Trade and Development
International Trade: Some Key Issues

• Many developing countries rely heavily on exports of primary products for income (exceptions are NICs and oil-producing nations in the Persian Gulf and elsewhere) with attendant risks and uncertainty (unstable prices)
• Many developing countries also rely heavily on imports (typically of machinery, capital goods, intermediate producer goods, and consumer products) to fuel their industrial expansion
• Many developing countries have chronic deficits on current and capital accounts which depletes their reserves, causes currency instability, slows down economic growth and retards development efforts
• Recently many developing countries have sought to promote exports (looking outward) and accumulate large foreign exchange reserves to cushion against crises.
<table>
<thead>
<tr>
<th>Africa</th>
<th>Asia and the Pacific</th>
<th>Latin America and the Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso (cotton)</td>
<td>Fiji (sugar)</td>
<td>Belize (sugar)</td>
</tr>
<tr>
<td>Burundi (coffee)</td>
<td>Maldives (fish)</td>
<td>Chile (copper, metal ores)</td>
</tr>
<tr>
<td>Côte d’Ivoire (cocoa, coffee)</td>
<td>Myanmar and the Pacific (wood, vegetables)</td>
<td>Costa Rica (coffee, fruit)</td>
</tr>
<tr>
<td>Ethiopia (coffee)</td>
<td>Papua New Guinea (gold, metal ores)</td>
<td>Cuba (sugar)</td>
</tr>
<tr>
<td>Ghana (cocoa, precious stones)</td>
<td>Solomon Islands (wood)</td>
<td>Dominica (iron, fruit)</td>
</tr>
<tr>
<td>Kenya (tea, coffee)</td>
<td>Tonga (vegetables)</td>
<td>Guadeloupe (sugar, fruit)</td>
</tr>
<tr>
<td>Madagascar (coffee, spices)</td>
<td></td>
<td>Guyana (gold, sugar)</td>
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<tr>
<td>Malawi (tobacco)</td>
<td></td>
<td>Honduras (fruit, coffee)</td>
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<tr>
<td>Mauritania (iron ore)</td>
<td></td>
<td>Jamaica (minerals)</td>
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<tr>
<td>Mozambique (fish, fruit)</td>
<td></td>
<td>Panama (fruit)</td>
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<tr>
<td>Reunion (sugar)</td>
<td></td>
<td>Paraguay (vegetable oil, cotton)</td>
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<tr>
<td>Rwanda (coffee)</td>
<td></td>
<td>Saint Lucia (fruit)</td>
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<td>Senegal (fish, vegetable oil)</td>
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<td></td>
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<tr>
<td>Seychelles (fish)</td>
<td></td>
<td></td>
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<tr>
<td>Sierra Leone (precious stones)</td>
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<td></td>
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<tr>
<td>Sudan (cotton, vegetables)</td>
<td></td>
<td></td>
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<tr>
<td>Uganda (coffee)</td>
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</tbody>
</table>

International Trade: Some Key Issues

• Five Basic Questions about Trade and Development
  – How does international trade affect LDC economic growth?
  – How does trade alter the distribution of income? How are the gains and losses distributed?
  – How can trade promote development objectives of LDCs?
  – Can developing countries determine how much they trade?
  – Is outward-looking or inward-looking trade policy best option for LDCs or some combination?
International Trade: Some Key Issues

• Developing countries are generally more dependent on trade than developed countries are
  – Exports are important to developing countries
  – Merchandise exports as a share of GDP are often higher for developing countries; there are exceptions though
  – As a group however developing countries are more dependent on trade in terms of its share in national income than the highly developed countries are

• Share of manufactures in merchandise exports are low but rising; more important for NICs, including China
Merchandise Exports in Perspective: Selected Countries, 2008

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Merchandise Exports (current millions of U.S. $)</th>
<th>GDP (current millions of U.S. $)</th>
<th>Merchandise Exports as a Share of GDP (%)</th>
<th>Manufactures Exports (% of merchandise exports)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing countries</td>
<td></td>
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<tr>
<td>Malaysia</td>
<td>199,516</td>
<td>221,773</td>
<td>90</td>
<td>54</td>
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<tr>
<td>Nigeria</td>
<td>81,900</td>
<td>207,118</td>
<td>40</td>
<td>5</td>
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<tr>
<td>China</td>
<td>1,428,488</td>
<td>4,326,996</td>
<td>33</td>
<td>93</td>
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<tr>
<td>Venezuela</td>
<td>93,542</td>
<td>314,150</td>
<td>30</td>
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<tr>
<td>Philippines</td>
<td>49,025</td>
<td>166,909</td>
<td>29</td>
<td>83</td>
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<tr>
<td>Indonesia</td>
<td>139,281</td>
<td>510,730</td>
<td>27</td>
<td>39</td>
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<tr>
<td>Mexico</td>
<td>291,807</td>
<td>1,088,128</td>
<td>27</td>
<td>74</td>
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<tr>
<td>Sri Lanka</td>
<td>8,370</td>
<td>40,565</td>
<td>21</td>
<td>67</td>
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<tr>
<td>Kenya</td>
<td>4,972</td>
<td>30,355</td>
<td>16</td>
<td>37</td>
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<tr>
<td>Jamaica</td>
<td>2,400</td>
<td>14,614</td>
<td>16</td>
<td>61</td>
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<tr>
<td>Niger</td>
<td>820</td>
<td>5,354</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>India</td>
<td>179,073</td>
<td>1,159,171</td>
<td>15</td>
<td>63</td>
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<tr>
<td>Brazil</td>
<td>197,942</td>
<td>1,575,151</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Developed countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>457,983</td>
<td>2,674,057</td>
<td>17</td>
<td>70</td>
</tr>
<tr>
<td>Japan</td>
<td>782,337</td>
<td>4,910,840</td>
<td>16</td>
<td>89</td>
</tr>
<tr>
<td>United States</td>
<td>1,300,532</td>
<td>14,591,381</td>
<td>9</td>
<td>74</td>
</tr>
</tbody>
</table>

