

TRADE POLICY

EE 462 Development Macroeconomics

Semester 1/2014

Topics

- Import Substitution
 - Protective Tariffs
 - Import Quotas
 - Production Subsidies
 - Exchange-Rate Management
- Export Orientation
- Trade Strategy and Industrial Policy
- Trade, Growth, and Poverty Reduction
- Key Issues on the Global Trade Agenda

Trade Strategies

- Two different trade strategies:

1. **Import substitution (IS)** is the production of goods and services that replace (or substitute for) imports.

- Strategies: tariffs, quotas, subsidies, exchange rate management
- Core idea - *Infant industries* need protection to survive.

2. **Export orientation** is a strategy designed to make producers internationally competitive by relying on market forces, strengthening key institutions, and in some cases using subsidies, managed exchange rates, and other instruments.

- Core idea - Domestic producers must become internationally competitive.

IMPORT SUBSTITUTION

Import Substitution

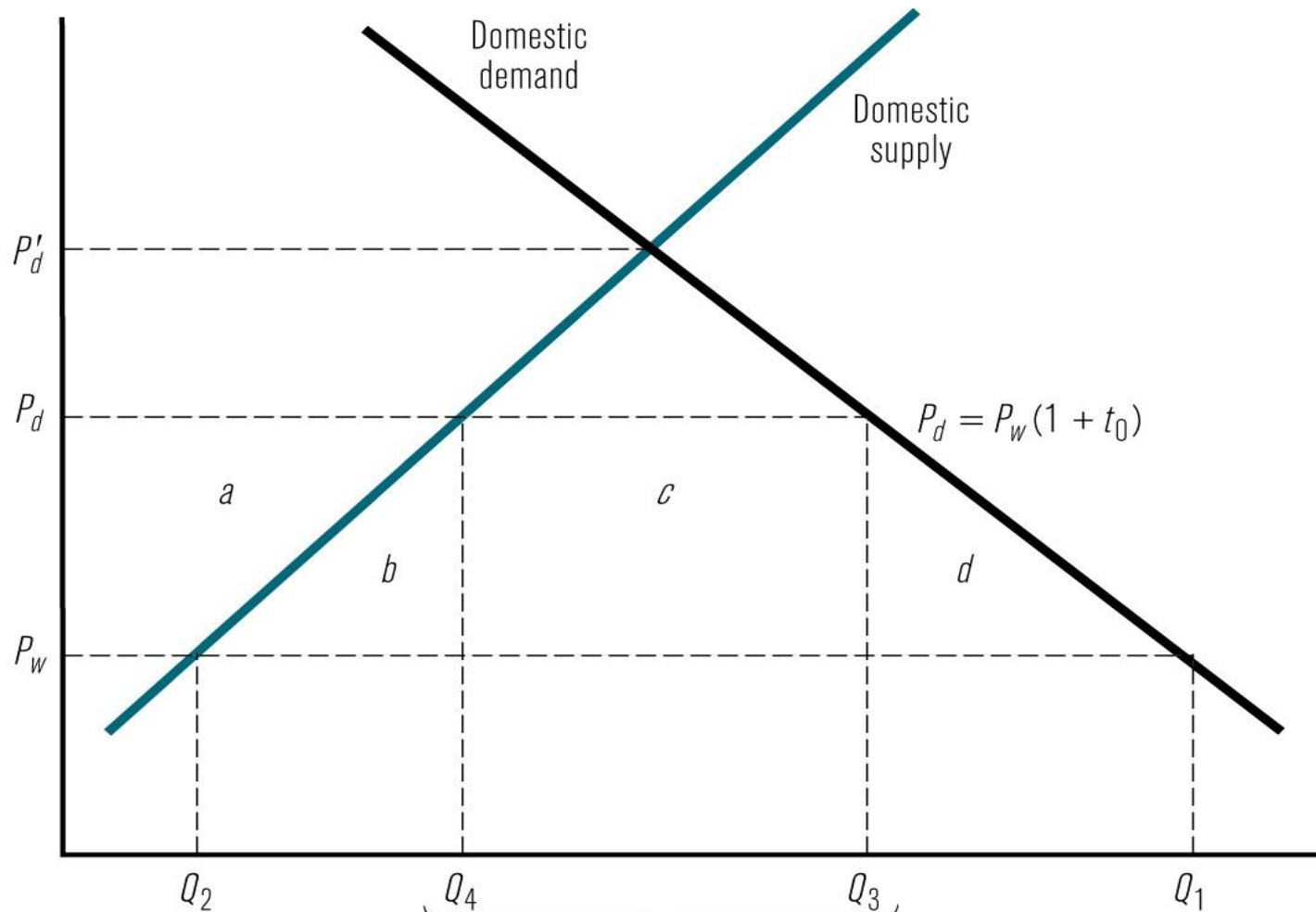
- Also referred to as *Import Substitution Industrialization*
 - Firms are unlikely to compete in manufactures immediately, so they need government assistance to get started.
 - Ideally, industries for *simple products with large domestic markets* (e.g. processed foods, beverage, textiles, clothing) should be the first targets.
- This argument is particularly valid for ‘infant industry’.
- Government’s tools:
 - **Tariffs** – taxes imposed on imports at the borders
 - **Quotas** – quantitative limits on specified categories of imports
 - **Subsidies** – production subsidies provided to local producer
 - **Exchange rate policy** – fixed exchange regime

