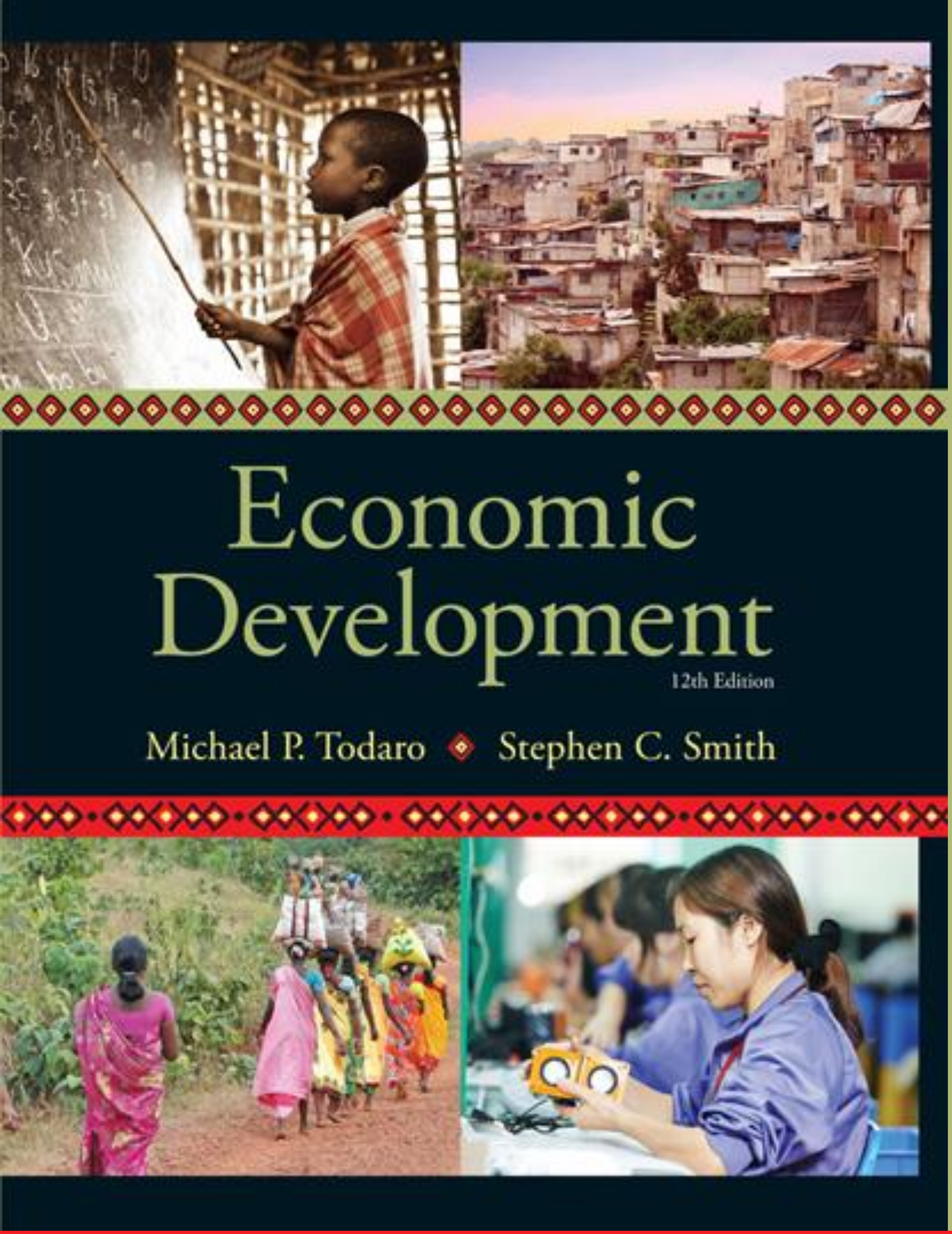


Chapter 12

International Trade Theory and Development Strategy

12.1 Economic Globalization: An Introduction

- Globalization- many interpretations
- Core economic meaning- the increased openness of economies to international trade, financial flows, and foreign direct investment
- Concerns with globalization center around the unevenness of the process, and risks

12.2 International Trade: Some Key Issues

- Many developing countries rely heavily on exports of primary products with attendant risks and uncertainty
- Many developing countries also rely heavily on imports (typically of machinery, capital goods, intermediate producer goods, and consumer products)
- Many developing countries have chronic deficits on current and capital accounts which depletes their reserves, causes currency instability, and may slow economic growth
- Recently many developing countries sought to promote exports and accumulate large foreign exchange reserves to cushion against crises - spurring new policy debates

12.2 International Trade: Some Key Issues (cont'd)

- Five Basic Questions about Trade and Development
  - How does international trade affect economic growth?
  - How does trade alter the distribution of income?
  - How can trade promote development?
  - Can developing countries determine how much they trade?
  - Is an outward-looking or an inward-looking trade policy best?

