



The Centre for International Governance Innovation

WORKING PAPER

Shifting Global Power

The BRICSAM Countries and Changing World Economic Power: Scenarios to 2050

MANMOHAN AGARWAL

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Working Paper No. 39

October 2008

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Manmohan Agarwal
Senior Visiting Fellow, CIGI
magarwal@cigionline.org

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ISSN 1917-0238 (Print)

ISSN 1917-0246 (Online)

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Thank you for your interest,



John English

About the Author

Manmohan Agarwal is a visiting senior fellow at CIGI and a former Dean of the School of International Studies, Jawaharlal Nehru University, New Delhi, India, where he taught graduate students economics for many years. He has taught graduate students in macroeconomics, both open and closed, international trade, investment finance and development economics. His research has been mainly in international economics and development economics, though he has also worked in the area of environmental economics, and he has published extensively in these areas. He has co-edited books such as *Globalisation and the Millennium Development Goals: Considerations for Policy-Making* (Social Science Press, New Delhi) 2007 *Development and Environmental Issues in Indian Reform 94* and *Indian Economy in Transition: An Indian Perspective 98* Haranand Publishers ND. He has also guest edited of special issues of the *Journal of International Trade and Economic Development* and *Pacific Economic Review*.

He has extensive experience of working in international organizations such as the International Monetary Fund and the World Bank.

He studied at the Delhi School of Economics and the Massachusetts Institute of Technology.

Abstract

Rapid economic growth in the large developing countries collectively known as BRICSAM (Brazil, Russia, India, China, South Africa and Mexico) has the potential to change the balance of economic power in the world. This paper analyzes this potential building on developments in these economies over the past four decades in the context of the evolution of the world economy. This evolution has two significant features: increasing economic integration and a hiatus in growth. Increasing integration can be observed in the almost universal rise in the share of the exports of goods and services in GDP, and the increase in private capital flows. There has been a hiatus in growth since the 1973-1974 increase in the price of oil.

This paper's analysis of various scenarios concerning the relative size of major economies till 2050 based on incomes measured at official exchange rates, a preference explained in the paper, suggests a sharp increase in the share of world income of China and partly India over the next four decades. Coupled with the expected increase in the share of China in world exports during this period, the prospect is of a substantial increase in China's influence over world economic management. This influence would be even more substantial if China is able to build alliances with the other BRICSAM countries. It is in the common interest of the BRICSAM countries to ensure that the workings of the major international economic institutions contribute to maintaining the free flow of goods, services and capital necessary for these economies to achieve their potential.

1. Introduction

The rapid economic growth of the so-called emerging economies of the BRICSAM countries – Brazil, Russia, India, China, South Africa, and Mexico – particularly China and India, has significant implications for the distribution of world economic power. Two features of world economic development that have stood out over the past few decades are, first, increasing economic integration – including changes in international trade and capital flows, as evidenced by the increasing share of exports of goods and services in GDP and by increasing private capital flows – and, second, the major hiatus in world economic growth that followed the oil price shock of 1973-1974.

This paper reviews these developments, and then discusses the relative importance of the BRICSAM economies. Forecasts of their growth out to 2025 and 2050, as measured by their shares of world trade, add weight to suggestions that the economies of China and India will become major players in the decades ahead.

Table 1: Growth of Per Capita Income by Region, 1965-2005

Region	1965-1973	1974-1982*	1983-1990	1991-2000	2001-2005
	<i>(annual average % change)</i>				
World	3.3	0.8	1.8	1.2	1.4
OECD	4.3	1.6	3.0	1.7	1.5
Latin America, Caribbean	3.5	1.5	-0.2	1.7	0.8
Middle East, North Africa		1.3	-0.5	1.1	2.1
Sub-Saharan Africa	2.3	0.1	-1.1	-0.3	1.3
South Asia	0.2	2.0	3.5	3.2	4.6
East Asia, Pacific	4.5	4.5	6.3	6.0	7.3

*Data for the Middle East and North Africa are for the 1975-1982 period

Source: World Bank, *World Development Report*, various years

2. The Macroeconomic Performance of the World Economy

The oil price crisis of 1973-1974 not only affected the operation of the world economy in the short run, but profoundly altered its structure and performance over the long run. Until the oil price shocks, the world economy had grown rapidly in the postwar period, with practically all countries, including the less-developed countries (LDCs), experiencing faster growth than in any earlier period. As Table 1 shows, however, performance in all regions except East Asia and South Asia suffered after the oil price rises. Broadly speaking, growth rates declined, inflation rates worsened, and the efficiency of capital, as measured by the incremental output capital ratio, declined.

Innovations in International Governance

Even during the postwar period of rapid growth, various problems bedeviled the world economy, among them: recovery of the war-ravaged economies and the associated problem of a dollar shortage; concerns about the sufficiency of world monetary reserves, including problems with the world gold market and the so-called Triffin paradox;¹ and the need to accelerate growth in

¹ The Triffin paradox, after Robert Triffin (1960), referred to the need for the supply of international reserves to increase as trade grew. But world production of gold was inadequate to meet the requirements of world reserves, so the gap would have to be met by the expansion of holdings of key currencies, particularly the US dollar, in the reserves of other countries. US dollar holdings would increase, however, only if the United States ran a balance-of-payments deficit. But if US dollar holdings increased too much relative to US gold holdings, confidence in the dollar would be eroded, resulting in countries' converting their US dollar holdings into gold, further diminishing the US gold holdings. Thus, Triffin argued, the world economy was caught in a dilemma between inadequate holdings of reserves, forcing countries to adopt restrictive import policies, and loss of confidence in the US dollar. For a more recent discussion of whether the international monetary problems of the 1960s and early 1970s were in consonance with Triffin's argument, see De Grauwe (1996).

developing countries, many newly independent, and to deal with their representation in international organizations.²

Many of these problems were tackled through innovations in international economic governance.³ Recovery from war damage, which proved beyond the resources of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development – popularly known as the World Bank – was managed through the establishment of the Marshall Plan, the precursor of future aid programs for developing countries. The adequacy of international monetary reserves was tackled by the institution of Special Drawing Rights and the General Agreement to Borrow. The private gold market was gradually delinked from the official one to prevent destabilization because of inadequate gold reserves in the key currency areas – namely, the United Kingdom and the United States. Programs of technical and financial aid were established and soft aid increasingly provided, including the establishment of the International Development Association, the soft-aid affiliate of the World Bank. The Generalized System of Preferences for LDCs was introduced to give them greater access to the markets in developed countries. These innovations enabled economies to grow rapidly during these postwar years.

