Arguments For and Against Protection

- “First-best” arguments for trade protection
- “Second-best” arguments for trade protection
  - Distortions may create a case for trade protection
  - The “Specificity Rule”: Where to act to correct a distortion?
  - Distortions in international trade, and use of trade policy to offset distortions
    - Infant industry argument
    - Senile industry and adjustment assistance
    - Infant government / tariff revenue argument
    - Others: National defense, income redistribution, ...
- Political economy of trade policy

The First-best World

- Conditions of Pareto Optimality (Chap1-2, p.11)
  - MRT (in production) = MRS (in consumption) = TOT (relative prices)
  -⇒ No marginal changes in production or consumption can further improve welfare
  - in Lindert/Pugel:
    - MC (private marginal cost) = MB (private marginal benefit) = P (price)
- When externalities or spillover effects are possible
  - Add two additional conditions:
    - SMB (social marginal benefit) = SMC (social marginal cost) = MC = MB = P
- Taxes are another distorting effect
  - Taxes to achieve economic / social objectives
  - Taxes (subsidies) on production and/or consumption
The “First-best” World and Trade Policy

- In “First-best” world, free trade is the optimal policy
- Assumptions about the “first-best” world:
  » Private demand and supply curves represent social benefits and costs ⇔ no externalities or spillover effects
  » No adjustment costs for either capital or labor
    - Labor can move without cost from farming to textiles (and back)
    - Capital can move at no cost from textiles to farming (and back)
  » Even if there were uncertainties regarding future technology or future demand patterns, no adjustment costs ⇒ always producing the right amount with the right technology
- Free-trade achieves its potential as first-best because winners can compensate losers to make them as least as well off compared to no trade

Types of Distortions and Externalities (that we’re likely to find in the real world)

- External Costs
  » If private producers create pollution (social cost), too much private production (SMC > P)
- External Benefits
  » If private producers provide employee training (social benefit), too little provided (SMB > P)
- Distorting Tax
  » P(1 + tax) > SMC; Producers only receive “P” ⇒ too little supplied
- Monopoly Power
  » P>MSC; not enough demanded, monopolist price is too high
- Monopsony Power
  » P<MSB; not enough (labor) supplied
Other Departures from First-best World
(that we’re likely to find in the real world)

✦ Adjustment costs
  » Laborers cannot move costlessly from one industry to next
    ◆ Costs of re-training
    ◆ Costs of re-location
    ◆ Higher personal utility working in one industry (farming) than another (autos)
  » Capital cannot move costlessly from one industry to next
    ◆ Costs of tearing down and relocating factories (putty-clay)
    ◆ Technology (patents) not freely available

✦ Uncertainty costs
  » Adjustment costs for labor and capital may be wasted if underlying shift is temporary, or of unknown duration

Theory of the Second Best

✦ Theory of the Second Best
  » When two sub-optimal situations are compared, there are no general rules for judging which is better than the other

✦ “Second-best” policies
  » So named because they may add other distortions to the economy and/or not deal with the distortion directly (the specificity principle)

✦ The “optimum tariff” is a “first best” policy because it deals directly with the foreign distortion (however, it is first best conditional on no retaliation)
“Second-best” Arguments for Trade Protection

- When distortions already exist, another distorting policy (tariff) may be welfare improving
  - Helping to close in on Pareto optimality:
    \[ P = MB = MC = SMB = SMC \]
- The “Specificity Rule”
  - Intervene at the source of the problem. It is usually more efficient to use policy tools closest to the source of the distortion you are trying to correct.
  - For example:
    - If auto production too low, subsidize production
    - If workers are poor, supplement workers’ income
    - Tariff produces one good effect, but often has other bad (unneeded) effects

Promoting Domestic Production with a Tariff

- Recall Figure 7.4 and impact of 10% tariff on bicycles
- Cost to importing country is
  - \[ b + d \] deadweight production and consumption losses
  - Assumes government collects tariff revenue \( c \)
- If objective is to promote production (not reduce consumption) then area \( d \) may be unnecessary
- If so, tariff is a second-best policy to boost domestic production
Promoting Domestic Production with a Subsidy

- By offering domestic producers a subsidy, production ↑
- Suppose subsidy is $30/bike
  » Supply curve ↑ to $S_d$
  » Domestic production ↑ to $S_1$
  » Consumers face $P_m = $300
  » Consumers import $D_0 = 1.50$ mm
- Cost of the subsidy
  » Gross cost = $30 \times (S_1 - S_0)$
  » Net cost = $b$
- What is smallest subsidy to achieve production ↑ to $S_1$?
- How to administer subsidy?
- Why isn’t subsidy used more?

Non-Economic Arguments for Protection

- National defense
- Minimum production level (e.g. steel, rice, …)
- Maximum consumption level (e.g. luxury goods)
- Self-sufficiency (e.g. in oil or energy)
- National presence in critical industries
  » High-tech, airlines, communications, …
- Using tariffs to achieve the above objectives (and others) are second-best policies compared with production subsidies
The Infant Industry Argument

Before the tariff, domestic production is zero as world price < S_d(t1). Consumers import S_5.