Protective Tariffs

- **Protective tariff** is aimed at *raising the domestic price* of the imported good *above* the world price.
- For importing country, the world price is the cost at the port of entry, called the **c.i.f. price** (including costs, insurance, and freight) or **border price**.
- Suppose P_w is the world price with free trade, and an **ad valorem tariff**, t_0 , is imposed on the good.
 - Domestic price becomes: $P_d = P_w(1+t_0)$
 - The **nominal rate of protection** is:

$$t_0 = (P_d - P_w)/P_w$$

Nominal Tariff Protection



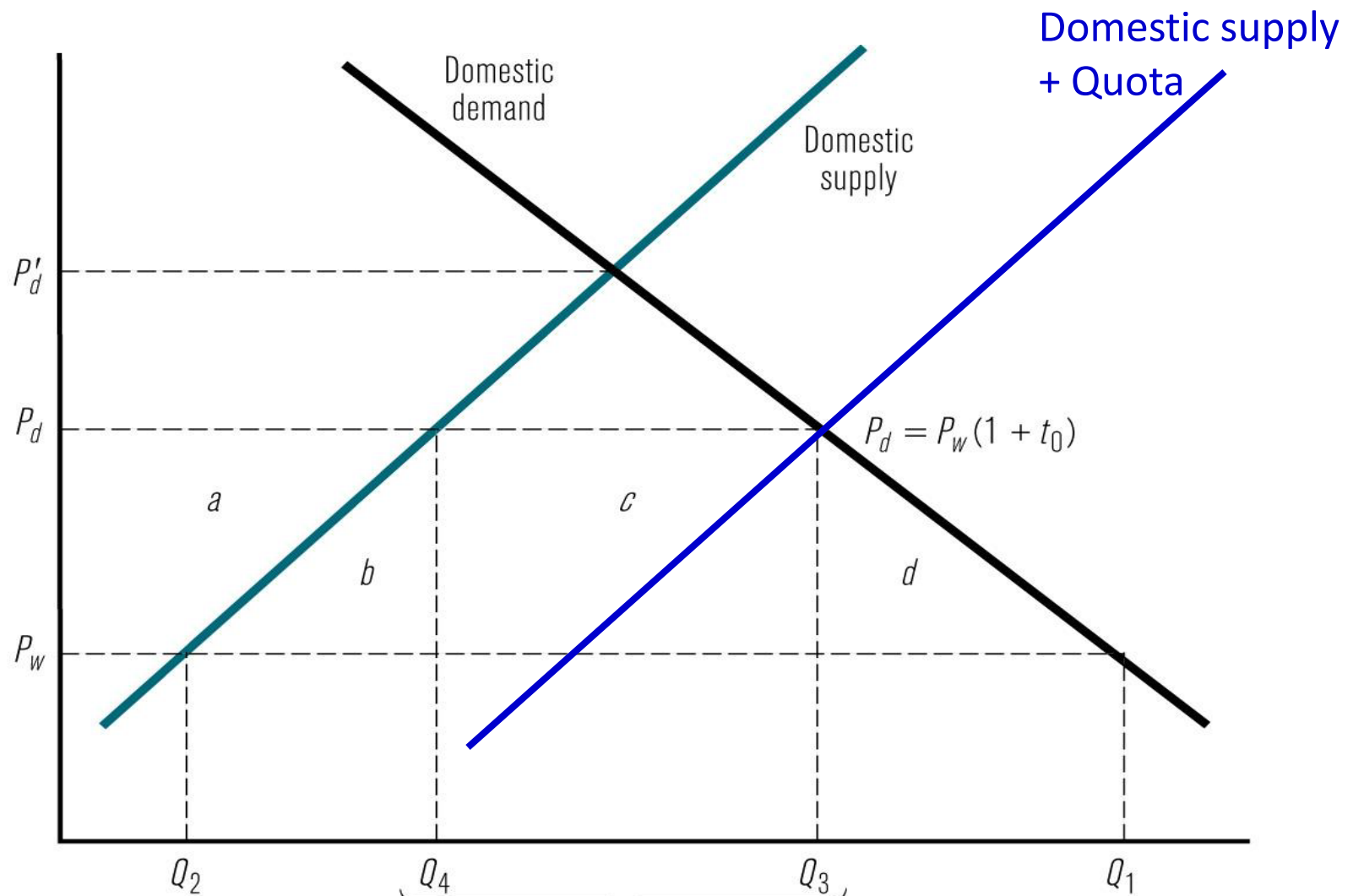
Impact of Tariff Protection (from diagram)

- Gain in producer surplus = a
- Loss of consumer surplus = $a + b + c + d$
- Tariff revenue = c
- Resource cost (i.e. cost of using resources inefficiently) = b
- Deadweight loss = $b+d$