12.2 International Trade: Some Key Issues (cont’d)

- The Importance of Exports to Different Developing Nations
- Importance of exports to developing nations
- Exports of developing countries are generally less diversified than those of developed countries
- Merchandise exports as a share of GDP are often higher for developing countries

Table 12.1 Structure of merchandise exports: Selected Countries, 2012

Country	GDP, $ billions, 2012	Merchandise exports, $ billions, 2012	Merchandise Exports, % of GDP, 2012	Food, % of Total, 2012	Agricultural raw materials, % of total, 2012	Fuels, % of total, 2012	Ores and Metals, % of total, 2012	Manufactures, % of totals, 2012
Algeria	205.8	74.0	36	0	0	97	0	2
Benin	7.6	1.4	18	61	24	0	1	15
Bolivia	27.0	10.9	40	14	1	55	25	5
Brazil	2252.7	242.6	11	32	4	11	16	35
Burkina Faso	10.4	2.4	23	38	52	0	1	8
Burundi	2.5	0.1	5	74	5	0	8	13
Central African Republic	2.2	0.2	10	1	31	1	62	4
China	8227.1	2048.8	25	3	0	2	1	94
Cote d'Ivoire	24.7	12.4	50	51	13	26	0	10
Ecuador	84.0	23.9	28	30	4	58	1	8
Egypt, Arab Rep.	262.8	29.4	11	14	2	32	6	45
Ethiopia	41.6	3.0	7	78	9	0	1	10
Gambia, The	0.9	0.1	11	82	2	0	9	7
Ghana	40.7	12.0	29	48	2	39	2	9
India	1841.7	293.2	16	11	2	19	3	65
Indonesia	878.0	188.1	21	18	6	34	6	36
Iran, Islamic Rep.	514.1	95.5	19	4	0	70	2	12
Japan	5959.7	798.6	13	1	1	2	3	90
Malawi	4.3	1.3	30	76	5	0	9	9
Malaysia	305.0	227.4	75	13	2	20	2	62
Mexico	1178.1	370.9	31	6	0	14	4	74
Mozambique	14.2	4.1	29	20	5	16	51	7
Nicaragua	10.5	2.7	25	90	2	1	2	6
Niger	6.8	1.5	22	14	3	1	76	6
Nigeria	262.6	114.0	43	2	6	89	0	3
Peru	203.8	45.6	22	21	1	14	50	14
Philippines	250.2	52.0	21	9	1	2	5	83
Russian Federation	2014.8	529.3	26	3	2	70	4	14
Rwanda	7.1	0.5	7	51	5	0	34	10
South Africa	384.3	87.3	23	8	2	12	32	45
United Kingdom	2471.8	468.4	19	6	1	14	4	66
United States	16244.6	1547.3	10	10	2	10	4	63
Vietnam	155.8	114.6	74	19	4	11	1	65
Yemen, Rep.	35.6	8.5	24	7	0	89	0	3

Source: World Bank, World Development Indicators, 2013, Table 4.4, at: http://wdi.worldbank.org/table/4.4, accessed 18 February 2014.

Demand Elasticities and Export Earning Instability

- Often low price elasticity of demand for agricultural commodities but supply shocks
- Often low price elasticity of supply for basic commodities but demand shocks
- Result can be export earnings instability; risks to income
- Also, low *income* elasticity of demand for primary products:

