

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

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Chapter 9, p. 1

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

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Chapter 9, p. 2

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 \Leftrightarrow 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 \Rightarrow 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

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Chapter 9, p. 3

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 ” \Rightarrow too little supplied
- ◆ Monopoly Power
 - » $P > MSC$; not enough demanded, monopolist price is too high
- ◆ Monopsony Power
 - » $P < MSB$; not enough (labor) supplied

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Chapter 9, p. 4

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

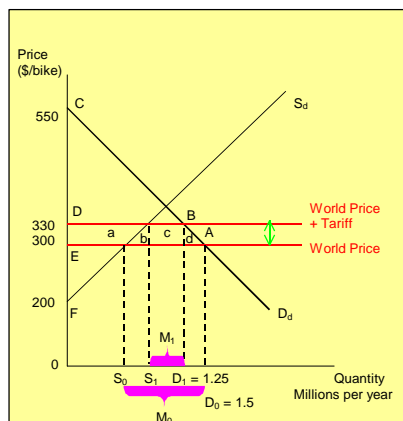
- ◆ When distortions already exist, another distorting policy (tariff) may be welfare improving
 - » Helping to close in on Pareto optimality:
 - $P = MB = MC = SMB = SMC$
- ◆ The “Specificity Rule”
 - » Intervene at the source of the problem. It is usually more efficient to use policy tools closest 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
 - » Why specificity? “Law of Unintended Consequences”
 - ◆ Tariff produces one good effect, but often has other bad (unneeded) effects

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Chapter 9, p. 7

Promoting Domestic Production with a Tariff



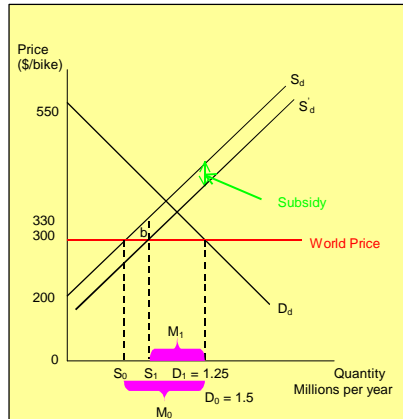
- ◆ Recall Figure 7.4 and impact of 10% tariff on bicycles
- ◆ Cost to importing country is
 - » $b+d$ deadweight production and consumption losses
 - » Assumes government collects tariff revenue c
- ◆ If objective is to promote production (not reduce consumption) then area d may be unnecessary
- ◆ If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

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Chapter 9, p. 8

Promoting Domestic Production with a Subsidy



- ◆ By offering domestic producers a subsidy, production \uparrow
- ◆ Suppose subsidy is \$30/bike
 - » Supply curve \uparrow to S'_d
 - » Domestic production \uparrow to S_1
 - » Consumers face $P_w = \$300$
 - » 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 \uparrow to S_1 ?
- ◆ How to administer subsidy?
- ◆ Why isn't subsidy used more?

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Chapter 9, p. 9

Non-Economic Arguments for Protection

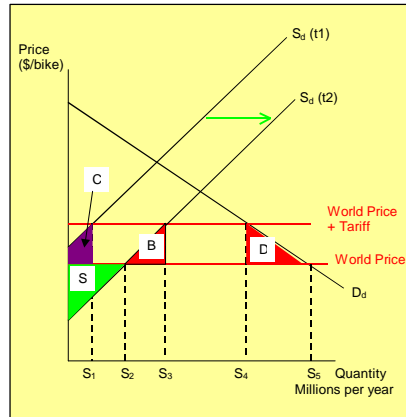
- ◆ National defense
- ◆ Minimum production level (e.g. steel, rice, ...)
- ◆ Maximum consumption level (e.g. luxury goods)
- ◆ Self-sufficiency (e.g. in oil or energy)
- ◆ National presence in critical industries
 - » High-tech, airlines, communications, ...
- ◆ Using tariffs to achieve the above objectives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

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Chapter 9, p. 10

The Infant Industry Argument (1 of 2)



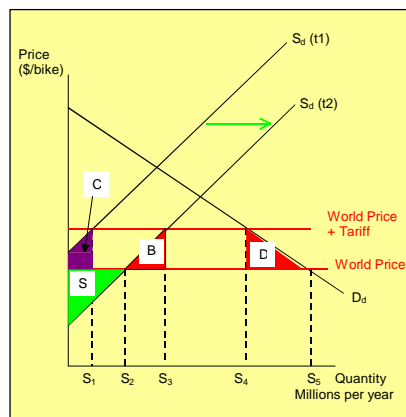
- ◆ Before the tariff, domestic production is zero as world price $< S_d(t1)$. Consumers import S_5
- ◆ With the tariff
 - » Domestic production \uparrow to S_1
 - » Consumption \downarrow to S_4
 - » Total *national* cost $C + D$
- ◆ Over time, industry matures, becomes more cost efficient
 - » Supply curve shifts to $S_d(t2)$
 - » Domestic production \uparrow to S_3
 - » Consumption remains at S_4
 - » Total *national* cost: $B+D-S$
 - ◆ Why is S a benefit?

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Chapter 9, p. 11

The Infant Industry Argument (2 of 2)



- ◆ 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

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Chapter 9, p. 12

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?

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Chapter 9, p. 13

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

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Chapter 9, p. 14

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?

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Chapter 9, p. 15

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 \Rightarrow 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

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Chapter 9, p. 16

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

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Chapter 9, p. 17

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

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Chapter 9, p. 18

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?

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Chapter 9, p. 19

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.

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Chapter 9, p. 20