Import Quotas

- These involve the **quantitative restrictions** on imports by import licensing – government determines in advance *the quantity of imports it wants to allow*.
- The loss in consumer surplus, deadweight loss, and gain in producer surplus are the same as in the case of equivalent tariff.
- 2 distinctions from tariffs:
 1. Government does not necessarily collect revenue, so the area c becomes license holder's bonus a.k.a. "**quota rent**"
 - Room for rent seeking activities including bribes.
 2. When the world price decreases, imports cannot rise unless the quota increased. → **Tariff is preferred to quotas.**

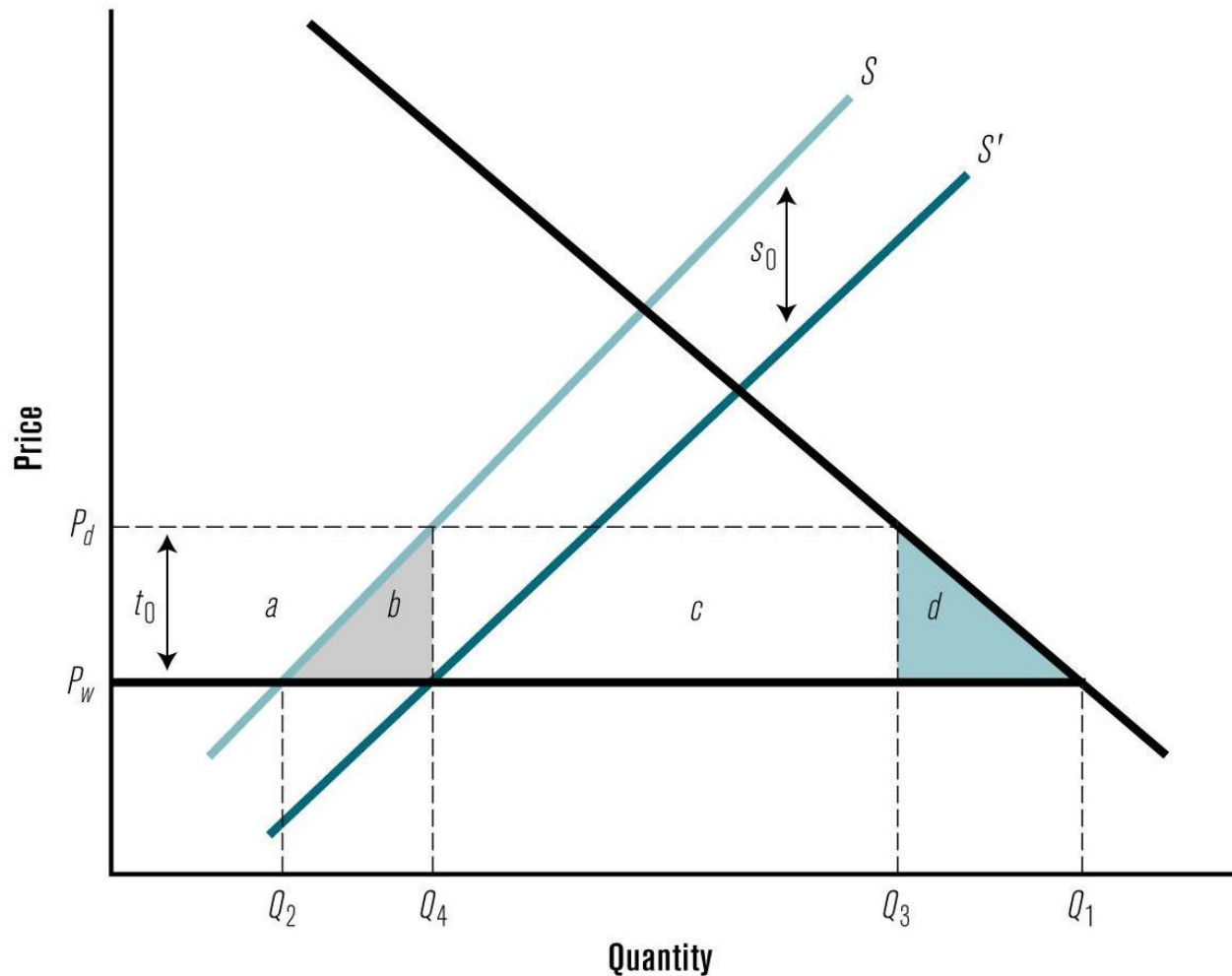
Import Quotas



Production Subsidies

- Government provides **direct subsidies** as a means of protecting domestic manufacturers (just like how high-income economies subsidize their agricultural production).
- Producers are equally happy with a subsidy or equivalent tariff.
- But consumers are better off because *there is no loss in consumer surplus*.
 - Lower deadweight loss
- **Economists generally prefer subsidies over tariffs, and tariffs over quotas.**
- But **government officials tend to prefer quotas or tariffs over subsidies. Why?**