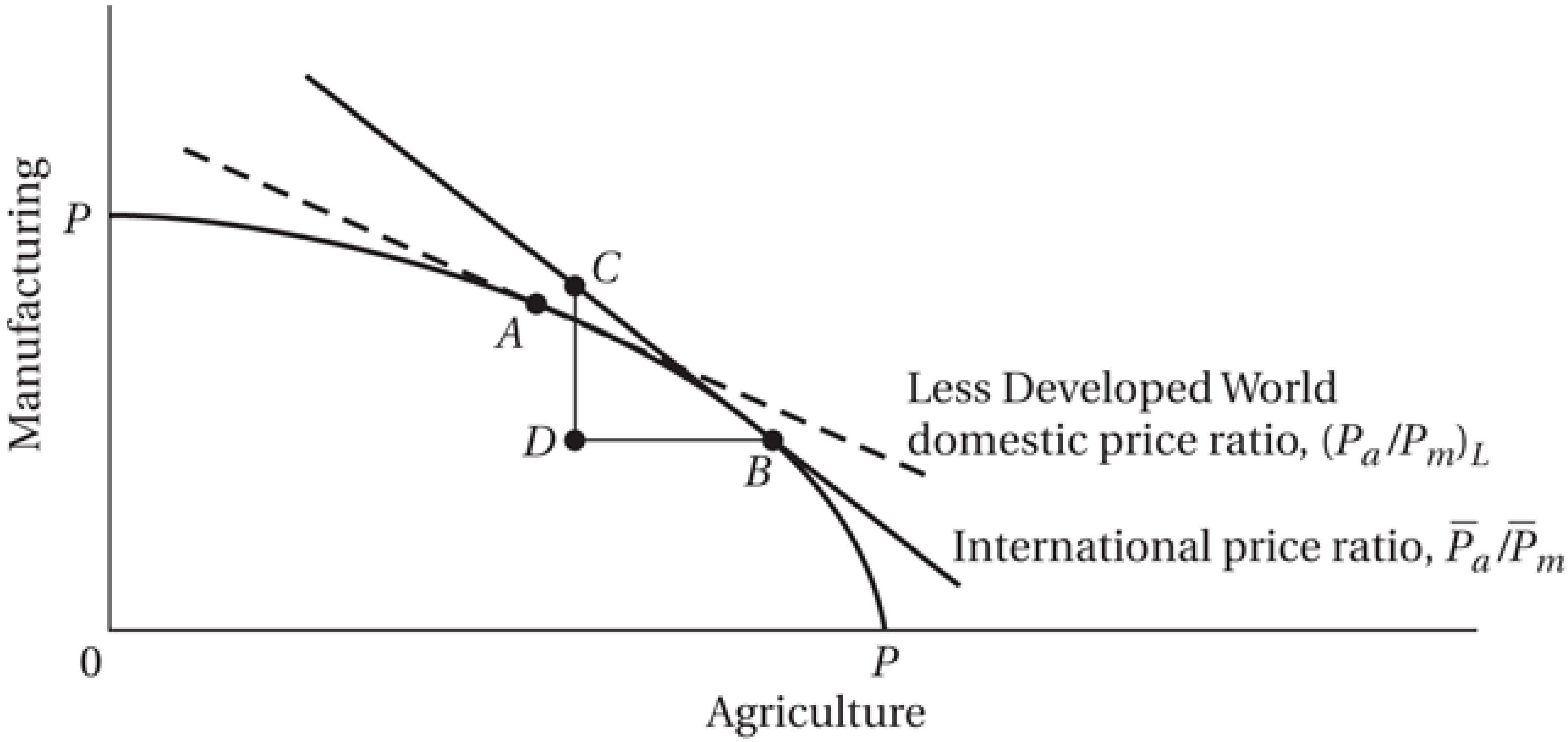
The Terms of Trade and the Prebisch-Singer Hypothesis

- Total export earnings depend upon:
  - Total volume of exports sold; and,
  - Price paid for exports
- Prebisch and Singer argued commodity export prices fall over time, so developing countries lose revenue unless they can continually increase export volumes
- They concluded that developing countries need to avoid dependence on primary exports
- Some recent evidence is reported in Box 12.1

12.3 The Traditional Theory of International Trade

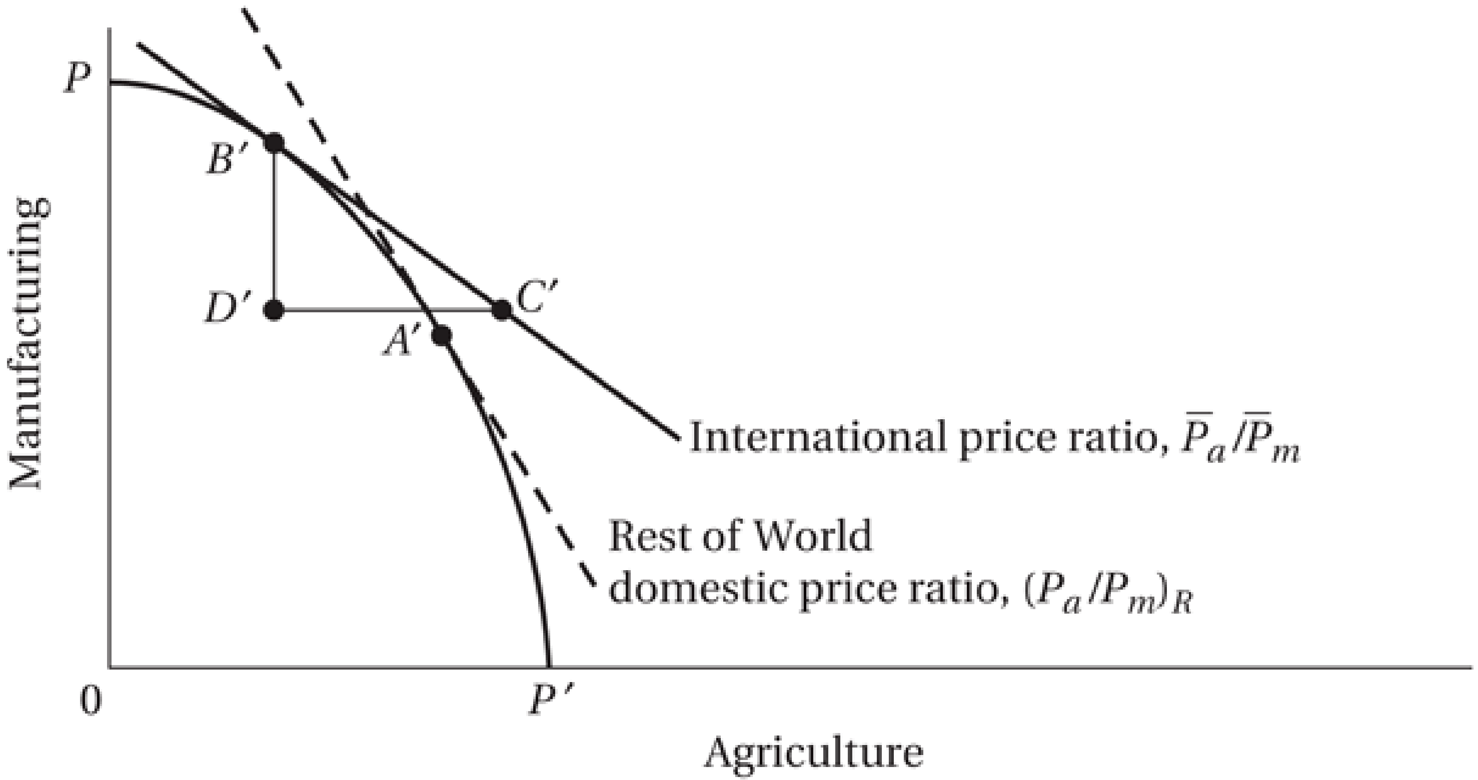
- Comparative advantage
  - specialization
- Relative factor endowments and international specialization: the Neoclassical model
  - Ricardo and Mill (static model)
  - Heckscher and Ohlin (factor endowment theory)
    - Different products require productive factors in different ratios
    - Countries have different endowments of factors of production

