PART ONE. PRINCIPLES AND CONCEPTS OF DEVELOPMENT

1 How the Other Two-Thirds Live

> Development economics investigates the causes of poverty and low income around the world and seeks to make progress in designing policies that could help individuals, regions, and countries to achieve greater economic prosperity. (Acemoglu 2010:17)

> In 1966, Ethiopia, India, and Thailand were all poor countries, [in which] a majority of people were living on less than $1 a day (in 1985 prices). . . . India did well, doubling per capita income between 1966 and 1990, and reducing poverty to 53 percent of the population. . . . Thailand did very well, tripling per capita income and cutting poverty to just 2 percent. . . . In 1966 Thailand had about four times Ethiopia's per capita income. By 1990 Ethiopians had seen no income growth, and Thailand was more than 10 times wealthier. . . . This difference is what Robert Lucas means by the "staggering consequences for human welfare" of different rates of growth and development. (World Bank 1998:29)

Nature and Scope of the Text

This book is about the economics of developing Asia, Africa, Latin America, and East and Central Europe, whose peoples include impoverished peasants, factory workers, small farmers, landlords, business people, managers, technicians, government officials, and political elites. The economics of development also includes lessons from the past economic growth of today's industrialized countries and middle-income economies. This book differs from other development textbooks:

1. Unlike most texts, it discusses why modern economic growth originated in the West; gives reasons for Japanese growth (before its deceleration since 1985); and explains different growth rates among developing countries, including the success of the newly industrialized countries – especially Taiwan, South Korea, Singapore, Hong Kong, and Malaysia.
2. This book illustrates concepts from all major Third World regions, with discussion of Asia's recent gains on the West, Latin America's slowing growth, sub-Saharan Africa's food and economic crises, and how developing regions have been affected by globalization.
3. I provide a more detailed and balanced discussion of economic adjustment (structural or sectoral adjustment, macroeconomic stabilization, or economic reform) in emerging economies, including former socialist economies, such as China,

Russia, Ukraine, Poland, the Czech Republic, and Hungary, making the transition to a market economy. The text also analyzes the roles of rich nations, the International Monetary Fund (IMF), and the World Bank in supplying external resources and their conditions. Moreover, this book examines the lessons learned during the reaction against reforms imposed by the IMF and other external lenders on less developed countries (LDCs) in the past 30 years and on countries such as Russia, Ukraine, Poland, and Hungary since 1990. I treat adjustment comprehensively in Chapter 18.

4. The case studies discussed – Russia, Japan, South Korea, Taiwan, China, the Philippines, Thailand, Indonesia, Malaysia, Bangladesh, India, Nigeria, Congo (Kinshasa), South Africa, Argentina, Brazil, and Mexico – are not isolated at the ends of chapters but are integrated into the chapters.
5. Instead of stressing abstract models of aggregate economic growth, the text emphasizes poverty, inequality, unemployment, hunger, and lack of education, clothing, shelter, and health in LDCs, including the HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome), malaria, and tuberculosis pandemics.
6. Rather than being isolated in a separate chapter, employment and income distribution are discussed throughout the book.
7. Problems of measuring economic growth are stressed along with adjusting income for purchasing power.
8. I examine institutional, social, and political factors of development throughout the book rather than in only one chapter.
9. I explain economic performance in the context of both domestic and global economies, with emphasis on international interdependence. Three chapters are devoted to the balance of payments, aid, foreign investment, reverse capital flows, technical transfer, the global economic crisis, the financial and currency crises, the external debt crisis, World Bank and IMF policies, international trade, exchange-rate policies, trade-in services and agricultural products, and regional economic integration. I discuss a subject little noted by other economists – how U.S., Japanese, European, and other global production networks have increased international competition and reduced production costs and how Asia's increasing share of the world's middle-class population is providing increased competition for the industrialized countries' middle class and college graduates, especially in electronics, software, and services.
10. A section of Chapter 11 on capital formation and technical progress concentrates on information and information technology (IT), electronics, and cell phones, examining the market breakdown by geographical region; returns to investment in IT; the contribution of IT to **gross national product** (**GNP**); the rate of price reduction in electronics, computers, and IT; the adaptation of this technology in LDCs; and the extent to which LDCs can "leapfrog" stages to use state-of-the-art IT.