Impacts of Subsidies on Firms Competing with Imports

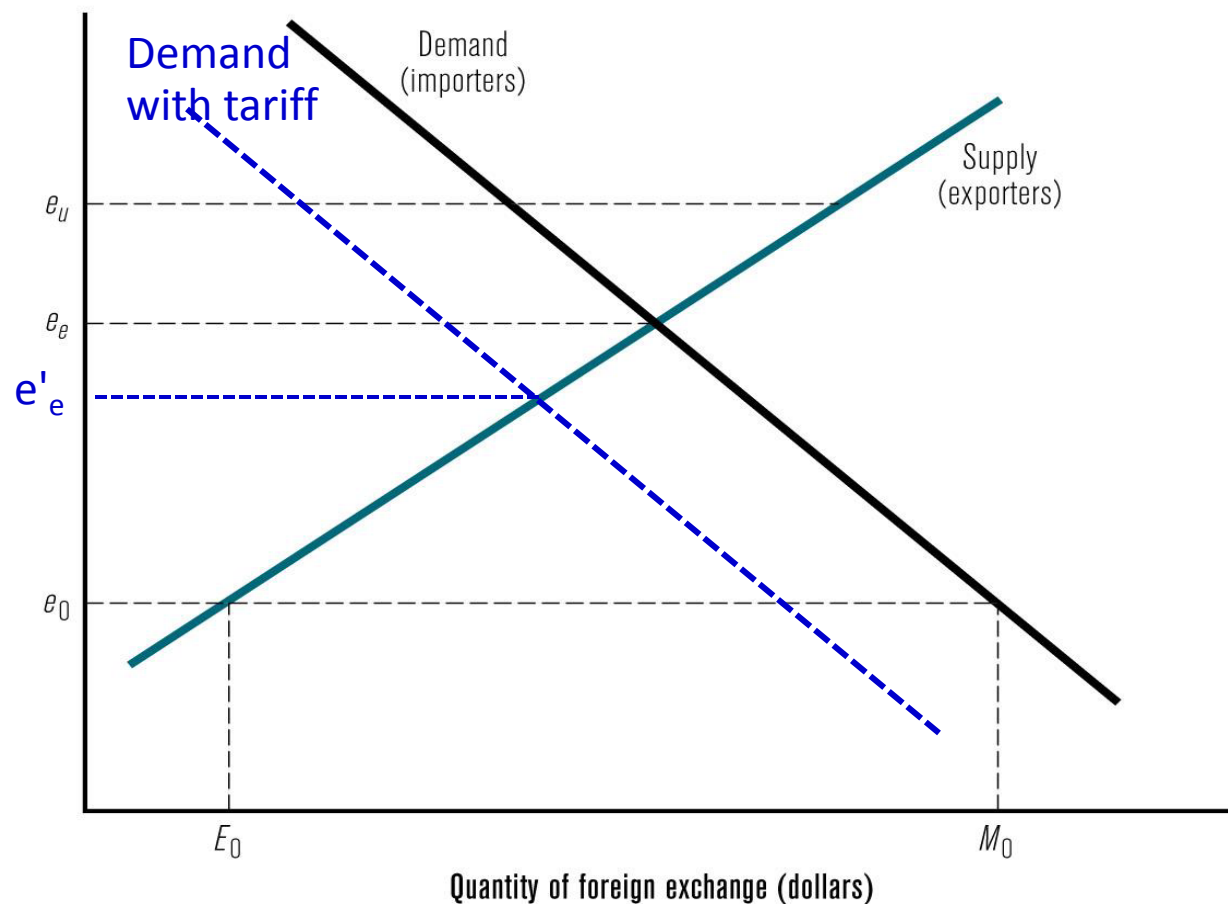


Exchange Rate Management (1)

- Exchange-rate policy has a **uniform effect on the prices of all tradable goods**, but alters the price between tradables and nontradables.
- **IS strategies tend to cause the domestic currency to appreciate.**
 - Tariffs and quotas reduce the demand for foreign exchange at every exchange rate.
 - The new exchange rate acts like a tax on exports.
- Many IS strategies were designed to foster industrial development, but at the same time often hurt traditional exports (e.g. agricultural goods).

IS Strategy and Exchange Rates

Foreign exchange rate
(Baht/\$)



Exchange Rate Management (2)

1. **Overvalued Exchange rate**: fix official exchange rate *below* equilibrium rate