Figure 12.1 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*)

Figure 12.1 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 = $D'C'$)

12.3 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

12.3 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
  - Outward-looking international policy is superior to isolation

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience

- The following assumptions of the basic Neoclassical model have been scrutinized:
  - Fixed resources, full employment, international factor immobility
  - And fixed, freely available technology and consumer sovereignty vs. product cycle, ongoing development of synthetic substitutes for developing countries exports, and opportunities for dynamic gains in leading sectors
  - Internal factor mobility vs. different types of structural rigidities; and perfect competition vs. pervasive market power
  - Governmental non-interference in trade vs. active trade policies
  - Balanced trade and international price adjustments vs. instability
  - Trade gains accruing to nationals vs. export enclaves with foreign ownership; distinction between GDP and GNI becomes important

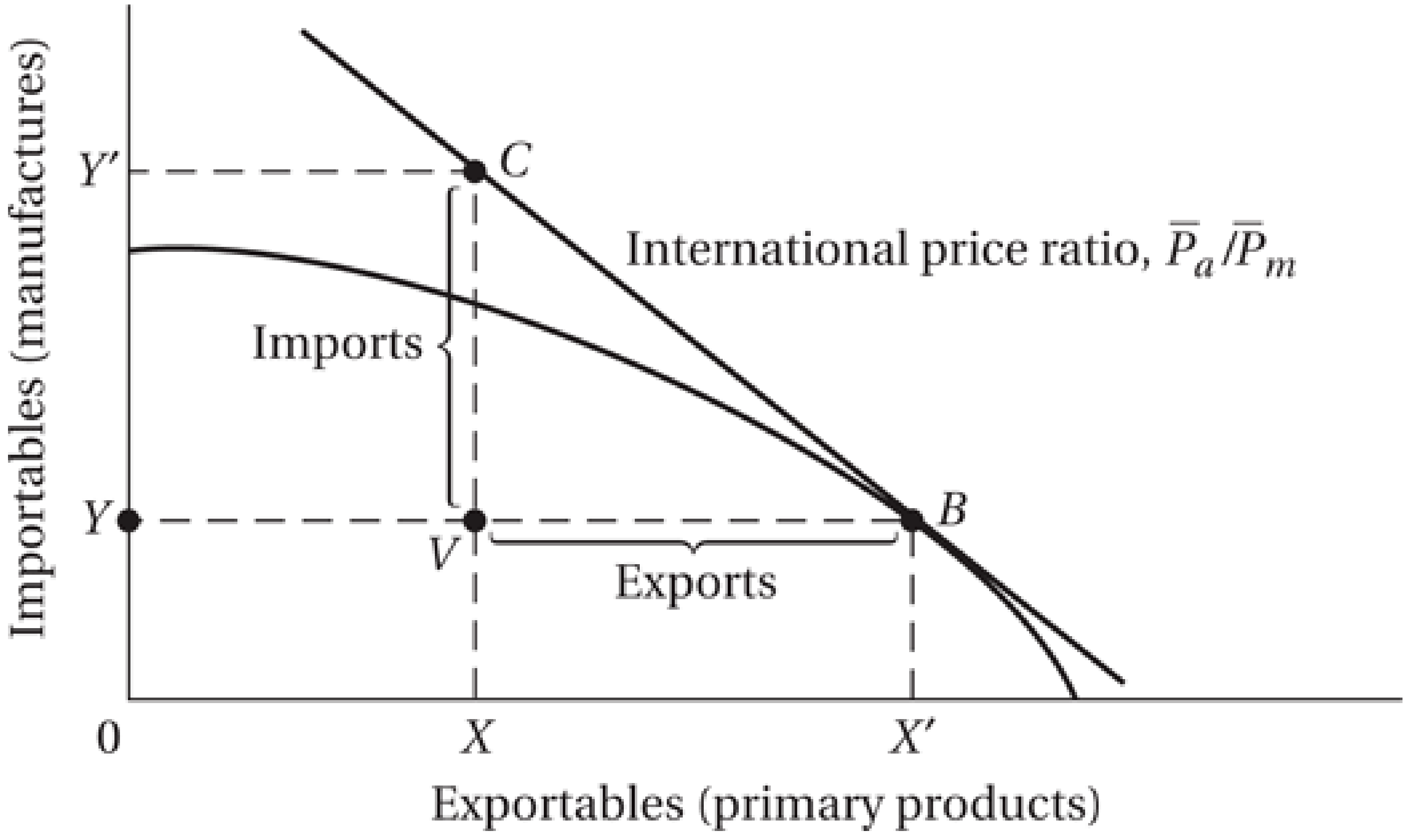
12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Fixed Resources, Full Employment, and the International Immobility of Capital and Skilled Labor
  - Challenged by North-South trade models
- Porter's "Competitive Advantage" theory:
  - Traditional trade theory applies only to basic factors (unskilled labor, physical resources)
  - But creation of advanced factors (knowledge resources, specialized infrastructure) is the first priority
  - Central task to "escape from the straightjacket of factor-driven national advantage"