Further innovations have occurred since the 1973-1974 oil price rises, mainly in the policy frameworks countries have adopted. For example, protection of domestic industry, which

² The LDCs made a determined effort after the oil price increases to negotiate a "New International Economic Order" (see Bhagwati and Ruggie, 1984), which would have included increased representation in international organizations. Ultimately, the negotiations went nowhere.

³ These concerns were partly responsible for the establishment of UNCTAD, the United Nations Conference on Trade and Development, and the demand in the 1970s for a New International Economic Order.

had been very high in most developing countries as they tried to develop their industries under protection – the so-called import-substituting industrialization policy – has been drastically reduced.⁴ But the reforms have gone beyond trade liberalization. The role of government in economic activity has declined with the privatization of many public enterprises. The nature of government intervention has also changed, with price incentives very often replacing direct controls and autonomous regulating bodies increasingly being used to prevent anticompetitive behaviour. Furthermore, the nature of the international financial system has changed with the placing of much greater reliance on the market – the major players have given up their attempts to reform and gain control of the system.⁵ Aid has declined, and private capital markets have become more important.

Deceleration and Increasing Volatility, and Lagging Growth in Africa and Latin America

Economic growth has fluctuated in the OECD countries, with recovery in the 1980s, then a worsening in the 1990s. Performance has also varied among the major developed regions (see Table 2). Growth resumed in the United States in the 1990s, but remained low in Europe, which grew at less than 2 percent during that

⁴ Much of this reduction was undertaken either unilaterally or in response to conditions imposed by the IMF and the World Bank for access to their loans. Developing countries participated strongly in the Uruguay Round of multilateral trade negotiations, but most of the liberalization that took place under the agreements reached in that round took the form of binding their tariffs, usually at substantially higher rates than those most countries were levying. The developed countries had already reduced their levels of protection dramatically by the end of the 1960s, following the Kennedy Round, and further reductions occurred as a result of the Tokyo Round and Uruguay Round agreements.

⁵ The failure of international monetary reform in the 1970s is discussed in Williamson (1977). Subsequent to the various crises that affected the world monetary system in the 1990s, there was considerable talk of developing a new financial architecture, but little has emerged in concrete terms.

Table 2: Size and Economic Performance,
by Region and Selected Countries, 1990-2004

Region	Population (millions)	GDP (US Billions)	GDP Growth (% per year)		GDP Per Capital (US\$)
			1990-2000	2000-2004	
World	6,365	40,282	2.9	2.5	6,329
High-income countries	1,004	32,245	2.7	2.0	32,112
United States	294	12,168	3.5	2.5	41,440
European Union	394	11,159	2.1	1.3	28,321
Japan	128	4,734	1.1	0.9	22,255
Others	188	4,184			
Developing countries	5,361	8,050			1,502
East Asia, Pacific	1,870	2,647	8.5	8.1	2,274
China	1,296	1,938	10.6	9.4	1,500
Others	574	709			
South Asia	1,447	859	5.6	5.8	594
India	1,080	673	6.0	6.2	620
Others	367	186			
Sub-Saharan Africa	726	436	2.5	3.9	601
South Africa	48	165	2.1	3.2	3,630
Others	678	269			
Middle East, North Africa	300	592	3.8	3.8	2,730
Latin America, Caribbean	546	863	3.3	1.6	3,576
Brazil	184	262	2.9	2.0	3,000
Mexico	104	148	3.1	1.5	6,790
Others	258	452			
Eastern Europe, Central Asia	472	698			3,295
Russia	144	123	-4.7	6.1	3,400
Others	328	575			

Note: Population and GDP data are for 2004

Source: World Bank, *World Development Indicators*, 2006

decade after growing at the same rate as the United States in the 1980s. Japan's economy maintained healthy growth even after the oil price rise, but it has performed particularly poorly since the 1990s, its growth rate declining from 4 percent in the 1980s to just over 1 percent in the 1990s.

For developing countries outside Asia, conditions worsened in the 1980s, but East Asia and the Pacific region continued to

grow very rapidly, at about 8 percent a year, and growth in South Asia increased, as India and Bangladesh, in particular, did better. Despite an improvement in the 1990s, per capita incomes in sub-Saharan Africa continued to decline in the 1990s, though at a slower rate than before. In more recent years, the region's growth rate has become positive. Despite this upturn, however, per capita income in the sub-Saharan countries has decreased by about 0.2 percent a year for more than two decades, and increased by only about 0.6 percent a year over the past four decades. Growth in per capita income in Latin America recovered in the 1990s to the level achieved in the 1970s, though still only half the rate of the 1960s; since the beginning of this century, however, it has slipped a bit.

A consequence of these developments is that the gap in incomes between the OECD countries and countries in Latin America, Africa, and the Middle East has increased. Earlier hopes of convergence in levels of per capita income have been belied by the experience of the past quarter-century (for a discussion of convergence see Barro and Sala-i-Martin, 1992). Between 1980 and 2005, per capita incomes in Latin America declined from 18 percent of that in the United States to 10 percent, Africa's relative per capita incomes declined from 6.5 percent to 1.7 percent, and South Asia's fell from 2 percent to 1.6 percent. Even those of rapidly growing East Asia increased only from 3 percent of the US level in 1980 to just less than 4 percent by 2005. There was no general convergence among countries, and that which occurred was basically among smaller groups – for instance, Ireland, Spain, and Portugal, and among a few developing countries in East Asia and Southeast Asia. The developing countries in East and Southeast Asia still have a long way to go, however, before their levels of prosperity approach those of developed countries.

The economies of developing countries remain small even in terms of absolute size. At the end of the century, the United States still accounted for almost 30 percent of the world's income, while the EU accounted for a bit more than a quarter, and Japan for 13.5 percent. China accounted for just 3.3 percent of world GDP, East Asia another 3 percent, and India 1.5 percent.