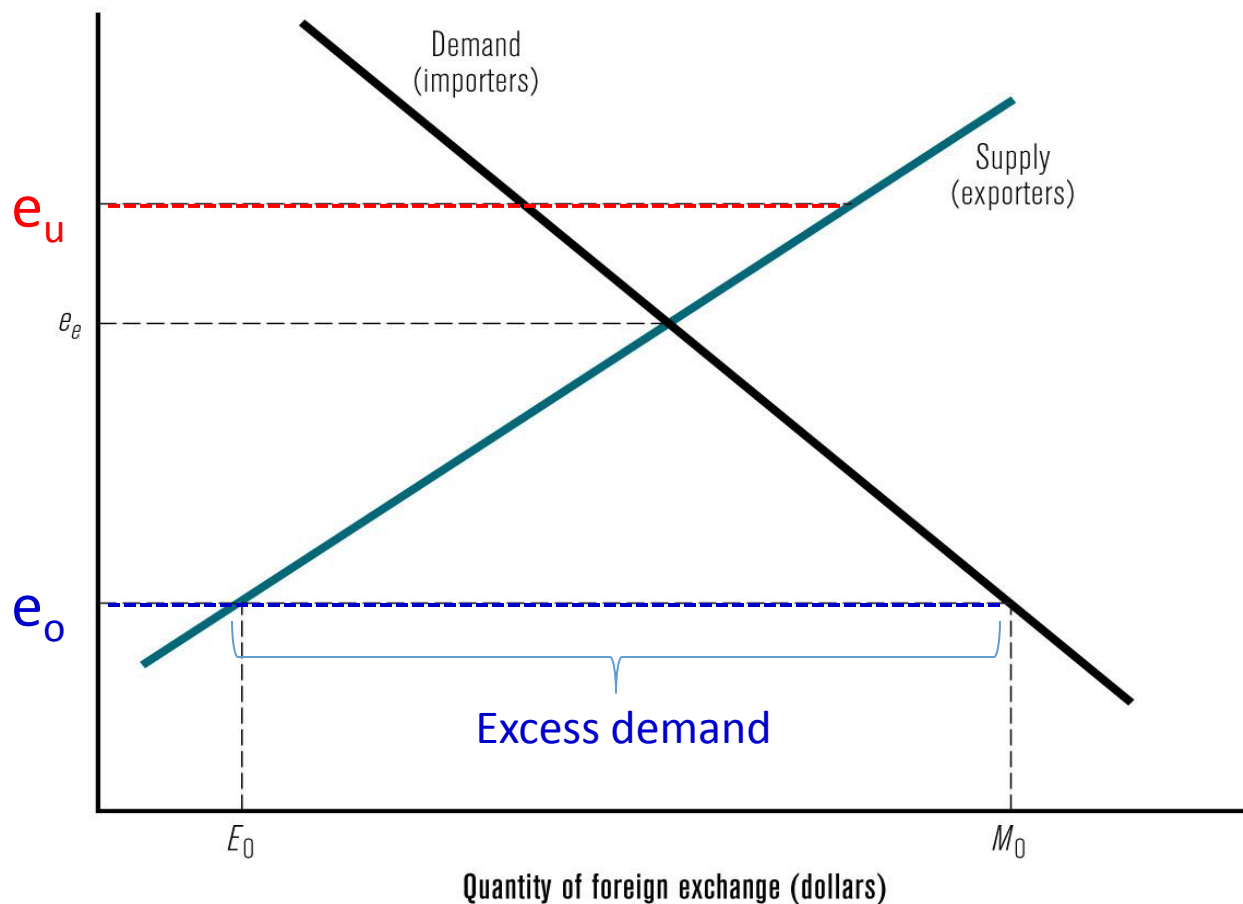
- Exports less profitable and imports less expensive
- Can harm domestic producers of goods that compete with imports, but consumers are happy.
- Often used as IS strategy to make capital goods cheaper
- Can also give rise to black markets for foreign exchange

2. **Undervalued Exchange rate**: fix official exchange rate *above* equilibrium rate

- Exports more profitable and imports more expensive
- Used to stimulate exports and provide protection to firms competing with imports
- Example is China's exchange rate policy (read box 19.3)

Overvalued and Undervalued Exchange Rates

Foreign exchange rate
(Baht/\$)



Outcomes of Import Substitution

- Countries that introduce import substitution may experience initial spurt in growth, but **eventually leads to weak technology, low efficiency, growing trade deficits, and slower growth.** Why?
 - IS protected too many industries and remained in place for too long
 - IS induced excessively capital-intensive investments
 - Trade protection resulted in lower productivity → unable to compete internationally
- IS also creates incentives for rent seeking, corruption, lobbying and reduced competitiveness.