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Alternative Theories
- Vent for Surplus theory

Figure 12.2 The Vent-for-Surplus Theory of Trade



12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Fixed, Freely Available Technology and Consumer Sovereignty
  - Challenged by the Product Cycle theory
  - Development of synthetic substitutes for developing country exports

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- International Factor Mobility, Perfect Competition, and Uncertainty: Increasing Returns, Imperfect Competition, and Issues in Specialization
  - Structural realities in developing countries
  - Increasing returns and exercise of monopolistic control over world markets
  - Risk and uncertainty inherent in international trading arrangements

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- The Absence of National Governments in Trading Relations
  - Definite role for State
  - Industrial policy is crafted by governments
  - Commercial policies instruments (tariffs, quotas) are state constructs
  - International policies can result in uneven distribution of gains from trade

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Balanced Trade and International Price Adjustments
  - Unrealistic (example: impact of oil price hikes of the 1970s)

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Trade gains accruing to nationals
  - Enclave economies are promoted by trade
  - Difference between GDP and GNI becomes important

12.4 The Critique of Traditional Free-Trade Theory, in the Context of Developing-Country Experience (cont'd)

- Some Conclusions on Trade Theory and Economic Development Strategy
  - Trade can lead to rapid economic growth under some circumstances
  - Trade seems to reinforce existing income inequalities
  - Trade can benefit developing countries if they can extract trade concessions from developed countries
  - Developing countries generally must trade
  - Regional cooperation may help developing countries

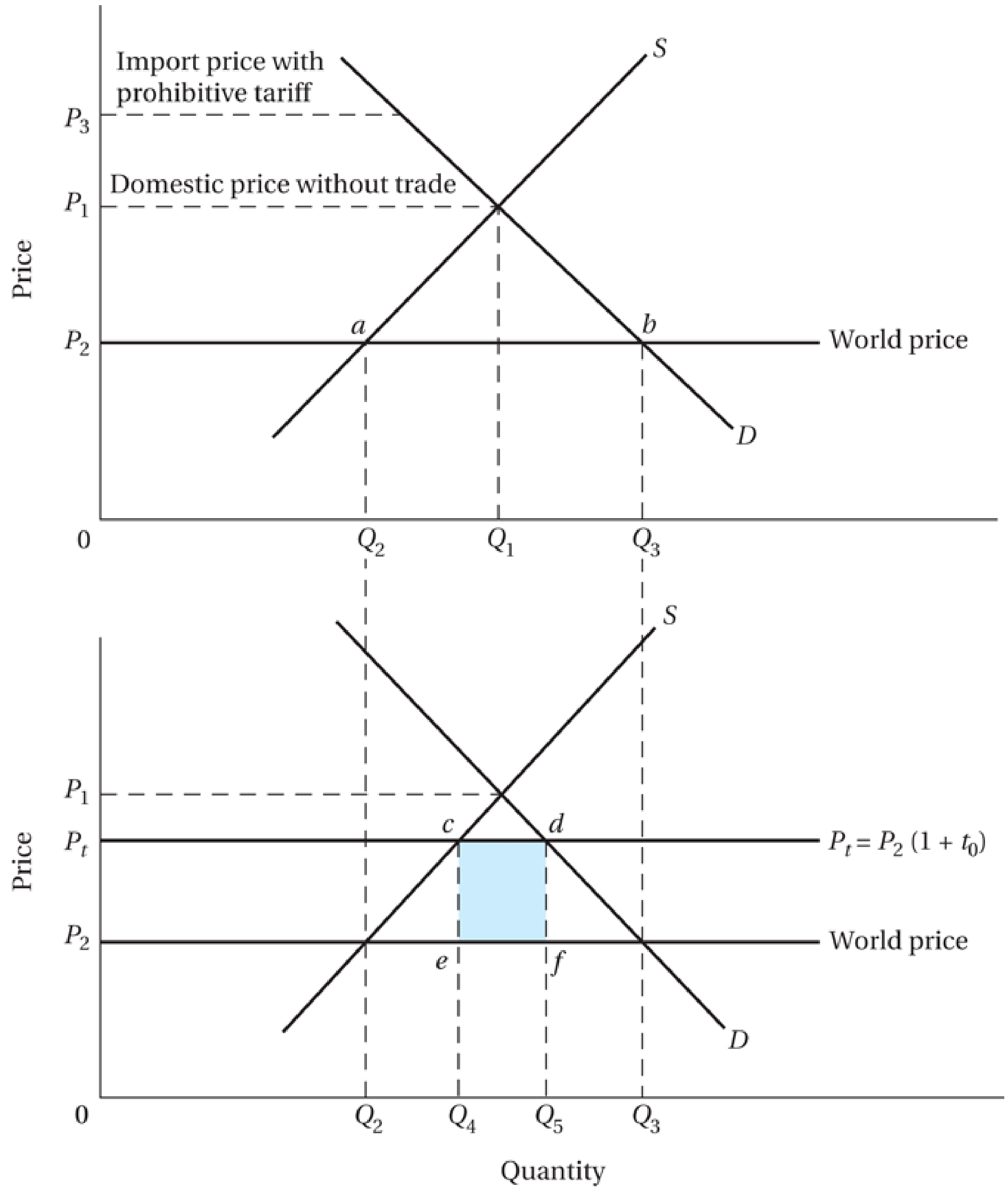
12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution

- Export promotion: looking outward and seeing trade barriers
  - Primary-commodity export expansion, limited demand
    - Low income elasticities
    - Low population growth rates in developing economies
    - Decline in prices implies low 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
    - Agricultural subsidies
  - Primary-commodity export expansion, supply rigidities
- Expanding Exports of manufactured goods: Greater successes, particularly China; unevenly distributed across the developing world

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Import substitution: looking inward but still paying outward
  - Tariffs, infant industries, and the theory of protection

Figure 12.3 Import Substitution and the Theory of Protection



12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- The import substitution (IS) industrialization strategy and results
  - Protected industries get inefficient and costly
  - Foreign firms often benefit more
  - Subsidization of imports of capital goods tilts pattern of industrialization and contributes to balance of payments (BOP) problems
  - Overvalued exchange rates hurt exports
  - Does not stimulate self-reliant integrated industrialization

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Tariff Structure and Effective Protection
  - Nominal rate of protection
  - Effective rate of protection

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

The nominal tariff rate, t, is

$$t = \frac{p' - p}{p} \qquad (12.1)$$

Where

p' is the tariff-inclusive price

p is the free trade price

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

Tariff Structures and Effective Protection

The effective tariff rate, g, is

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

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

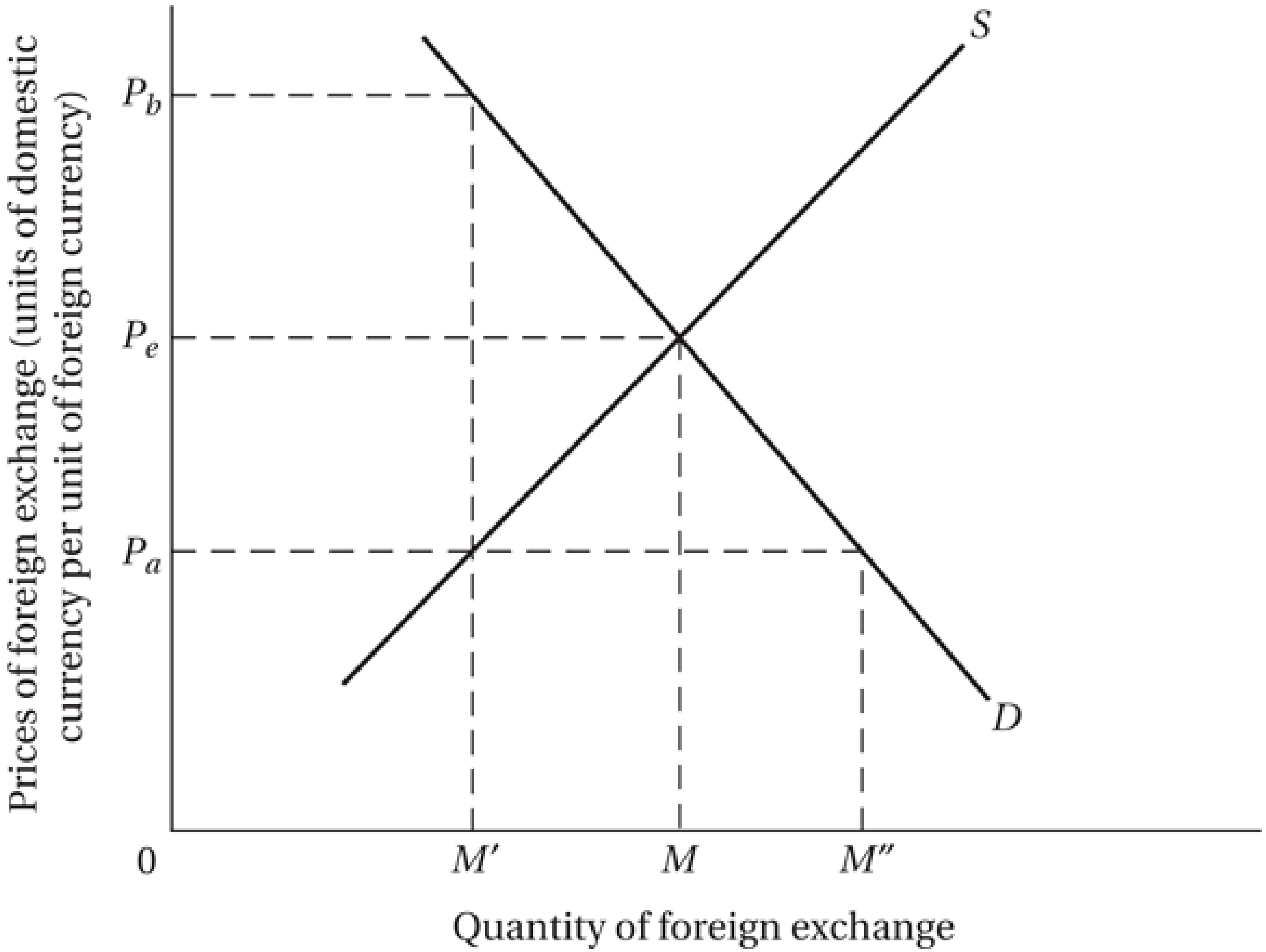
12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Standard argument for tariff protection
  - Sources of revenue
  - Response to chronic BOP problems
  - Help foster industrial self-reliance (general IS)
  - Greater control over economic destinies
- Must be applied selectively and wisely
- Infant industry protection argument
  - Many examples of perceived failures, but some success in East Asia