Gross national product is income accruing to a country's residents, whereas **gross domestic product** (**GDP**), a term that is sometimes used, is income earned within a country's boundaries. The United States' GNP increases when General Motors, John Deere, Google, Microsoft, or other U.S.-based multinational corporations (MNCs) earn factor income repatriated from Malaysia to the United States, while MNC income is added to Malaysia's GDP.

11. The text analyzes views opposed to prevailing Western economic thought, such as the dependency theory, which explains the underdevelopment of the Third World by the economic and political domination of the industrialized world, and Neo-Marxism, which sees international class conflict as a struggle by workers and peasants in the developing world against their own political elite, who are allied with the elites of the developed world. Only by carefully considering these perspectives can a reader understand Third World economic ideologies and political discontent. Indeed, most Neo-Marxists put more emphasis on criticizing the prevailing system, especially capitalism, than on prescribing socialism. I try to present a balanced view of Neo-Marxism and dependency – neither attributing these views to a "devil theory of history" nor using them to explain the distributional effects of international trade as unequivocally unfavorable to LDCs.

12. The discussion on development policy making and planning, although discussed in the last chapter of this book, is integrated with other chapters, emphasizing that antipoverty programs, family planning, agricultural research and extension, employment policies, education, local technology, savings, investment project analysis, monetary and fiscal policies, entrepreneurial development programs, and international trade and capital flows are included in economic planning. I analyze the role of the state and the market in policy making, with a section on the role of government and the liberalizing process in adjustment in Chapter 19.

13. With the explosion of Internet resources, students can type in concepts or authors' names into search engines, such as Google or Yahoo. Moreover, my Web site, www.ksu.edu/economics/nafwayne/edc.htm, has journal, database, and library lists, Internet resources, LDC news sources, country and map information, development economics institutes and abstracts, international agencies, general resources in economic development, and other economic sites.

Organization of the Text

The book is organized into six parts. The first five chapters focus on principles and concepts of economic development and sustainability. Chapters 6 and 7 examine income distribution, including a discussion of the distribution between urban and rural areas and the process of agricultural transformation. Chapters 8 through 13 analyze the role of population, production factors, and technology in economic development, with special emphasis on the environment and natural resources in Chapter 13. Chapters 14 through 17 discuss the macroeconomics and international economics of development. Chapter 18 analyzes the transition to liberalization and economic reform in Eastern Europe, the former Soviet Union, and China, while the Appendix to Chapter 18 looks at the coordinated planning of market entities and the state, frequently at the national level, to achieve reduced poverty, accelerated economic growth, and other national economic objectives. Chapter 19, the concluding chapter, analyzes stabilization, adjustment, and reform.

Sections presenting terms to review, questions to discuss, and guides to readings can be found at the end of each chapter. Highlighted terms are defined or identified in the glossary near the end of the book. References in the chapters and guides to reading are cited in full in the bibliography.

How the Poorest Two-Thirds Live

INEQUALITY BETWEEN THE WORLD'S RICH AND POOR

Development economics focuses primarily on the poorest two-thirds of the world, from fast-growing Malaysia to Haiti, the poorest country of the Western Hemisphere. These poor are the vast majority, but not all, of the population of developing countries, which comprise 82 percent of the world's population. Many of them are inadequately fed and housed, in poor health, and illiterate. Calculations based on national accounts and income distribution indicate that about 700 million to 1 billion (10–14 percent) of the world's 7 billion people (5.8 billion in developing countries) are poor or living on no more than $1.25 daily at 2005 purchasing power parity (PPP).[1]

PURCHASING POWER PARITY

Purchasing power parity is the adjustment made to GNP that reflects the country's purchasing power relative to all other countries. An international dollar, or $PPP, has the same purchasing power over GNP that a U.S. dollar has in the United States. In 2008, Rs. or ₹ (Indian rupees) 15.9 had the same purchasing power as $U.S.1, even though the exchange rate was Rs. 43.51 = $1. Thus, India's 2008 PPP GNP, $3,339.3 billion, was 2.75 times what its nominal GNP was. Conversely, in 2008, the ¥ (Japanese yen) 116.5 had the same purchasing power as $U.S.1, although the exchange rate was ¥89.56 = $1. Thus, Japan's PPP GNP, $4,493 billion, was only 0.77 times what its nominal GNP was.