Investment and Efficiency of Capital

The behaviour of these economic growth rates can be explained, in part, in terms of investment rates and efficiency in the use of capital. Investment ratios have fallen since the 1970s in most of the world, except Asia, where ratios have increased (see Table 3). Investment rates have gradually declined in the developed countries, perhaps for understandable reasons, as these are capital-abundant economies. In the developing world, however, – again, except in Asia – investment ratios fell sharply in the 1980s and 1990s, the decline partly reflecting a fall in domestic savings rates.

Table 3: Investment Rates, by Region, 1965-2005

Region	1965-1973	1974-1982	1983-1990	1991-2000	2001-2005
	<i>(% of GDP)</i>				
World	23.6	23.9	22.5	22.0	21.0
OECD	24.4	23.8	22.3	21.4	20.0
Latin America, Caribbean	20.1	22.7	19.2	19.3	20.0
Sub-Saharan Africa	21.8	24.0	18.5	17.2	19.0
Middle East, North Africa		26.5	23.3	21.7	21.0
South Asia	14.9	17.8	20.0	21.4	25.0
East Asia, Pacific		28.4	28.5	32.6	35.0

Source: World Bank, *World Development Report*, various years

Efficiency in the use of capital is measured by incremental ratios of output to capital. These ratios have declined substantially over the past four decades (see Table 4). The developing regions, except for South Asia, had very similar incremental output-to-capital ratios in the years prior to the oil price rises of 1973-1974; these ratios almost halved after that time and, despite some recovery, remain considerably lower than in the 1965-1973 period. Output-to-capital ratios in the OECD countries recovered slightly in the 1980s, but declined again in the 1990s.

Table 4: Incremental Ratios of Output to Capital, by Region, 1965-2000

Region	1965-1973	1974-1982	1983-1990	1991-2000
World	0.22	0.11	0.15	0.12
OECD	0.20	0.09	0.16	0.11
Latin America, Caribbean	0.30	0.16	0.09	0.16
Sub-Saharan Africa	0.27	0.14	0.11	0.13
Middle East, North Africa		0.16	0.10	0.15
South Asia	0.16	0.22	0.27	0.23
East Asia, Pacific	0.32	0.21	0.25	0.21

Source: Author's calculations, based on data from World Bank, *World Development Report*, various years

Since the elasticity of output with respect to capital has remained constant, the decline in the output-to-capital ratio can be attributed either to a slowing down of the rate of technical progress or to an increase in the ratio of capital to labour.⁶ It is

⁶ Since the elasticity of output with respect to capital is constant, one can assume a Cobb-Douglas production function. Then $Y/K = A(L/K)(1-\partial)$, where ∂ is the elasticity of output with respect to capital, Y is output, K capital, L labour, and A technology. So, Y/K is the output-to-capital ratio. A lower Y/K implies a lower A – that is, a lower state of technology – or a lower L/K – namely, a higher K/L or capital-to-labour ratio.

not clear why the rate of technical change slowed down in the 1980s and 1990s.⁷ Also, while an increase in the capital-to-output ratio might be understandable for the OECD countries, reforms in the developing countries were supposed to encourage specialization in labour-intensive goods.⁸ The public image is one of massive job displacement in the North because of exports of labour-intensive goods and services from the South.

Another surprising aspect is that the reverse, the incremental capital-to-output ratio, is lower in South Asia than in East Asia, which tends to support the contention that East Asia's higher growth rates were due to greater use of factors such as higher rates of investment, rather than productivity enhancement (Krugman, 1994). It also questions analyses that argue that the control and licensing regime in India resulted in inefficiencies, particularly in the use of more capital-intensive techniques.

3. Increasing Integration of the World Economy

The increasing integration of the world economy is particularly evident if one looks at changing capital flows and trends in trade in goods and services.

⁷ There is evidence that the rate of productivity improvement decreased in the United States after the oil price increases. Subsequently, however, growth recovered to its earlier rate. Many argue that innovation that saved on time, such as just-in-time production methods, should have resulted in a reduction in the capital-to-output ratio. Professor Mrinal Datta Choudhary particularly stressed this point in private discussions.

⁸ Overvalued exchange rates, labour market imperfections, and direct controls, it was argued had all encouraged the adoption of capital-intensive techniques. A high capital-to-output ratio in economies with protective trade systems was used as an indicator of the inefficiency of the policy regime (see Bhagwati and Srinivasan, 1975; Bhagwati, 1978).

Capital Flows

The international financial system and the nature of capital flows have always been of great importance to developing countries. Foreign capital has served to augment the domestic savings of developing countries, enabling them to achieve a higher rate of investment and so growth. Foreign capital has also been necessary to finance the balance-of-payments deficits that have accompanied growth, as investment often depends on imported capital goods.

Developed countries did not completely lift capital controls until the late 1970s or early 1980s, even though most European currencies had become convertible by the early 1960s. Developing countries, after lagging behind the developed countries in eliminating capital controls, have in recent years liberalized their policies, particularly regarding foreign direct investment (FDI) and other inflows of capital.⁹ Capital flows have largely been among the developed countries themselves, and have mainly taken the form of FDI, except in the 1970s and 1980s, when investors bought the government bonds that were necessary to finance large budget deficits.

The dependence on foreign capital inflows by developing countries and the nature of those flows have varied among regions and over time. In the 1950s and 1960s, capital flows to developing countries mainly consisted of aid from official multilateral and bilateral agencies.¹⁰ This changed in the aftermath

⁹ Developing countries with established stock exchanges have also liberalized their rules regarding portfolio investment. Many others have taken steps to establish stock exchanges.