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Foreign-exchange rates, exchange controls, and the devaluation decision
  - Developing country currencies have often been overvalued (excess of local demand over available 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
  - Can switch to freely convertible foreign exchange

Figure 12.4 Free-Market and Controlled Rates of Foreign Exchange



12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Chronic payments deficits can be ameliorated by a currency devaluation
  - Difference between depreciation and devaluation
  - Higher import prices result in an inflationary wage-price spiral
  - Distributional effects

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Trade Optimists and Trade Pessimists: Summarizing the Traditional Debate
- Trade pessimist arguments
  - Limited growth of world demand for primary exports
  - Secular deterioration in terms of trade
  - Specializing in comparative advantage inhibits industrialization, skills accumulation, and entrepreneurship
  - Rise of "new protectionism"; WTO benefits limited in practice

12.5 Traditional Trade Strategies and Policy Mechanisms for Development: Export Promotion versus Import Substitution (cont'd)

- Trade optimist arguments - trade liberalization:
  - Promotes competition and efficiency
  - Generates pressure for product improvement
  - Accelerates overall growth
  - Attracts foreign capital and expertise, which are in scarce supply in most developing countries
  - 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
  - Promotes equal access to scarce resources,
  - Enables developing countries to take full advantage of reforms under the WTO

Export-Oriented Industrialization Strategy: Some arguments in the literature on why, in principle, it could be effective

- There are market failures in transfer of innovations
- Coordination failures may make industrialization problematic
- Export expansion may facilitate technology transfer through contacts with foreign firms, industry spillovers, scale economies
- There may be learning by doing (or "watching") effects in manufacturing sectors
- Performance is rigorously tested when firms attempt to export
- Export targets more visible; focus on manageable problems
- Hausmann, Hwang, and Rodrik: exporting a mix of goods more typical for higher-income countries predicts higher growth
- Thus, export oriented industrial policy may help overcome market failures in the process of technological progress

12.6 The Industrialization Strategy Approach to Export Policy

- Focus on government interventions to encourage exports, especially those with higher skill and technology content (industrial policy)
- Problem: without proper attention to incentives, industrial policies may be counterproductive too
- WTO rules and industrial policies – gray areas remain
- Problem: level of competence and political authority of governments to carry out policies effectively
- Policy approaches are addressed in case studies of Taiwan (Chapter 12) and South Korea (Chapter 13)

12.7 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
  - Trade creation
  - Trade diversion