Most LDCs have a PPP GNP in excess of their nominal GNP, whereas many developed countries (DCs), such as Japan and European countries, have a PPP GNP less than their nominal GNP.

COMPARISONS BETWEEN DEVELOPED AND LESS DEVELOPED COUNTRIES

Most Americans, Canadians, and Britons have never seen poverty like that among the world's poorest two-thirds, the overwhelming majority of which is in sub-Saharan Africa, South Asia, and East Asia.

If you have an average income in the United States or Canada, you are among the richest 5 percent of the world's population. The economic concerns of this 5 percent

[1] While precise data are lacking, increasing food prices may mean that the world's poverty percentage in 2011 was as high as in 2005.

are in stark contrast to those of most people on the planet. The majority see the average American as incredibly rich, perhaps as an average American views the Mellons or Rockefellers. By and large, a person's material well-being is tied to the long-run growth record of his or her country, a focus of this book.

Income inequality is even greater for the world as a whole than for countries having high income concentration, such as South Africa, Brazil, and Bolivia. To see these contrasts more clearly, let us briefly compare living conditions in North America with those in India, a low-income (LIC) or lower middle-income (LMIC) country but not as poor as the poorest countries in sub-Saharan Africa.

A North American family. Median household income in the United States and Canada is $U.S.50,000 to 60,000. A median intact family, the Smiths, with parents and two children, live in a comfortable apartment or suburban home with three bedrooms, a living room, kitchen, and numerous electrical appliances, home furnishings, and consumer goods. Their three meals a day include coffee from Brazil, tinned fruit from the Philippines, and bananas from Ecuador.

The Smith children are in good health and have a life expectancy of seventy-eight years. Both parents received a secondary education, and the children can be expected to finish high school and possibly go to university. Their jobs, even manual work, will probably be relieved by modern machinery and technology. But although the Smiths live well, they may experience stress, boredom, insecurity, and a lack of meaning and control. Their air and water may be polluted and their roads congested. Some of these problems may even result from economic progress. Nevertheless, millions of less fortunate people throughout the world would be happy with a portion of the Smiths' material affluence.

Indian farm families. The family of Balayya, a farm laborer in India, has a life far different from that of the Smiths. Although work, family structure, food, housing, clothing, and recreation patterns vary widely in the developing world, Balayya's family illustrates the low income of the majority of the world's population in Asia, Africa, and Latin America. Balayya Lakshman, his wife, Kamani, and their four children (ranging in age from three to twelve years) have a combined annual income of $U.S.1,000[2] (but several times that in purchasing power), most of which consists of goods produced rather than money earned. Under a complex division of labor, the family receives consumption shares from the patron (or landlord) in return for farm work – plowing, transplanting, threshing, stacking, and so on.

The rice-based daily meal, the one-room mud house thatched with palm leaves, and the crudely stitched clothing are produced locally. The house has no electricity, clean water, or latrine. Kamani fetches the day's water supply from the village well, a kilometer (three-fifths of a mile) away. Although there is much illness, the nearest doctor, nurse, or midwife is fifty kilometers away, serving affluent city dwellers. Life expectancy is sixty-four years. Few villagers can afford the bus that twice daily

[2] Tens of thousands of Indian rupees.

connects a neighboring village to the city, forty kilometers away.[3] The family's world is circumscribed by the distance a person can walk in a day.

Neither Balayya nor Kamani can read or write. One of their children attended school regularly for three years but dropped out before completing primary school. The child will probably not return to school.

Despite undernourishment, Balayya and the two sons older than seven years of age toil hard under the blazing sun, aided by only a few simple tools. During the peak season of planting, transplanting, and harvesting, the work is from sunrise to sunset. Kamani, with help from a six-year-old daughter, spends most of her long working day in the courtyard near the house. Games, visiting, gossip, storytelling, music, dancing, plays, worship, religious fairs and festivals, weddings, and funerals provide respite from the daily struggle for survival.

Balayya has no savings. Like his father before him, he will be perpetually in debt to the landlord for emergencies and also for the proper marriages of daughters.