¹⁰ The need for aid to accelerate growth has always been an important component of development policy analysis. In the 1960s, models were developed to estimate the amount of aid a country would need in order to achieve its growth target (see Chenery and Bruno, 1962; Chenery and Stout, 1966).

of the oil price rise in 1973-1974, as some of the higher-income developing countries borrowed from international commercial banks to finance their balance-of-payments deficits; lower-income countries continued to depend on official flows. In the 1980s, as countries that had borrowed from banks struggled to get out of the debt crisis,¹¹ they turned increasingly to other sources – mainly bonds and FDI. Some of the dynamic East Asian countries also turned to portfolio capital and FDI to finance their balance-of-payments deficits and meet their need for savings to fuel their rapid growth. Because developing countries have faced problems in servicing inflows, particularly of bank loans and bonds, they have tended to shift to non-debt-creating forms of capital inflows, with the result that FDI has become more important than other forms of private capital flows.¹²

South Asia has consistently run larger deficits on the external balance of goods and services larger than have other developing regions (see Table 5), and so has depended on capital inflows. It is also the only region to run a deficit in the early years of the twenty-first century. East Asia has run surpluses since the 1980s, after running deficits in earlier years, the conventional pattern of running deficits and borrowing when income is low and running surpluses and exporting capital when income rises.¹³ The surpluses in Latin America and the Caribbean and in sub-Saharan

¹¹ South Korea, which was an important borrower from commercial banks, was one of the very few that escaped the debt crisis.

¹² Portfolio flows usually have been limited because of the lack of substantial capital markets in most developing countries. In recent years, however, a number of countries have established stock exchanges and have taken steps to improve the functioning of their capital markets, so that portfolio flows might become more important in the future. Developing countries remain chary of such financial flows, however, fearing they might be unstable, which would create problems of macromanagement.

¹³ It should be noted, however, that East Asia's surpluses are mainly because of the huge surpluses achieved by China, a relatively poor country.

Table 5: Current Account, by Region, 1965-2005

Region	1965-1973	1974-1982	1983-1990	1991-2000	2001-2005
	<i>(% of GDP)</i>				
World	0.2	-0.3	0.4	0.4	1.0
OECD	0.4	-0.2	0.2	0.6	0.0
Latin America, Caribbean	-0.5	-1.5	3.3	-1.1	3.0
Sub-Saharan Africa	-1.1	-1.5	1.2	-1.3	2.0
Middle East, North Africa		8.7	-5.5	0.6	4.0
South Asia	-1.7	-3.8	-4.4	-3.5	-3.0
East Asia, Pacific	-1.9	-1.2	0.4	1.8	0.0

Source: World Bank, *World Development Report*, various years

Africa in the 1980s reflected the need of countries in these regions to repay their external debt or to build up reserves because of their inability to attract enough capital.¹⁴

The changing patterns of capital inflows portend considerable problems for developing countries. Increasingly, capital inflows are considerably larger than current account deficits, resulting in the accumulation of reserves rather than the financing of greater imports of the capital goods needed to sustain the higher levels of investment that would raise growth rates. Since the reserve accumulations are in the currencies of developed countries, developing countries, in essence, are lending to the developed countries.¹⁵

While official capital flows have stagnated – aid has become insignificant except in the case of sub-Saharan Africa – private capital flows have increased substantially over the years. These

¹⁴ The current account balance of the Middle East and North Africa is heavily dependent on the price of oil. These countries run surpluses when this price is high and deficits when it is low.

¹⁵ Of course, much of this is financing the large current account deficits run by the United States.

flows seemed to have stabilized at about 10 percent for Latin America and the Caribbean and for East Asia, but continue to rise sharply in sub-Saharan Africa and South Asia. A continuing commodity boom might sustain high levels of private flows in sub-Saharan Africa, though flows from privatization might now decrease. South Asia's high rates of growth are likely to continue to attract private capital; they would increase even faster if privatization became more important in India.

One should stress, however, that private debt capital is very expensive, and few developing countries can afford to borrow significant amounts of it without running into a debt crisis. Reliance on FDI is safer, and this has also been increasing. Unfortunately, in the past, FDI flows to LDCs have been very concentrated. Analysts looking at absolute amounts received by various countries often conclude that a few receive most of the inflows. For instance, the top ten recipients account for about 80 percent of capital flows to developing countries, China alone accounting for almost half. China's influence can be seen in the dramatic rise in FDI as percentage of GDP since the 1990s. But the differences are not so great when FDI is expressed in terms

Table 6: Gross Foreign Direct Investment, by Region, 1965-2005

Region	1965-1973	1974-1982	1983-1990	1991-2000	2001-2005
	(% of GDP)				
World	1.2	1.2	1.8	3.8	2.2
OECD	1.2	1.3	2.0	4.0	2.0
Latin America, Caribbean		1.0	1.0	2.9	2.8
Sub-Saharan Africa		0.7	0.9	2.4	3.1
Middle East, North Africa		1.5	0.9	1.3	1.0
South Asia		0.0	0.1	0.5	0.8
East Asia, Pacific		0.7	1.0	3.5	3.1

Source: World Bank, *World Development Report*, various issues; idem, *World Development Indicators*, various years

of GDP (see Table 6). While FDI usually influences growth very significantly, its effect in some cases may have been limited. FDI inflows may be tied to disinvestment, and so might have resulted in only a limited amount of additional investment, although they could still have had beneficial effects because of the transfer of technology and management practices. But only countries with the requisite complementary factors can expect to attract significant amounts of FDI. Dependence on FDI as the major form of capital flow acts against countries in Africa and in Latin America and the Caribbean with unsettled political systems, and where there is the potential for civil strife.

Trade in Goods and Services

A significant feature of the postwar economy has been the continued lowering of barriers to trade through multilateral trade negotiations. In eight rounds of negotiations, average tariffs on manufactures levied by the developed countries declined from 40 percent at the end of the Second World War to about 3.5 percent after the implementation of the Uruguay Round agreements. Developing countries also have reduced tariffs drastically since the 1970s, on average to about 10 percent, and somewhat higher in African and South Asian countries. The Uruguay Round also initiated the process of liberalization of both agricultural trade and trade in services, and sought to extend a clear rules-based system into many areas; it also brought textiles trade back into the international system.

