trade than under autarky. This is for the same reason that you are better off specializing in a single

profession, selling your labor services, and in turn buying medical help, food, clothing, and entertainment from other specialized persons.

Some caveats...

A country as a whole may gain from trade but that does not mean that every person within a country is better off, or that the gains from international exchange are freely shared.

- There are some firms (or persons) who provide resources that are scarce in a closed economy. This scarcity allows them to command high returns. But when opening up to the rest of the world, scarcity is measured relative to the world as a whole. For example, workers with less than a high school education are scarce in the US, but abundant in the world as a whole. These workers and firms will tend to do better when they don't have to compete against the entire world.
- Conversely, some firms (and persons) provide resources that are very abundant in the closed economy and that abundance prevents them from earning high returns. But measured relative to the world as a whole they are in scarce supply. These workers and firms will tend to do better when they are able to sell their services globally.
- Understanding that there are winners and losers from globalization provides insights into why some people might dislike it and pursue policies opposed to it. They might be motivated by self-interest (I don't care about national income; I care about my income); or they might be motivated by broader distributional concerns. If free trade with China earns Bill Gates \$5 billion but reduces the wages of 4 million unskilled workers by \$1000 each, there are still gains from trade, but they are very unevenly shared.

Countries may be better off under free trade than under autarky, but under certain circumstances partially (but not completely) impeding trade can raise incomes still further. This works in one of two ways.

- A large country may be able to exercise its own market power on world markets by using tariffs to lower domestic demand, thereby lower world demand, and shift the terms of trade in its favor (the optimal tariff argument)
- A country may be able to help its own firms exploit their market power (strategic trade policy and the infant industry argument) if production is subject to large increasing returns to scale.
- These policies work by deliberately hurting consumers domestically (thru higher prices) in order to create a situation in which either the government treasury or domestic firms can profit. They only work if they are done just right, and economists are generally skeptical of the ability of government bureaucrats to pull that off. And they only work if foreign countries do not retaliate.

Unfair Trade

Firms that lose out in international competition often make the following claim: if I had competed on a level playing field I would have done just fine. But I was competing in the presence of unequal market regulation. I'm all for trade as long as its "fair".

If you unpack that argument there is often a kernel of truth of the claim, but the policy conclusion is typically different from that offered by these firms. It is undeniably the case that governments can tilt the playing field

- a. tariffs raise the price of foreign goods relative to domestic goods in their home markets
- b. subsidies lower production costs (and therefore prices charged) for some firms, both in their own domestic markets as well as in foreign markets.
- c. governments can choose not to regulate environmental emissions, lowering costs for firms that are not subject to regulation.
- d. governments can refuse patent protection for intellectual property, only loosely enforce patents already granted (as in the case of DVD pirating), or use their role as a single very large purchaser of some products (military hardware, pharmaceuticals) to negotiate lower prices.

In all of these cases, firms can be disadvantaged by government policies, so from their perspective the exchange really is an uneven playing field.

- In several of these cases ('a' and 'd' in particular), policies not only hurt firms but hurt the economy as a whole. As a result, trade institutions such as the WTO exist to create international agreement that these policies are mutually harmful and should be eliminated. In "easy" cases like tariffs, much progress has been made. In "hard" cases like intellectual property protection and pharmaceutical pricing, there is a lot of work to be done.
- In some of these cases ('b' and 'c'), even though particular firms are hurt by the unlevel playing field their country as a whole can be better off. The combination of strict regulation of local environmental damage and free trade can be especially injurious to polluting industries. But trade in this instance can result in a dramatically cleaner environment at very low cost since the environmental damage is experience abroad. Similarly, foreign production subsidies can hurt already struggling import competing industries, but still create benefits to consumers large enough to offset these costs.