The common stereotype that peasant, agricultural societies have populations with roughly uniform poverty is false. Not all Third World villagers are poor. A tiny middle and upper class exists. Accordingly, Sridhar Ramana, Balayya's landlord, together with his extended family – wife, two unmarried children, two married sons, their wives, and their children – is relatively prosperous. The family, whose annual income is $U.S.68,000, lives in a five- to six-room brick house with a tile roof and a large courtyard. Their two daily meals consist of a variety of meats as well as seasonal fruits and vegetables.[4] Machine-stitched clothes are acquired from the local tailor, the village bazaar (open-air marketplace), or on monthly bus trips to the city. The house has electric lights and fans. Servants shop for food, cook, clean, carry water, and tend the lawn and garden. Sridhar and his sons and grandchildren have completed primary school. Some grandsons, and occasionally a granddaughter, will complete secondary school or even university.

Congestion, poverty, and affluence in India's cities. In the large Indian cities, there are few footpaths for pedestrians or separation of fast-moving vehicles from slower ones; traffic consists of the juxtaposition of buses, automobiles, taxis, trucks, jeeps, motorcycles, motor scooters, powered cycles, bicycles, human-drawn and motorized rickshaws, oxcarts, handcarts, cattle, dogs, and pedestrians walking or carrying head loads. Congestion, squalor, destitution, and insecurity characterize the lives of the unemployed, underemployed, and marginally employed in cities such as Kolkata (Calcutta), Mumbai, and Delhi – more so than for the rural, landless worker. In the central city, people literally live in the street, where they eat, wash, defecate, and sleep on or near the pavement. During the monsoon season, they huddle under the overhanging roofs of commercial establishments. Others with menial or intermittent

[3] Although some villagers can afford a bicycle, few can purchase a motor scooter, which costs a bit less than India's average yearly income.
[4] Some Indian castes prohibit eating meat for religious reasons.

jobs live in tenement houses or crowded, blighted shantytowns. In contrast, the family whose major income earner is steadily employed as an assembly-line worker in a large company or as a government clerk may live in a small house or apartment. Upper-income professionals, civil servants, and business people usually live in large houses of five to six rooms. Although they have fewer appliances than the Smiths, they achieve some of the same material comfort by hiring servants.

Social institutions and lifestyles vary greatly among LDCs. Nevertheless, most LICs have income inequality and poverty rates at least as high as India's. Even the poorest Americans and Canadians are better off than most of the people in India and other LMICs and LICs.

Globalization, Outsourcing, and Information Technology

Yet both Indians and North Americans are living in worlds affected by domestic economic change and greater global integration. In the United States, household income distribution is shaped more like an hourglass, with a slender middle, so that families such as the Smiths are falling from the middle class from job loss or rising to higher incomes. In India, the gains from economic growth and reform – although these gains bypass some – mean rising commercial farm income for the families of Sridhar and increased urban business and employment. Furthermore, as Anthony P. D'Costa (2003:212) notes, India's incomes are uneven so that "You have fiber optic lines running parallel with bullock carts."

With globalization, India's and the United States' worlds increasingly are intersecting, much beyond the expanding Indian–American representation in electronics, academics, business, politics, medicine, and journalism in the United States. Some U.S. state or local governments or corporations, some run by Indian Americans, outsource service jobs to India, where an entry salary for a university graduate is $U.S.400 to 500 monthly (five figures in rupees), a good career opportunity. The corporation may have an Indian subsidiary or subcontractor. India has two million English-speaking college graduates yearly, and most work for one-tenth to one-fifteenth the salary that a U.S. worker of comparable skill receives.

Low-cost, high-quality telecommunications means that U.S. companies can open a call center almost as easily in Kolkata, Delhi, Dakha, Johannesburg, and Manila as in Omaha, Austin, or Tallahassee. Indian employees spend several weeks of training to Americanize their accents and take a crash course in Americana – "holidays, regional speech patterns, [weather patterns], and the meaning of 'frat party'" – to disguise their location (Bengali 2003:A1).

