<u>Trade Policy Controversies (2/29/2012)</u> Econ 390-001

<u>Definitions</u>

- ***externality*** – benefits or costs that accrue to parties other than the one that generates it
- ***strategic trade policy*** – government policy to give a domestic firm a strategic advantage in production
- ***beggar-thy-neighbor policy*** – increase own welfare at another country's expense
- ***pollution haven*** – an economic activity subject to strict environmental controls in some countries is moved to other countries with less strict regulation

<u>Principles</u>

- An activist trade policy usually means export subsidies or general subsidies to exporting industries.
- Activist trade policies are justified using a market failure argument
    - externalities
        - positive
            - appropriability problem
            - e.g., technology
        - negative
            - environmental damage
    - monopoly profits
- Firms that invest in new technology create knowledge that other firms can use without paying for it.
    - This is an appropriability problem: an externality in which marginal social benefit of investment is not represented by producer surplus.
    - Governments may want to actively encourage investment in technology when externalities in new technologies create a high marginal social benefit.
- Problems with intervention
    - Can (or will) governments to subsidize the right activity?
        - Much activity by high tech firms does not generate knowledge.
            - e.g., equipment purchases, salary for non-tech workers
    - Knowledge & innovation can be created in non- high tech industries.
    - It's difficult to measure the marginal social benefit of externalities.
        - So it's hard to know by what amount activities ought to be subsidized.
    - Externalities can also occur across countries.
        - No individual country would have an incentive to subsidize industries if all countries could take advantage of the externalities.
- The case for government subsidizing technology is quite dubious given those problems.
- The U.S. subsidizes R&D through the tax code instead of subsidizing specific industries.
    - Research and development expenses are tax deductible.
- In contrast, Japan deliberately promoted key industries.
    - 1980s: fear Japan's dominance of RAM market would lead to dominance of all semiconductors.
    - But Japan did not takeover all semiconductors & South Korea challenged its RAM dominance.
- The decline in U.S. employment in the production of information, communication, and technology goods and large U.S. trade deficits in those goods have renewed fears about U.S. high tech industries.
    - But innovation in the U.S. + manufacturing in low cost countries isn't really a problem.
- More generally, decline in manufacturing employment is not a bad thing.
    - Although manufacturing employment is down, manufacturing output continues to rise.
        - Technology makes each worker more productive (machines replace workers).
    - Additionally, there is nothing inherently better about manufacturing jobs.
        - As manufacturing jobs decline, service jobs rise.
        - Service jobs tend to involve more education, less physical labor, and higher salaries.

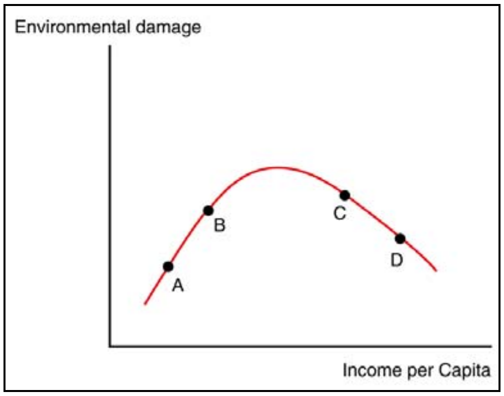
- Imperfectly competitive industries are typically dominated by a few firms with monopoly profits.
    - But government subsidies can shift monopoly profits from a foreign firm to a domestic firm.
- Brander-Spencer analysis (strategic trade policy with game theory)
    - Setup
        - Two firms compete in the international market but are located in different countries.
        - Each firm's profits depends on the actions of the other.
        - Each firm decides to produce or not depending on profits.
    - Insights
        - The predicted outcome depends on which firms invest/produce first.
        - If Boeing produces first, then Airbus won't produce.
        - If Airbus produces first, then Boeing won't produce.
    - Twist: strategic trade policy in the form of a subsidy
        - A subsidy(+25) by the European Union can alter the outcome.
            - Makes it profitable for Airbus to produce regardless of Boeing's action.
            - Boeing will then be deterred from entering the industry.
        - The EU subsidy of 25 gives Airbus profits of 125.
            - Here the subsidy raises profits more than the amount of the subsidy.
            - This is due to its deterrent effect on foreign competition.
- Criticisms of strategic trade policy
    - requires too much information about firms
    - foreign governments could retaliate
    - manipulable by politically powerful groups
- Compared to rich-country standards, environmental standards in developing countries are very lax.
    - Some oppose free trade because of increased production increases in these countries.
- Environmental activists want environmental standards to be part of trade negotiations.
    - But developing countries oppose such standards.
    - Standards can be used as an excuse for protectionism.
    - Resentment: developed countries such as the United States had lax environmental standards during their growth, but now want to make growth harder for developing countries.
- Environmental Kuznets curve
    - As poor countries grow richer they produce more and can consume more.
        - Increasing environmental damage (left side of curve).
    - But as countries grow richer, they want to pay for more environmental protection.
        - Reducing environmental damage (right side of curve).
    - The environmental Kuznets curve shows being green is a normal good.
        - People demand more of it as income goes up.
        - Best way to improve environment long term is to increase real incomes until all are rich.
- Pollution havens
    - Evidence shows the pollution haven effect on international trade is relatively small.
        - Production that seems to move for pollution havens more often attracted to low wages.
    - To the extent that pollution is limited to a country, it isn't other countries' problem.
        - When it causes a negative externality for others, include it in trade negotiations.
        - Air pollution in Mexico City is a problem for Mexico, not the United States.
    - A better case can be made that global warming affects all countries.
        - Unilaterally limiting carbon emissions from the U.S. would have little effect because production would shift to other countries (like China) in a pollution haven effect.
        - Only taxes or tariffs applied to the whole world could effectively curb it.
        - Cure may be worse than disease: lower growth rates (e.g., right side of Kuznets).

TABLE 12-1 Two-Firm Competition

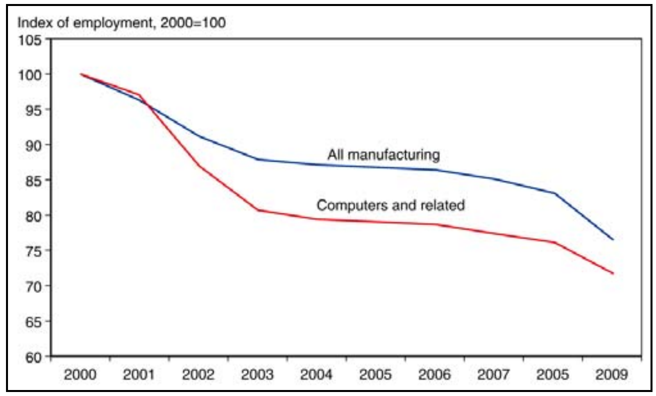
Boeing \ *Airbus*	*Produce*	*Don't produce*
Produce	–5 –5	0 100
Don't produce	100 0	0 0

TABLE 12-2 Effects of a Subsidy to Airbus

Boeing \ *Airbus*	*Produce*	*Don't produce*
Produce	20 –5	0 100
Don't produce	125 0	0 0



Environmental Kuznets curve



manufacturing jobs in the U.S. by year