EXPORT ORIENTATION

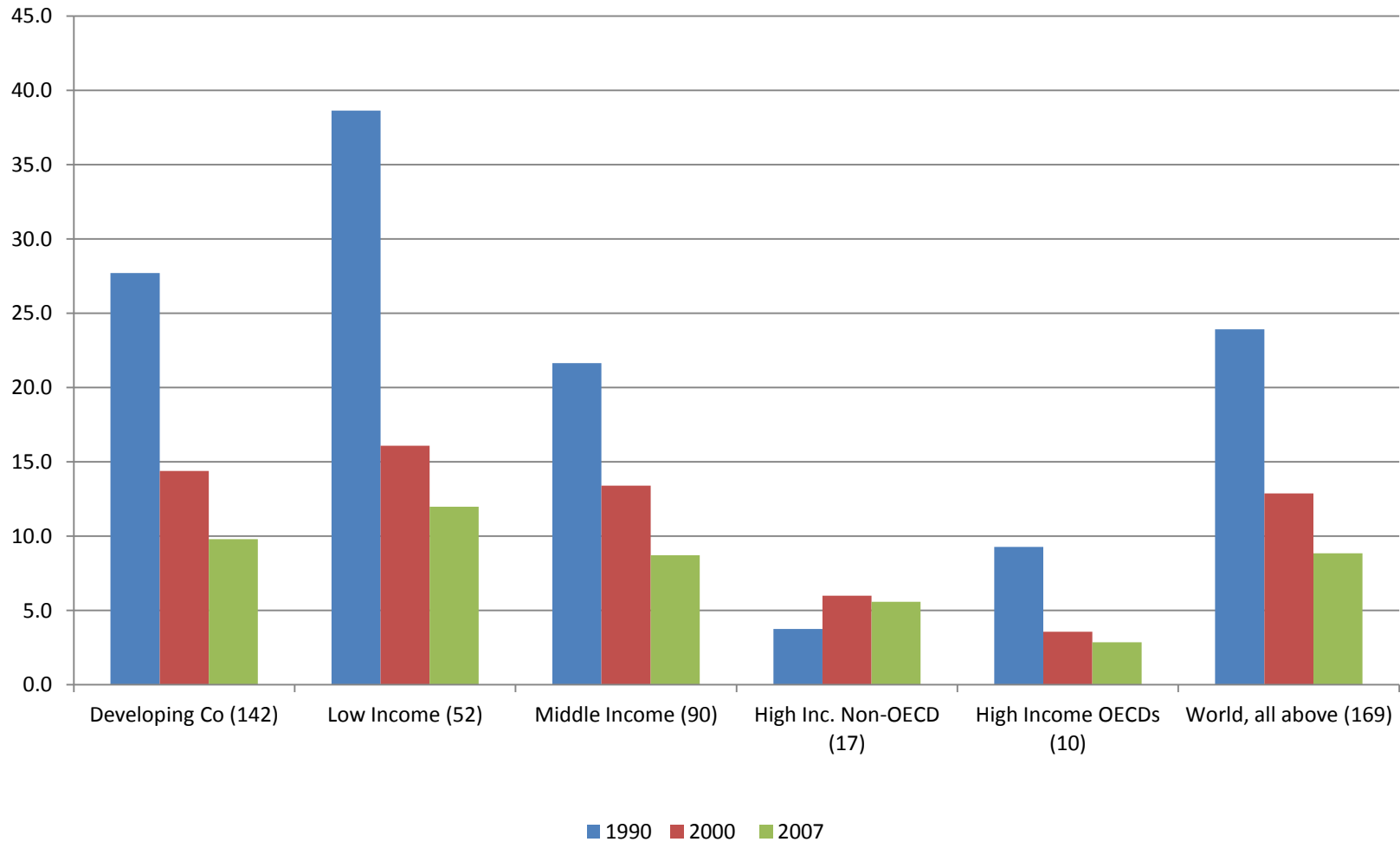
Export Orientation

- A.k.a. *outward orientation, openness, export promotion*, and *export orientation*.
- Core idea is to introduce policies that encourage firms to produce products that are competitive on world markets.
 - Encourage investment, productivity gain, learning, and new technology to support growth
 - Usually start with simple labor-intensive products, and move to more advanced manufactures
- The export-led strategy of East Asia's "tigers" has been outstandingly successful.
- There are some unsuccessful cases, e.g. Zambia.

Removing the Bias Against Exports

- Policies that favor imports (e.g. tariffs and overvalued exchange rates) are implicitly biased against exports.
- Policies to remove these biases:
 - Remove tariffs and quotas and other forms of protection, especially on capital and intermediate goods
 - Allow currency to float with market-determined rate & maintain macroeconomic stability
 - Reduce unnecessary regulatory burdens and business costs
 - Keep markets flexible for labor and credit with market determined wages and interest rates

Trends in Average Applied Tariff Rates (Unweighted in %)



Favoring Exports

- Same idea as “openness” of the economy
- Korea and China were much more interventionists.
- Korea uses an *outward-looking approach* – intervened to induce, and sometimes force, firms to meet ambitious export targets
 - A Korean firm could not take advantage of protection or other preferential treatment unless it met stringent export targets.
- China has been *using exchange rate policy to favor exporters by undervaluing* its currency.
 - Rapid export growth and large trade surplus
 - Large accumulation of foreign exchange reserves

Building Export Platform

- Export platform institutions are established to enable exporters to import and sell at close to world market prices.
- Forms of export platforms: *export processing zones (EPZs)*, *bonded warehouses*, *duty exemption programs*, and *science and technology parks*.
- The idea is to provide an *enclave* for new or potential export industries, so they can be *insulated from price distortions of the protected domestic markets* and more able to compete on world market.
- Advantage – allow one part of the economy to be competitive, while steps are taken over time to introduce economy-wide changes.