As night settles in Mumbai, Megha Joshi enters an office with other young graduates, sitting in a row of sound-muffling cubicles, talking into their designer headsets. She phones someone in the United States, twelve time zones away. "Good morning, this is Meg," she says, Anglicizing her name. Working from a script, she offers the respondent a major credit card. Other Indian call center workers handle routine work, like helping a customer make a standard order, check a bank or food stamp balance, pay a bill, or activate a credit card; processing insurance claims; recovering bad debts; providing other customer services; or routing more complicated questions back to the call center in the United States. Other outsourcing spans the technology spectrum, including software code writing, chip design, product development, accounting, Web site designing, animation art, stock market research, radiology, airline reservations, tax preparation and advice, transcribing, consulting, prayers for the deceased, grading of college essays (but none yet reported for development classes), and other support services, especially in south India's silicon city Bangalore and other high-technology cities (ibid.; Guardian 2001; Landler 2001).[5] Yet with India's sustained growth and increasingly attractive job options for college graduates, call centers are finding it more difficult to hire university graduates cheaply.

In software and related services, India moved up the information and communications technology (ICT) value chain from Western corporate outsourcing and small ICT enterprises to a major exporter, as indicated by TRP Software in Kolkata (Chapter 14), whose export growth grew after India's liberalization in 1991.

Domestic firms such as TRP, joined by the emerging technically talented Indian diaspora, provided the skills for India to play a major role in the global ICT industry. In the late 1990s, Chinese and Indian immigrants ran one-third of Silicon Valley, California's high-technology firms. Indian- and Indian American–owned companies in the United States, frequently spinoffs from large American companies, have become suppliers to former U.S. employers or other contacts, using Indian employees. Moreover, Indian software firms raised capital in the United States to acquire U.S. companies, set up offices to interact with clients, and undertake research and innovation. India undertook innovation and skill deepening in "solid systems integration skills, imaging and scientific programming, such as GIS and CAD/CAM, and real time programming, such as telecom, multimedia, and e-commerce." India's software sector represents "the first time India has produced a skill-based, high value export-oriented sector. The sector has also attracted considerable foreign direct investment by multinational corporations and brought in some expatriate professionals" (D'Costa 2002:4, 10).

India's ICT production grew from $10 million in 1986–7, to $1.7 billion in 1994–5, to $47.8 billion in 2007–8 ($31.9 billion exports), constituting 5 percent of GDP and 1 percent of exports. In 2002, Forbes ranked India's software services magnate, Wipro's Azim Premji, forty-first in the world in net worth, with $6.4 billion, and one of the other top one thousand billionaires was from India's software industry (NASSCOM 2007; D'Costa 2002:1, 5). "Mumbai . . . a highly developed financial and commercial center [has] large software firms, such as TCS, Tata-Infotech

[5] Marketing consultant Rama Bijapurkar calls call-center workers, some with changing attitudes toward family, romance, marriage, and material possessions, "liberalization children." The post-1991 liberalization, which stimulated the demand for cell phones, motorcycles, café dining, and Western-style consumer imports demand, helped created a young affluent class that included information technology employees (Slater 2004:A1).

and Citibank."[6] Many Indian (and other Asian, especially Chinese) technology companies are moving from "offshoring" to competing for high-value work. Still India's ICT share of world users, 5 percent, ranked fourth compared with China's 19 percent (International Telecommunication Union 2009).

India's and Asia's Golden Age of Development

India's recent growth is a part of a golden age of development for Asia, during years of globalization (expansion of trade and capital movements), 1980 to 2010. From 1980 to 2010, the absolute incomes of the industrialized countries' middle class "slowed down to a crawl – only 1.1 percent a year, a third of that experienced by their parents," while that of Asian elites continued to be rapid – 3.8 percent annually (D'Costa 2002, p. 195; World Bank 2009f2, p. 27). The impact of this has been most substantial among the world's middle class (income range of $U.S.10–$U.S.40 a day or annual purchasing-power equivalent income, at 1993 prices, between $U.S.3,650 and $U.S.14,600). The relative income of Asian elites (top 10 percent of income earners) increased from 43 percent in 1980, to 60 percent in 2000, to about two-thirds in 2010 of the middle 50 percent of industrialized countries' income earners, a group with comparable education and skills.

ASIA'S COMPETITION AND AMERICAN PROTESTS

Globalized firms, in their search for lower costs, are hiring Indians (and other Asians) to do their work rather than hiring middle-class Americans, Britons, Swedes, or Dutch; and in some instances, as noted, Asians are subsequently establishing enterprises that compete globally. Figure 1-1 shows U.S. income (1960–2000) falling relative to East and South Asia, virtually unchanged relative to Latin America, and increasing substantially relative to Africa.