With the tariff
- Domestic production ↑ to S_1
- Consumption ↓ to S_4
- Total national cost C + D

Over time, industry matures, becomes more cost efficient
- Supply curve shifts to S_d(t2)
- Domestic production ↑ to S_3
- Consumption remains at S_4
- Total national cost: B + D - S

Why is S a benefit?

Criteria for protection:
- S > 0
- S > B + D
- Present value of gains over time (S-B-D) > Present values of costs over time (B+D)
- Social rate of return on this investment exceeds the return on other investments

To be at all credible, infant industry argument must assume that industry matures and no longer needs protection

When to remove infant industry protection?

As usual, production subsidy dominates tariff
The Senile (Dying) Industry Argument

- Similar to infant industry argument because industry depends on tariff protection for its survival
- Elements of the argument for tariff protection
  - Social marginal cost of free trade (and letting industry die) much greater than private MC
    - Workers in the industry have no alternative employment and cannot be re-trained
    - Capital cannot be transformed for another use
  - Nation saves by retaining tariff and avoiding shut-down costs
- On the other hand:
  - Subsidy to industry dominates a tariff
  - Adjustment assistance to industry and workers could benefit
  - Why support only those made poor through trade?

The Infant Government (Revenue) Argument for a Tariff

- For some governments, few alternatives as source of tax revenue
  - High costs of administering individual or corporate taxes + incomes may be low
  - Low costs of monitoring borders and ports
- If these conditions are met, then a tariff may be the best policy tool for an infant government to raise tax revenue
Political Economy of Trade Policy

✦ From a welfare standpoint, we showed that
   Subsidy > Tariff > Quota > VER
✦ However, the real world often uses these in reverse
   VER > Quota > Tariff > Subsidy
✦ Why do barriers to free trade remain?
   1 Because of a failure in economic education?
   2 Because individuals and groups find it in their self-interest or in the social interest to provide trade protection to certain groups or industries?

Economic Self-Interest and Trade Policy

✦ If income redistribution is costless, voters favor free trade whether or not workers outnumber capitalists
✦ If income redistribution is costly:
  » Voting costs: Mass of consumers with small benefits from free trade do not vote, small groups with large benefits vote
  » Free trade is a public good with free-rider problems. All consumers gain from free-trade whether they contribute to free-trade org. or not. They do not contribute ⇒ no free trade
  » Examples: Organized industries & disorganized consumers
    ◆ Textiles and apparel
    ◆ Sugar producers
  » Opposite example: Steel import quotas
    ◆ Large steel users (Autos, Caterpillar) well organized
**Economic Self-Interest: Other Factors**

**Behavioral Economics**
- Greater welfare weight given to loss of income (X) than to gain of income (X) ⇒ protection for declining industries
- Uncertainty and risk aversion: People prefer certainty ⇒ preference for quotas and quantitative restrictions
- Self-interest may favor VERs because these are outside of GATT, and fewer domestic political problems
- Self-interest argues against subsidies; they represent an explicit cost, difficult to obtain politically, shorter uncertain life

**Prisoner's Dilemma**
- If countries could cooperate successfully, they would settle on free trade
- Fear of defection (and injury) leads both to defect (and protect) to prevent a worse outcome

**Social Concerns and Trade Policy**

**Welfare of certain social and economic groups + promotion of national and int’l goals ⇒ trade policy**
- Preserving status quo income distribution
- Achieving income redistribution
- Building political power

**Concern over changing income distribution**
- Income ↑ (low welfare weight), Income ↓ (high welfare weight)
- Promote welfare of lowest income groups (e.g. exception for set-asides for small or minority firms in government contracts)
- Myopia: Observe jobs lost through free trade, cannot observe jobs likely to be gained by free trade
- Quotas more certain to protect a declining sector than tariffs
- Tariff or quota puts burden on groups that consume the product, while subsidy puts burden on all taxpayers
Foreign Policy and Trade Policy

- Large (hegemonic) states (England in 19th C, and U.S. post-WW2)
  - May have used liberal trade policies to induce other countries to accept their political leadership
  - U.S. trying to stop spread of Communism by building free world economic linkages
  - National defense and trade policy: US-Israel free trade arrangement

- Today, should US endorse China for membership in the World Trade Organization or block membership for foreign policy reasons?

Summary on Arguments For and Against Protection

- Valid arguments for tariffs exist. These arguments rely on some type of distortion, or gap, between private and social costs or benefits.
- In the second-best world, a tariff may be better than doing nothing. But very often some other policy is better than a tariff in responding to the distortion.
- The specificity rule is important for selecting the best policy response to a distortion.
- Why nations and voters choose tariffs and protection is a complex issue. Ideas from “political economy” offer some insights into the popularity of certain trade policies, and the unpopularity of others.