As a consequence of trade liberalization, the ratio of exports to GDP increased in practically all regions over the past four decades (see Table 7). The increase in the OECD countries occurred mainly in the 1960s and 1970s, although there has been another spurt in the early years of this century. In the developing countries, the change has been more varied. The ratio increased

Table 7: Exports of Goods and Services, by Region, 1965-2005

Region	1965-1973	1974-1982	1983-1990	1991-2000	2001-2005
	<i>(% of GDP)</i>				
World	14.0	18.8	19.8	21.4	26.0
OECD	12.8	17.4	17.9	18.8	24.0
Latin America, Caribbean	9.5	11.5	14.8	14.7	22.0
Sub-Saharan Africa	23.8	28.1	26.8	28.0	32.0
Middle East, North Africa		42.5	26.8	31.9	35.0
South Asia	5.6	7.5	7.9	12.4	17.0
East Asia, Pacific	12.4	18.9	23.5	32.8	43.0

Source: World Bank, *World Development Report*, various years

dramatically in East Asia, but in sub-Saharan Africa, where it was already very high during the 1965-1973 period, it has tended to stagnate. In South Asia, most of the increase occurred in the 1990s, while in Latin America and the Caribbean it tended to remain relatively constant for a considerable period before showing a sharp increase in the new century. Currently, the ratio of exports to GDP is higher in most developing regions than in the developed countries.

This reduction of barriers to trade is held to have contributed significantly to the growth of the world economy since the Second World War.¹⁶ However, skeptics (such as Taylor, 1991; Rodrik, 1995; Rodriguez and Rodrik, 2000) point out that the growth rate declined in the 1990s despite further trade liberalization. The experience of sub-Saharan Africa suggests that neither integrating with the world – that is, having a high trade-to-GDP ratio – nor reducing protection is sufficient to achieve a higher

¹⁶ There is a general belief among economists that trade liberalization has been responsible for the rapid economic growth of the postwar period.

rate of growth. A successful growth strategy, as many development economists have stressed (see, for example, Lewis, 1969), has to also include supply-increasing measures. The structural adjustment programs of the IMF and the World Bank included many measures to evoke a supply response, but these were either not enough or were not the appropriate measures to do so.

A major feature of the exports of developing countries over the past four decades has been their rising share of world trade and the increasing importance of South-South trade, particularly in manufactures, although preferential trading arrangements have played a small role.¹⁷ The increasing importance of South-South trade has been driven mainly by exports to East Asia, which has been growing very rapidly, and to Brazil, which is a major partner for Latin American countries. Brazil's slow growth in the 1990s, however, prevented South-South trade from growing more rapidly.¹⁸

An important feature of trade has been the adverse movement in the terms of trade, which has handicapped the export performance of the LDCs, particularly in Africa. Prices of primary commodities, in fact, have declined almost continuously since the middle of the nineteenth century;¹⁹ the decline was particularly

¹⁷ In Latin America, intra-Mercosur exports as a share of the total exports of the trade area's member countries grew rapidly from 8.9 percent in 1990 to 20.3 percent in 1995, after which it stagnated. Intra-ASEAN trade as a share of that trade region's total fluctuated between 1970 and 1999, but overall it has remained constant during the whole period at about 23 percent.

¹⁸ For a discussion of the problems of South-South trade, see Agarwal (1991); for more recent forces pushing the South toward regional trading arrangements, see Bhagwati and Panagariya (1996).

¹⁹ Analysis of commodity prices has confirmed Prebisch's (1950,1951) hypothesis. Commodity prices declined by about 0.6 percent a year between 1870 and 1939 (Spraos, 1980), and at about the rate between 1900 and 1980 (Grilli and Wang, 1988).

rapid in the 1980s, although the pace slowed somewhat in the 1990s and prices of some energy-related goods have increased in recent years.²⁰ The recent surge in commodity prices and the improved performance of many countries, mostly in Africa and Latin America, reflect the continuing importance of commodity trade for many developing countries.

In recent years, trade in services has been growing faster than trade in goods, but developing countries have a much smaller share of exports of services (see Tables 8 and 9). Only East Asia and South Asia, among the developing regions, have

Table 8: Regional Shares of Exports of Goods and Services, 1985 and 2001

Region	Goods		Services	
	1985	2001	1985	2001
	(%)			
North America	15.4	16.6	19.0	20.5
Western Europe	39.8	41.5	50.8	46.5
Japan	9.1	6.7	5.4	4.4
Eastern Europe ^a	4.8	3.8		
Latin America, Caribbean	5.6	5.8	4.7	4.0
Sub-Saharan Africa	4.1	2.4	3.0	2.1
Middle East, North Africa	5.2	4.0	0.7	2.3
Asia ^b	10.8	18.3	9.3	16.4

^aIncludes the countries of the former Soviet Union

^bExcludes Japan, but includes Singapore and South Korea

Source: World Bank, *World Development Report*, various years

²⁰ The price of petroleum, after declining from US\$51.21 a barrel in 1980 to US\$22.68 in 1990, rose to US\$27.97 in 2000. The price of natural gas declined in Europe from US\$4.72 per million British Thermal Units (mmbtu) in 1980 to US\$2.55 in 1990 before increasing to US\$3.92 in 2000; in the United States, it declined from US\$2.15 per mmbtu in 1990 before increasing to US\$4.27 in 2000. In Australia, the price of coal declined from US\$54.72 per metric ton in 1980 to US\$39.07 in 1990 and to US\$26.01 in 2000; in the United States, it declined from US\$59.80 in 1980 to US\$41.67 in 1990 and to US\$32.76 in 2000.

Table 9: Share and Growth of Exports of Commercial Services, by Income Level and Region, 1990-2005

Income Level / Region	Share in		Average Annual Growth Rate
	1990	2005	1990-2005
			(%)
Low-income countries	1.9	3.4	13.1
Middle-income countries	10.5	16.8	10.1
High-income countries	87.6	79.8	7.1
East Asia, Pacific	2.9	5.6	12.7
South Asia	0.9	2.5	15.7
Middle East, North Africa	1.9	1.8	7.6
Sub-Saharan Africa	1.3	1.2	7.9
Latin America, Caribbean	3.3	3.0	7.2

Source: World Bank, *World Development Indicators*, 2007

managed to increase their share of exports of services as they have also increased their share of exports of goods.