In the 1960s and 1970s, those representing large U.S. corporate interests, such as Nelson Rockefeller, a liberal Republican, supported populist programs of health, education, and welfare. In subsequent decades, as multinational corporations have become more "footloose" with greater global outsourcing, these interests are more likely to oppose large government spending for middle and working classes.

Indian and Asian elites anticipate doubling or tripling real incomes in a generation. On the other hand, the middle classes of the United States and other DCs are facing a collapse in growth (doubling real incomes in three generations), more competition from foreign skills, and lowered expectations for a better life. Is it surprising that many U.S. and Western middle classes are protesting against globalization?

Latin America's 2000 income relative to the United States is only 70 percent of its preglobalization value in 1960 (Bhalla 2002:192–6). Brazil (**Porto Alegre** and Belém) and other LDCs host an annual antiglobalization meeting, the **World Social Forum**,

[6] Tata, whose family was involved in trade as early as 1868 and is today among India's largest industrial houses, was named for Jamshedjee Tata, who established India's first steel mill in 1911.

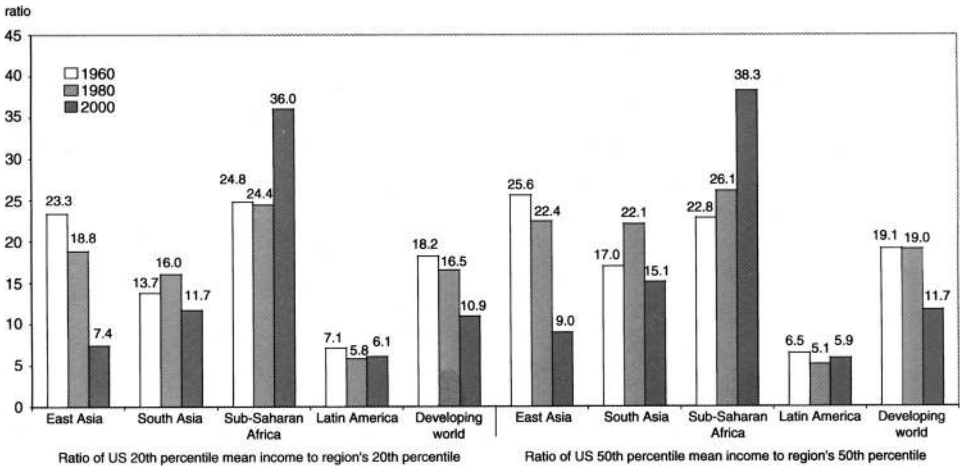

FIGURE 1-1. U.S. Income Relative to That of Developing Regions, 1960–2000. *Note:* The figures above represent the ratio of incomes at the 20th and 50th percentiles, respectively, comparing U.S. income with income in regions of the developing world. Hence, a (20th percentile) ratio of 11.7 for South Asia in 2000 indicates the U.S. income at the 20th percentile was 11.7 times the income at the 20th percentiles in South Asia. To obtain the distributions of income across the developing world, country data were pooled using the simple accounting procedure method. *Sources:* Bhalla 2002: 192; WIDER 2002; World Bank 2002h. CD–ROM.

a rival to the annual **World Economic Forum** for the world's economic elites, usually held in **Davos**, Switzerland.

Although Asians protest the **policy cartel** of the IMF, World Bank, and U.S. government, they rarely protest against globalization, from which they benefit. Africa, on the other hand, has few protests against expanded trade, capital flows, and outsourcing, from which it receives little benefit. Africans are more likely to complain about their lack of international integration.

Which Is the Major Motor of Global Economic Growth: America or Asia?

In 2010, China, with 1.3 billion people, had the world's largest population and ranked second to the United States in nominal GNP and GNP when measured by PPP. Moreover, Asia has three-fifths of the population of the world, 35 percent of its GNP, and about half of economic growth.

During the first decade of the twenty-first century, China, with an undervalued yuan, gradually increased its share of the U.S. nonoil trade deficit, peaking at more than 80 percent in 2009. However, with labor shortages in export-oriented southern coastal cities, China's manufactures have become less competitive. In mid-2010, for example, Reebok paid wages in Guangzhou (Canton) that were 45 percent higher than in Tangerang, Jakarta, Indonesia's satellite city but only 8 percent of those in Lawrence, Massachusetts (Abelson 2010).