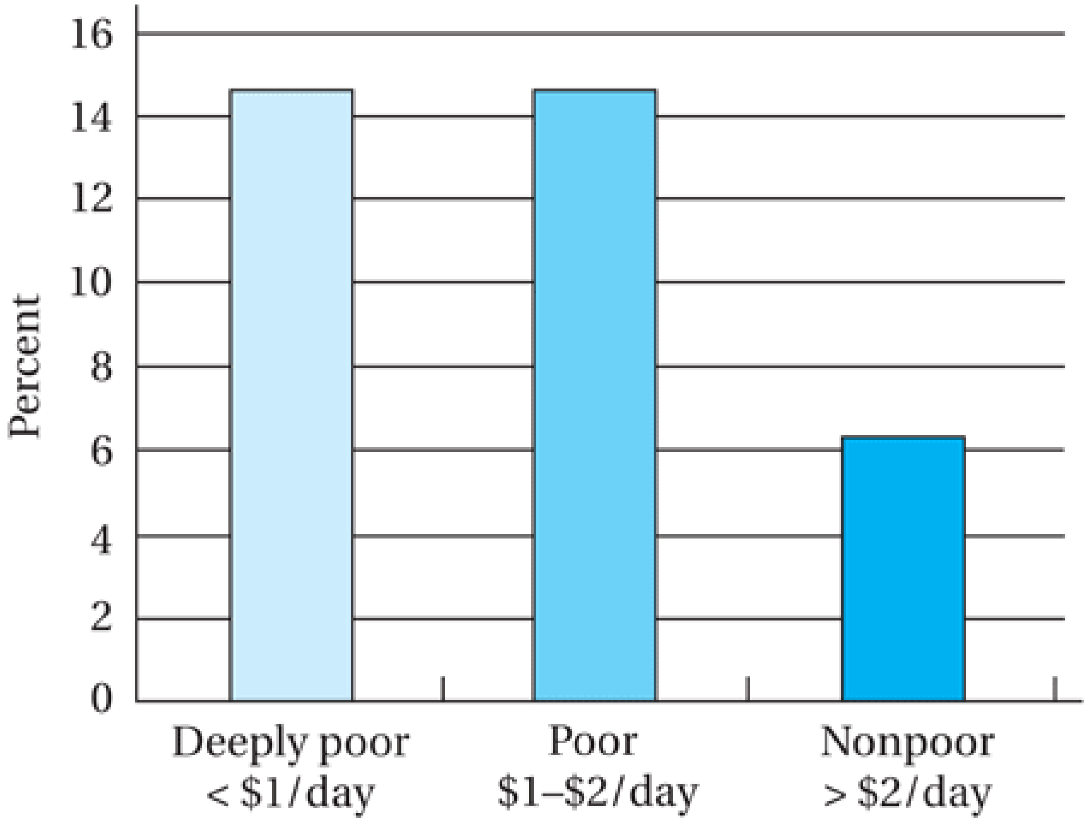
12.7 South-South Trade and Economic Integration

- Regional trading blocs and the globalization of trade
  - NAFTA
  - MERCOSUR
  - SADC
  - ASEAN
  - Local conditions matter
  - Still not fully answered: Do blocs promote growth or retard the progress of globalization

12.8 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
  - General impact of economic policy
- World Trade Organization
- Despite 8 liberalization rounds over 50 years, trade barriers remain in place in agriculture; and, through various mechanisms, to a degree in other sectors
- Doha Development Round begun 2001 tilted the nominal focus to needs of developing world; but talks remained stalled through the end of 2010, a self-imposed deadline, and were still deadlocked in 2014

Figure 12.5 Effective Tariff Faced by Income Groups, 1997-1998



Source: International Bank for Reconstruction and Development/The World Bank, *Global Economic Prospects and the Developing Countries, 2002*. Reprinted with permission.

Concepts for Review

- Absolute advantage
- Autarky
- Balanced trade
- Barter transactions
- Capital account
- Commodity terms of trade
- Common Market
- Comparative advantage
- Current account
- Customs Union
- Depreciation
- Devaluation
- Dual exchange rate
- Economic Integration
- Economic Unions

Concepts for Review (cont’d)

- Effective Rate of Protection
- Enclave economies
- Exchange Control
- Export dependence
- Export earnings instability
- Factor endowment trade theory
- Factor price equalization
- Flexible exchange rate
- Foreign-exchange earnings
- Free market exchange rate
- Free trade
- Free trade area

Concepts for Review (cont’d)

- Gains from trade
- General Agreement on Tariffs and Trade (GATT Globalization
- Globalization
- Growth poles
- Import substitution
- Income elasticity of demand
- Increasing returns
- Industrialization Strategy Approach
- Industrial policy
- Infant industry
- International commodity agreements
- Inward-looking development policies

Concepts for Review (cont'd)

- Managed float
- Monopolistic market control
- Multifiber Arrangement (MFA)
- New protectionism
- Nominal rate of protection
- Nontariff trade barriers
- North-South trade models
- Official exchange rate
- Oligopolistic market control
- Outward-looking development policies
- Overvalued exchange rate
- Parallel exchange rate
- Prebisch-Singer thesis

Concepts for Review (cont'd)

- Price elasticity of demand
- Primary products
- Product Cycle
- Product differentiation
- Quotas
- Regional trading bloc
- Rent
- Returns to scale
- Risk
- Specialization
- Subsidy
- Synthetic substitutes
- Tariffs
- Trade creation
- Trade deficits

Concepts for Review (cont'd)

- Trade diversion
- Trade liberalization
- Trade optimists
- Trade pessimists
- Uncertainty
- Undervalued exchange rate
- Uruguay Round
- Value added
- Vent-for-surplus theory of international trade
- Wage-price spiral
- World Trade Organization (WTO)