4. The World Economy in 2025

Short-run forecasts of the relative performance of different economies are fraught with pitfalls, even though one might expect recent trends to continue.²¹ Today, there is talk of the rising importance of what are called “emerging economies,” particularly China and India, and expected loss by the United States of its predominant position in the world economy. It must be remembered, however, that, 20 to 30 years ago, there was talk

²¹ The 1970s and 1980s saw many analysts talk about the decline of US power and hegemony. Many economists and business management experts extolled the superiority of certain corporate features of the Japanese and German models of capitalism over the more individualistic and more market-based US and UK systems. Two well-known exponents of this view were Lester Thurow, dean of the Sloan School of Management at the Massachusetts Institute of Technology, and Laura Tyson, who headed US president Bill Clinton's Council of Economic Advisors.

of the rise of Germany and Japan, and fears that the United States would lose its hegemonic role to these economies.²² Today, there is no such talk. Similarly, one must be cautious in projecting the rise of China and India.

Changes in Relative Economic Size, 1965-2004

One can place the performance of China and India in the context of the emerging economies, specifically the BRICSAM countries. In 2004, this group accounted for about 11 percent of world GDP, and had a per capita income of \$1,584, just under 4 percent of US per capita income of US\$41,440.²³ BRICSAM is not homogenous, however, but can be divided into two groups, with Brazil, Russia, Mexico, and South Africa in one and China and India in the other. The countries in the first group are considerably richer: per capita income in Brazil, Russia, and South Africa is over US\$3,000, and that of Mexico is nearly US\$7,000, while in China it is under \$2,000 and in India under \$1,000. But China and India have larger economies, accounting between them for 7 percent of world income, while the first group accounts for only 4 percent. The two groups also differ in their recent economic performance. China's economy grew by about 10 percent a year during the 1990-2004 period, while India's grew by

²² In the 1990s, analysts talked about a tripolar world consisting of the United States, the EU, and Japan. Today, analysts talk of a different tripolar world – the United States, China, and India.

²³ For a number of reasons, the comparison here is made at official exchange rates, not at purchasing power parity (PPP) rates – particularly as one is interested in comparing these countries over a period of almost 50 years, during which some of them will catch up substantially with the United States. In these circumstances, it is not appropriate to take the PPP exchange rate as fixed because the gap between the official and PPP exchange rates narrows as the per capita income gap narrows.

more than 6 percent. In contrast, Brazil, Mexico, and South Africa grew at an annual rate of about 2.5 percent and Russia stagnated, its recent growth spurt not yet compensating for the decline of the 1990s. India, moreover, has performed worse than the others in many social indicators, such as enrolment in primary and secondary education, infant and maternal mortality rates, malnutrition, and the percentage of population in poverty; it has, however, a more equal income distribution (Agarwal, 2007).

Table 10: Major World Economies by Size, 2004, and Their Rankings in 1965, 1981, and 1990

Country	1965	1981	1990	2004
	<i>(Ranked by GDP)</i>			
United States	1	1	1	1
Japan	5	2	2	2
Germany	2	3	3	3
United Kingdom	3	5	6	4
China	6	8	10	5
France	4	4	4	6
Italy	7	6	5	7
Spain	11	11	8	8
Canada	8	7	7	9
Mexico	13	9	14	10
India	9	13	13	11
South Korea	22	21	15	12
Brazil	15	10	9	13
Australia	10	12	11	14
Netherlands	14	14	12	15
Switzerland	17	18	17	16
Belgium	16	17	18	17
Sweden	12	16	16	18
Turkey	19	23	22	19
Austria	18	20	19	20
Indonesia	21	19	20	21
Saudi Arabia	23	15	23	22
Norway	20	22	21	23

Note: It was necessary to exclude Russia from the comparison as data on its GDP for 1965 were not available

Source: Author's rankings, from World Bank, *World Development Report*, various years

Looking at the 25 largest countries by GDP in 2004 and their relative size over the previous four decades, one discovers that, despite differences in economic performance, the rankings have not changed very much – with the exception of South Korea, few countries changed their rank by more than a couple of positions (see Table 10). Interestingly, China, which had the sixth-largest economy in 1965, moved by 2004 only to fifth place, while India actually slipped from ninth in 1965 to eleventh in 2004.²⁴ The United States was the largest economy in 1965, and remained the largest in 2004. Significantly improving were Japan, from fifth in 1965 to second by 1981, and South Korea, which rose steadily from twenty-second in 1965 to twelfth in 2004.

Projections of Relative Economic Size in 2025 and 2050

To forecast changes in relative economic size out to 2050 (see Table 11), the following methodology was employed. First, it was assumed that all countries and regions would experience some change in growth rates of per capita income, which also implicitly assumes that variations would be due to global factors, not to internal policy actions. The rate of growth between 1990 and 2004 was used as the base projection. Then, the growth rate for the developed countries was assumed to remain constant, mainly because of expectations that their rates of productivity growth, which is the main source of their growth, would not change. The growth rate of per capita income in the developing countries was assumed to slow down, depending on how closely

²⁴ India's slippage is because of poor performance in the late 1960s and early 1970s, partly as a result of exogenous shocks, such as poor harvests in 1965 through 1967, the oil price increases of 1973-1974, the cost of feeding refugees fleeing from Bangladesh and the later war with Pakistan, and adjustment to the cut-off of aid from the United States and the World Bank in the mid-1960s. The cut-off of US aid persisted, whereas that of the World Bank was later reversed.

they approach the US per capita income level.²⁵ Some adjustment was also made to the growth rates of the rapidly growing economies of East Asia and China. For East Asia, it was assumed

Table 11: Share of the World's Economy by Region and Selected Countries, 2004, and Forecasts to 2025 and 2050

Country / Region	2004	2025 Forecast			2050 Forecast		
		Base	Low	High	Base	Low	High
		(% of world GDP)					
High-income countries	80	69	72	66	50	58	42
United States	30	28	30	28	22	27	20
European Union	28	24	24	22	18	18	13
Japan	12	8	9	8	5	6	4
Others	10	8	9	8	6	7	4
Developing countries	20	31	28	34	50	42	58
East Asia, Pacific	7	13	13	15	20	21	26
China	5	10	10	11	17	17	21
Others	2	3	3	4	3	4	5
South Asia	2	5	4	5	12	6	11
India	2	4	3	4	10	5	9
Others	<1	1	1	1	2	1	2
Sub-Saharan Africa	1	1	1	1	2	2	3
South Africa	<1	<1	<1	<1	1	1	1
Others	1	1	1	1	2	2	2
Middle East, North Africa	1	2	2	2	2	2	2
Latin America, Caribbean	5	5	5	6	8	6	9
Brazil	1	1	1	2	2	2	3
Mexico	2	2	2	2	3	2	3
Others	2	2	2	2	3	2	2
Eastern Europe, Central Asia	4	5	4	5	6	4	7
Russia	1	1	1	1	2	1	2
Others	3	4	3	4	4	3	5