Sources: Derived from World Bank, *World Development Indicators*, 2010, tabs. 4.2 and 4.4.
Demand Elasticities and Export Earnings Instability

- Export performance of many developing countries has been weak. Why?
  - Elasticity of demand!
- Often low price elasticity of demand for agricultural commodities
- Often low price elasticity of supply for agricultural commodities
- Supply or demand shocks can cause large and volatile price fluctuations
- In addition, low income elasticity of demand for primary products: values around 0.5
  - consequence is for their relative price to decline over time.
- Result is export earnings instability; leading to lower and less predictable rates of economic growth.
The Terms of Trade and the Prebisch-Singer Hypothesis

• Total export earnings depend upon:
  – Total volume of exports sold; and the price paid for exports.

• Historically, prices of primary commodities have declined relative to manufactured goods.

• There is decline in the commodity terms of trade for non-oil exporting developing countries.
  – Need more exports to exchange for same quantity of imports.

• Prebisch and Singer argue that commodity export prices fall over time (low income and price elasticity); developing countries thus lose revenues unless they can continually increase export volumes.

• Developing countries need to avoid dependence on primary exports; they must diversify into manufactured exports.
  – Success for Asian ‘Tigers’, and lately China, India.
The Traditional Theory of International Trade

- Why do people trade?
  - Because it is profitable.
- Comparative advantage
  - Specialization according to ability
  - Produce what you can at the lowest relative cost and trade the rest.
- Neoclassical trade models
  - Ricardian (productivity or technology differences)
  - Heckscher and Ohlin (factor endowment differences)
    - Different products require productive factors in different ratios
    - Countries have different endowments of factors of production
Trade with Variable Factor Proportions and Different Factor Endowments

(a) Less Developed World (without trade, production and consumption occur at A; with trade, production is at B, consumption is at C; exports = BD; imports = DC)
Trade with Variable Factor Proportions and Different Factor Endowments (continued)

(b) Rest of World (without trade, production and consumption occur at $A'$; with trade, production is at $B'$, consumption is at $C'$; exports = $B'D'$; imports = $D'C'$)
The Traditional Theory of International Trade (cont’d)

• Main conclusion of the neoclassical model is that all countries gain from trade
• World output increases with trade
• Countries will tend to specialize in products that use their abundant resources intensively
• International wage rates and capital costs will gradually tend toward equalization
• Returns to owners of abundant resources will rise relatively
• Trade will stimulate economic growth.
The Traditional Theory of International Trade (cont’d)

• Trade theory and Development: The Traditional Arguments
  – Trade stimulates economic growth
  – Trade promotes international and domestic equality
  – Trade promotes and rewards sectors of comparative advantage
  – International prices and costs of production determine trading volumes to maximize welfare
  – Outward-looking international policy is superior to isolation (free trade is better than autarky).

• What has been the experience of developing countries?
• While trade has the potential of raising growth and promoting development, the experiences of developing countries has generally not confirmed this!
Unemployment, Resource Underutilization and the Vent-for-Surplus Theory of International Trade (Hla Myint)

- Unemployed resources creates opportunity for generating surplus through trade
- More realistic analytical scenario of the historical trading experience of many LDCs
- However short run beneficiaries often colonial and expatriate entrepreneurs rather than LDC nationals
- In long run structural orientation of the LDC economy toward primary-product exports, and inhibited needed structural transformation in the direction of a more diversified economy.
Critique of Traditional Free-Trade Theory in the Context of Developing-Country Experience

• Assumptions of traditional free-trade theory unrealistic in many cases.