The Benefits of Outward Orientation

- The Asian tigers (Hong Kong, Korea, Singapore, and Taiwan) has proven success of export-oriented policies.
- Their rapid growth in trade was accompanied by accelerating economic growth, reductions in poverty, and other advancements.
- These countries shared four key characteristics:
 1. a disciplined focus on policies to promote rapid economic development
 2. prudent management of macroeconomic policy and exchange-rate policy
 3. flexible factor markets
 4. insulation of exports from domestic price distortions.

Trade Strategy and Industrial Policy (1)

- **Industrial policy** – a broad set of interventions (such as undervalued exchange rates and EPZs) which governments may use to favor one set of economic activities over another.
- **Rodrik** and others see industrial policy as a part of a developing nation's trade policy.
 - The government's role beyond traditional areas (ensure macro stability & provide public goods).
 - Government needs to facilitate the structural change inherent in the development process.

Trade Strategy and Industrial Policy (2)

- Rodrik suggests that the problem in moving away from traditional production is one of “self-discovery” (i.e. what particular product should entrepreneurs produce).
 - Governments need to intervene to *encourage the process of self-discovery*.
- Question: why can't we leave the self-discovery up to individual entrepreneur?
 - Think about *public good* problem
- Other economists argue for partnership between the public and the private sectors in resolving the constraints facing entry into the new markets.

TRADE, GROWTH, AND POVERTY REDUCTION

Trade and Growth (1)

- Trade and growth can have bi-directional relationship.
 - Trade could generate economic growth and reducing poverty.
 - Income and productivity growth can make a country more competitive in world markets.
- In the paper “Does Trade Cause Growth?,” Frankel and Romer study this relationship by using the portion of trade due to geographic characteristics (which are weakly correlated with determinants of growth).
 - This geographical component of trade has a large and positive effect on income.
 - Supports the direction of causality running from trade to growth, but the results are not highly statistically significant.

Trade and Growth (2)

- One issue is that Frankel and Romer use **trade volumes** (the ratio of $X+M$ to GDP) as their measure of trade.
- But trade volumes are not the same as **trade policies** (e.g. reducing tariffs, managing exchange rate, etc.).
 - Trade volumes are consequence of trade policies and other policies.
- Harrison and Rodriguez-Clare find **no** significant relationship between lower tariff levels on final goods and country performance.
 - So, does this mean that trade liberalization is not a good idea?
 - In practice, different countries have different policy mix, so it's hard to identify what steps of trade liberalization each country should take.

Trade and Growth (3)

- Alternative measure of trade policies is “*trade openness*”.
- Jeffrey Sachs and Andrew Warner find that countries with *more open policies* and less-biased exchange rates *grew about 2 percentage point faster* than did closed economies.
 - A country is considered to be “open” if it passed 5 criteria:
 1. Its average tariff rate was less than 40%.
 2. Its nontariff barriers covered less than 40% of imports.
 3. The premium on the unofficial parallel market exchange rate did not exceed 20%.
 4. There were no state monopolies on major exports.
 5. It was not a socialist economy.

Trade and Growth (4)

- Sachs-Warner's openness index was subjected to a number of criticisms, because some criteria are more likely to improve macroeconomic policy than to liberalize trade.
- So, what do we know about the impact of trade and trade policy on economic growth?
 - Economists believe that increased trade confer benefits, but the steps necessary to stimulate economic growth and increased trade go beyond simply reducing tariffs and quotas.
 - Also, one single approach in liberalizing trade does not fit all nations.

Trade Reforms and Poverty Reduction (1)

- Mechanisms by which increased trade can reduce poverty:
 - Greater openness and faster growth in labor intensive manufacturing can potentially create substantial employment opportunities → increase income → reduce # of people living below the poverty line
 - Prices of imports decrease → many of the poor can benefit as consumers
 - Trade can increase government revenue and improve spending on the poor.

Trade Reforms and Poverty Reduction (2)

- But trade have some negative impacts as well:
 - It can eliminate jobs in *import-competing sectors* → rising levels of unemployment & increasing poverty
 - Although urban consumers are better off from lower price, domestic producers in rural areas are generally worse off (e.g. corn producers in Mexico).
- The factor endowment models assume that labor is mobile between sectors. However, if **workers cannot easily relocate** (why?), then the **gains from trade may not be transmitted** as predicted.
- Thus, trade reform *alone* cannot be used to reduce poverty.

KEY ISSUES ON THE GLOBAL TRADE AGENDA

Increased Global Competition & The Rise of China (and India)

- China and India are emerging **global giants**, creating concerns about tougher competition and falling prices for export products.
- However, there could still be room for other countries.
 - Global production networks allow firms from many different countries to contribute to the production of one finished good each firm specializing in a phase that it has comparative advantages.
 - China and India need to import inputs from others.
 - Countries, such as Mexico, still has *locational advantage* in exporting to the US.

Does Outward Orientation create Sweatshops? (1)

- Some writers have argued that outward orientation and globalization creates global **sweatshop economy** and **race to the bottom** to those who will accept the lowest wages, benefits and environmental standards.
- This is also true for firms producing local markets such as agricultural workers in USA, especially emigrants.
- But low wages are a reflection of the extent of poverty in low-income countries.
 - Wages are different across countries reflecting *differences in the average level of **economy-wide productivity***.
 - i.e. Market wages are based on productivity.