Source: Data for 2004 are from World Bank, *World Development Indicators*, 2004; forecasts for 2025 and 2050 are the author's

²⁵ The experience of many countries shows that it is difficult to make the transition from a growth path based on increases in the use of factors to one based on increases in productivity.

that the rate would decline from the rapid growth experienced in the earlier period to that achieved by Japan in the 1980s, when it caught up to the incomes of the richest countries. A major uncertainty stems from how successful China will be in reforming its extensive public enterprise sector and the extent to which demands for democracy will increase and disrupt the system.²⁶ Since China's per capita income is still considerably lower than that of the more advanced economies, it was assumed that it will continue to experience rapid growth in productivity, at a rate just one percentage point lower than that achieved in recent years. For India, it was assumed that per capita income would grow at about 6 percent per year until 2025, and somewhat lower subsequently.

As Table 11 shows, the share of developed countries in world income is forecast to drop by slightly more than 10 percent by 2025, while, obviously, that of the developing countries increases by that amount, with the main gainers in Asia. The improvement in the share of the developing countries is forecast to be small if the world economy grows slowly, and relatively large if the world economy grows quickly. The United States remains the largest economy, continuing to account for about 30 percent of world income. The fifteen member countries of the old EU see a small decrease in their share of world income, but the country that sees the largest decrease in its share is Japan. Population growth helps the United States to gain relative to Europe and Japan: population is projected to grow by about 0.8 percent a

²⁶ The demand for democracy could also rise with increasing income, and the transition could be traumatic and interrupt economic growth. I am not very pessimistic, however, as many countries have handled the transition from an authoritarian regime to a democratic one quite successfully. Furthermore, Chinese policy makers have shown a remarkable capacity to change policies over time without disrupting growth.

year in the United States, but to decline by about 0.1 percent a year in Europe and Japan.²⁷

The BRICSAM countries' share of world GDP increases from about 11 percent to about 20 percent, which accounts for almost all the increase in the share of developing countries. Together, the share of Brazil, Russia, South Africa, and Mexico remains at about 4 percent, but that of China and India increases substantially, from 7 percent to about 14 percent, with China the main gainer, doubling its share of world income to about 10 percent.

As Table 12 shows, variations in shares as these economies grow faster or slower are very limited. Per capita income in the BRICSAM countries increases from about 4 percent of US per capita income to about 6 to 8 percent, while that in both India and China more than doubles. Per capita income in Russia increases relative to that of the United States in the base and high-growth cases, whereas the others gain relative to the United States only in the high-growth case.

By 2050, there is a substantial decline in the share of the developed countries, with developing countries accounting for about half of world income. There is now also substantial variation in the three cases: in the low-growth case, developing

²⁷ Population structure has also been changing and is expected to change further, particularly in Europe and Japan, with "the graying of the population." Fears have been expressed of the resulting strain on social security systems and savings rates. Facing a longer post-retirement period, however, one could argue that people will save more during their working age and so limit the net effect on savings rates. Also, one should expect changes in retirement patterns and dependency rates. Thus, changes in population structure are not expected to affect significantly the relative sizes of the economies. The projected population increase for the United States is based mainly on continuing in-migration to that country, which also lowers the dependency ratio and enables the United States to obtain skilled workers without incurring the cost of training them.

Table 12: Per Capita GDP as a Share of the US Level, by Region and Selected Countries, 2004, and Forecasts for 2025 and 2050

Country / Region	2004	2025 Forecast			2050 Forecast		
		Base	Low	High	Base	Low	High
		(% of US GDP per capita)					
World	15.3	16	15	16	20	16	21
High-income countries	77.5	80	78	77	85	79	76
European Union	68.3	76	69	69	86	69	69
Japan	89.4	81	81	83	81	81	74
Others	54	54	54	49	54	54	43
Developing countries	3.6	6	5	6	11	7	14
East Asia, Pacific	3.4	8	7	9	17	13	23
China	3.6	9	8	10	21	17	29
Others	<1	5	4	6	8	6	12
South Asia	1.4	3	2	3	10	4	10
India	1.5	4	2	4	11	5	11
Others	<1	2	1	2	7	3	7
Sub-Saharan Africa	1.4	1	1	2	3	3	4
South Africa	8.8	10	9	11	22	23	21
Others	<1	1	1	1	2	2	3
Middle East, North Africa	4.8	5	5	5	6	5	6
Latin America, Caribbean	8.6	9	8	11	18	10	20
Brazil	7.2	8	7	10	17	9	23
Mexico	16.4	18	16	22	33	19	45
Others	<1	7	6	7	14	8	11
Eastern Europe, Central Asia	8.0	11	7	11	16	9	21
Russia	8.2	14	8	17	25	12	9
Others	<1	10	7	10	14	8	18

Note: In 2004, the high-income category includes Singapore and South Korea in East Asia, and Kuwait and Saudi Arabia in the Middle East

Source: Data for 2004 are from World Bank, *World Development Indicators*, 2004; forecasts for 2025 and 2050 are the author's

countries raise their share to 40 percent, but in the high-growth case, they increase their share to almost 60 percent of world income. Japan's share of world income shrinks to about 5 percent, which is about half of India's share, except in the low-growth case, and about a fourth of that of China. The shares of the United States and EU also decline, but the United States remains the largest economy except in the high-growth case, when it is

slightly smaller than that of China. It is unlikely, however, that China will be able to maintain the rate used in the high-growth scenario. Most developing regions see an increase in their share of world income, but the region gaining the most is Asia, whose share increases to about a third.

The share of the BRICSAM countries increases further, to 30-40 percent, larger than that of the United States and even approaching that of all the developed countries put together – indeed, India and China together have a share larger than that of the United States or the EU. There is now a much larger difference when BRICSAM growth rates vary – more than 10 percent between the high- and low-growth cases.