• Some conclusions on trade and economic development strategy
  – Trade can lead to rapid economic growth under some circumstances
    • Examples of China, South Korea, Singapore, Taiwan, Malaysia, etc.
  – Trade seems to reinforce existing income inequalities
  – Trade can benefit developing countries if they can extract trade concessions from developed countries
    • Lower barriers to labor-intensive manufactures.
  – Developing countries generally must trade, perhaps more among themselves
  – Regional cooperation may help developing countries.
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Export promotion: looking outward and seeing trade barriers
  – Primary-commodity export expansion, limited demand
    • Low income elasticities
    • Low population growth rates in developed economies
    • Decline in prices implies low/loss of revenue (some periods of price spikes, including recent years, but very long-run trend has been downward)
    • Lack of success with international commodity agreements
    • Development of synthetic substitutes (rubber, cotton, etc.)
    • Agricultural subsidies in developed countries
  – Primary-commodity export expansion, supply rigidities (slow export response supply capacities)

• Expanding Exports of manufactured goods: Greater successes, particularly, Asian Tigers and more recently China; Thus, unevenly distributed across the developing world.
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Import substitution: looking inward but still paying outward
  – In the 1950s and 1960s
  – Domestic production largely manufactured consumer goods to replace imports
    • Large imports of intermediate inputs
  – Tariffs, infant industries, and the theory of protection.
Import Substitution and the Theory of Protection
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• The import substitution (IS) industrialization strategy and results
  – Protected industries get inefficient and costly
  – Foreign firms often benefit more (locate behind tariff walls)
  – Subsidization of imports of capital goods tilts pattern of industrialization (capital intensive with little employment effects) and contributes to balance of payments (BOP) problems (repatriation of profits, etc.)
  – Overvalued exchange rates hurt/penalize exports
  – Does not stimulate self-reliant integrated industrialization (very little linkages – backward & forward).
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• **Tariff Structure and Effective Protection**
  
  – Nominal rate of protection
    • Extent (in percentage) to which price of imported good exceeds world price
  
  – Effective rate of protection
    • Percentage by which domestic value-added increases with protection compared to free-trade.
The nominal tariff rate, \( t \), is

\[
t = \frac{p' - p}{p} \quad \text{(12.1)}
\]

Where

- \( p' \) is the tariff-inclusive price
- \( p \) is the free trade price
Tariff Structures and Effective Protection

The effective tariff rate, $\rho$, is

$$\rho = \frac{v' - v}{v} \quad (12.2)$$

Where

$v'$ is the value added per unit of output, inclusive of the tariff
$v$ is the value added per unit of output under free trade
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Standard argument for tariff protection
  – Source of revenue
  – Response to chronic BOP problems
  – Help foster industrial self-reliance and greater control over economic destinies.

• Infant industry protection argument
  – Many examples of perceived failures, but some success in East Asia

• Lesson: Protection must be applied selectively and wisely.
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Foreign-exchange rates, exchange controls, and the devaluation decision
  – Developing country currencies have often been overvalued (excess of local demand over available (foreign) exchange)
  – A developing country can devalue currency, or
  – Can run down reserves
  – Can curtail excess demand through taxes, tariffs, dual exchange rates
  – Can use exchange controls (rationing but breeds corruption; also black markets, etc.)
  – Can switch to freely convertible foreign exchange.
Free-Market and Controlled Rates of Foreign Exchange

[Diagram showing supply (S) and demand (D) curves for foreign exchange, with prices and quantities labeled.]
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Chronic payments deficits can be ameliorated by a currency devaluation
  – Note difference between depreciation and devaluation
  – Higher import prices (from devaluation) result in an inflationary wage-price spiral
  – Distributional effects; tradable sector benefits at expense of non-tradable sector.
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Trade Optimists and Trade Pessimists: Summarizing the Traditional Debate

• Trade pessimist arguments
  – Limited growth of world demand for primary exports (synthetic substitutes, low income elasticities, etc.)
  – Secular deterioration in terms of trade
  – Specializing in comparative advantage inhibits industrialization, skills accumulation, and entrepreneurship
  – Rise of “new protectionism” in developed countries; WTO benefits limited in practice.
Traditional Trade Strategies for Development: Export Promotion versus Import Substitution

• Trade optimist arguments - trade liberalization:
  – Promotes competition and efficiency (improved resource allocation)
  – Generates pressure for product improvement
  – Attracts foreign capital and expertise, which are in scarce supply in most developing countries, thus accelerating economic growth
  – Generates foreign exchange to use for food imports if agricultural sector lags behind or suffers natural catastrophes
  – Eliminates distortions caused by government interventions including corruption and rent-seeking activities
  – Enables developing countries to take full advantage of reforms (reduction/elimination of trade barriers, etc.) under the WTO.
South-South Trade and Economic Integration

• Economic Integration: Theory and Practice
  – The growth of trade among developing countries.
  – Integration encourages rational division of labor among a group of countries and increases market size
  – Provides opportunities for a coordinated industrial strategy to exploit economies of scale.
  – These are dynamic effects.
  – Two main static effects: trade creation versus trade diversion.
Trade Policies of Developed Countries: The Need for Reform and Resistance to New Protectionist Pressures

• Rich-nation economic and commercial policies matter for developing countries
  – Tariff and non-tariff barriers to developing country exports
  – Adjustment assistance for displaced workers in developed-country industries hurt by freer access of labor-intensive, low-cost LDC exports
  – General impact of rich-country economic policies on developing economies

• World Trade Organization (GATT since 1948, until 1995)
• Despite 8 liberalization rounds over 50 years, trade barriers remain in place in agriculture (of most interest to developing countries); and, through various mechanisms, to a degree in other sectors.
• Doha Development Round begun 2001 with focus on needs of developing world; not much progress has been made.