Does Outward Orientation create Sweatshops? (2)

- Some argue that the opportunity to work in a steady factory job is an *improvement* over other options.
- The concern about **the race to the bottom** also includes *working conditions* and *labor standards*.
 - **Core standards:** abolishing forced labor, child labor, gender discrimination, ethnic discrimination and permitting freedom of association
 - **Cash standards:** other improvements in work and safety conditions
- In general, evidence suggests that working conditions tend to improve as economic growth proceeds in outward-oriented countries.

Expanding Market Access

- Q: Can developing countries sell in European Union, North American, and Japanese Markets?
- These countries have greatest trade barriers on products for which developing countries have comparative advantages such as *textiles, apparel, and agricultural products* .
 - **Tariff peaks**: relatively high tariffs amid generally low tariff levels.
 - Example: US charges a 32% tariff on sweaters from Bangladesh, but no tariff on artwork imported from France.
 - **Tariff escalation**: having no or low import duties on raw materials and higher duties on the finished goods that use these raw materials.
 - This makes it harder for firms in developing countries to compete in the markets for finished goods.

Textiles and Apparel

- For decades, the exports of textiles and apparel from developing countries were restricted by a system of quotas and tariffs under the [Multi-Fiber Agreement \(MFA\)](#), which later became the [Agreement on Textiles and Clothing \(ATC\)](#).
 - Each industrialized country allowed only a certain amount of imports from each developing country.
 - These agreements were gradually *phased out and eliminated in 2005* as a part of the Uruguay round of WTO negotiations.
 - This creates winners or losers. (Who are the winners?)
 - National tariffs and [nontariff barriers](#) on textiles and apparel imports still remain.

Overall Protection in Agriculture (% tariff equivalent)

TYPE OF PROTECTION	UNITED STATES	CANADA	EUROPEAN UNION	JAPAN
Tariffs	8.8	30.4	32.6	76.4
Subsidies	10.2	16.8	10.4	3.2
Total	19.9	52.3	46.4	82.1

Source: William Cline, *Trade Policy and Global Poverty* (Washington, DC: Center for Global Development, 2004).

Agricultural Exports & Imports

- US, Canada, EU, Japan provide significant protection to their agricultural products through direct barriers and subsidies.
 - The Magnitude is quite high ranging from 20% in the US to over 80% in Japan.
 - Crops protected include cotton, dairy products, maize, peanuts, soybean, sugar, rice, wheat and others.
- Trade protection provides farmers in industrialized countries with a significant advantage, and **weakens incentives for increased production in developing countries.**
- **Subsidies depress world prices** for agricultural products (e.g. rice, sugar, and dairy products).
 - Farmers in LDC receive *low prices* and have *lower income*.

WTO and Multilateral Trade Negotiations

- After WWII industrial countries began to reduce tariffs. Between 1947 - 1994, eight round of trade negotiations took place through [General Agreement on Tariffs and Trade \(GATT\)](#) which became the [World Trade organizations \(WTO\)](#) in 1995.
- The [Uruguay Round](#) of trade negotiations began in 1986 and ended in 1994 involving 123 countries that took part.
 - The industrialized countries promised: (1) significant reduction in tariffs, (2) the end of Multi-Fiber Agreement, and (3) reduction in agricultural subsidies.
 - LDCs also committed to large reduction in their tariffs, agreement in new rules of investment, services, and [Trade-Related Intellectual Property Rights \(TRIPs\)](#), and support for the new WTO.

The Outcome of Negotiation of the Uruguay Round

- Global average tariff on manufactured goods were reduced by one-third, and LDCs have increased access in some industrialized country markets.
- But there are some concerns:
 1. Industrialized countries pledge to reduce agricultural subsidies did not happen.
 2. The new agreements on investment, services, and TRIPs were more complicated than reducing tariffs, and created large burden on many low-income countries.
 3. TRIPs resulted in LDCs paying higher prices for medicine and pharmaceutical products covered patents.

Other Trade Negotiations

- Began in 2001, the latest round of trade negotiations among the WTO members is the **Doha Round** (or the **Doha Development Agenda**), which were intended to served the needs of developing nations.
- The Doha Round collapsed in 2008 after failing to reach a compromise on **agricultural import** rules. The main dispute was among the US, China, and India.
- More recently, nations have turned away from multilateral talks and entered into **bilateral** and **regional agreements**.
 - Disadvantage – they did not allow for global comparative advantage
 - Advantage – they take the pressure off the government to compromise on multilateral agreement.

Temporary Migration: Another Dimension of International Trade

- One dimension of trade negotiation that has received relatively little attention is to increase the movement of people across borders.
- Lant Pritchett argues that an increase in **temporary migration** could be one of the most effective instruments to alleviate poverty.
 - Proponents – immigrant workers can take on what many natives find too “dirty, dangerous, or difficult.”
 - Opponents – worries about native jobs being taken away, lower wages, or more burden to taxpayers.