The rise in the share of China and India raises the possibility of a substantial increase in these countries' influence in international economic management. Translating this potential into reality would be easier if there were coordination and cooperation between them and with other BRICSAM countries, but each could play a substantial role by itself. Their interest in working together with the others obviously would depend on whether they had a similarity of interest in the way the world economy worked.

In terms of per capita income, however, the performance of the BRICSAM countries is less impressive, increasing only to between 11 and 21 percent of US per capita income after half a century, depending on whether the high- or low-growth case is used. India is the laggard, with per capita income increasing only to about 10 percent of the US level. These forecast lagging per capita incomes point to the need for the BRICSAM countries to maintain a high rate of growth. To that end, it would be in their common interest to pursue a well-functioning international economic system, in terms of both trade and capital flows.

Although it is unlikely that Japan and Europe will continue to lag behind the United States in economic performance, there is little evidence as yet that these economies will grow at rates that would seriously challenge the US position. The East Asian economies are recovering and are likely once again to experience high rates of growth, again without challenging the US position. The only exception might be China, but this is not likely to happen in the next two decades for several reasons. One is that, despite its impressive performance, China's per capita income will remain well below that of the United States. Another reason is that China is now likely to move onto more difficult terrain, facing the challenging task of reforming its public sector, particularly the state-owned banking system with its considerable nonperforming assets.

5. The Development of Trade

The current Doha Round of multilateral trade negotiations is at an impasse; prospects for a successful outcome are bleak. Fears have been expressed that this impasse might lead to increased protection and an unravelling of the liberal trading regime that has developed since the end of the Second World War, with adverse effects on incomes and growth of the world economy. Such fears, in fact, have been expressed on a number of occasions over the past four decades or so.²⁸ But, although protection has increased at times, there has been no large-scale turning back on liberalization: governments seem to be acutely aware that increased protection is not in their interest.²⁹ Moreover, today's

²⁸ Indeed, trade liberalization has sometimes been compared to a bicycle that must keep rolling if it is not to fall over. Cassandras among trade analysts are always predicting an increase in protection and looming disaster at the start of any new round of trade negotiations.

transnational companies have well-integrated production structures, any disruption of which they would strongly resist and which would severely reduce world efficiency and output.³⁰ While existing protection in the developed countries undoubtedly has adversely affected the developing world and should be removed, there is no evidence of a rising tide of protection in the developed world. Consequently, I do not believe that the integration of markets for goods will be disrupted; rather, in fact, they will become even more integrated.³¹

Over the past few years, it is true, new forces against trade liberalization have sprung up, but these are unlikely to succeed because of the serious adverse effects on output and welfare. Moreover, not all of these new forces have concerns that place them in opposition to globalization – nongovernmental organizations that champion global acceptance of human rights, for example, obviously would prefer the globalization of their causes. Conflict arises when economic globalization is perceived to inhibit the achievement of these broader goals or even to imperil democracy itself. But it not clear that restricting trade would help achieve such goals (for a discussion of this issue, see Keohane and Nye, 2000). Concerns that globalization is being furthered by the United States and reflects US social

²⁹ Increased protection by one country is likely to lead to increased protection by others. Given enough of such behaviour, the world might see a return to the situation in the 1930s, when substantially increased protection contributed to a decline in trade and a huge increase in unemployment. Governments are well aware of this possibility, and do not seem anxious to repeat the experience.

³⁰ An analogy can be provided by the break-up of the Soviet Union, which disrupted the integrated economic system that had prevailed and contributed to the large decrease in output and incomes in the successor republics.

³¹ One can look at the process of integration from many different viewpoints; there is even some dissent as to whether there has been a substantial increase in integration.

values might disappear as other countries increase their relative importance in the world. Already, the values and tastes of other cultures are spreading – what the final amalgam will be, how fast it will spread, and what room there will be for local preferences are the issues at stake, and the outcome is not clear.

The growth in trade will mean an increasing role for the World Trade Organization, whose main issue will be the relationship between regional and multilateral trading organizations. I believe overall liberalization will reduce the importance of regional trading arrangements.

The major markets, according to these assumptions, will continue to be in the United States, EU, and East Asia, with the importance of the latter increasing. Table 13 presents the actual and predicted shares of trade in GDP for the largest economies; the average is 33.4 percent. The actual share of trade in China's GDP is much higher than the predicted share, and even higher than the average for the whole group. In contrast, in most of the other BRICSAM countries, the actual share is less than the predicted share; for Brazil and South Africa, the gap is considerable. It was assumed, for these BRICSAM countries and for other countries with a small gap between the actual and predicted shares, that the gap between the shares would disappear by 2050. The main question mark is China. Will its share go on increasing or at what level will it stabilize? The share of trade in world GDP increased from 19 percent in 1990 to 26 percent in 2005; for the group of 25 countries in Table 13, it increased from 20 to 34 percent.

In Table 14, which shows the share of world trade by the BRICSAM countries, the share of trade in world GDP is assumed to continue to increase, but at a slower pace, rising to 33 percent by 2025 and to 40 percent by 2050. The corresponding share for

Table 13: Share of Trade in GDP, Selected Countries, Actual and Predicted, 2005

Country	Actual	Predicted
	<i>(% of total GDP)</i>	
United States	10	12.7
Japan	13	18.7
United Kingdom	26	25.1
Germany	40	23.3
France	26	26.0
Italy	26	27.8
South Korea	43	36.0
Mexico	30	34.8
South Africa	27	43.5
Turkey	27	39.7
Russia	35	34.7
Brazil	17	33.8
Thailand	74	42.1
Iran	39	41.7
Colombia	22	45.5
China	38	29.2
Ukraine	54	45.2
Philippines	47	40.0
Indonesia	34	33.5
Egypt	31	40.9
India	21	27.5
Vietnam	70	37.9
Nigeria	53	34.0
Bangladesh	17	32.7
Ethiopia	16	29.8

Source: Author's calculations, based on Chenery and Taylor (1968) and Chenery and Syrquin (1975)

the large economies is 41 percent and 50 percent, respectively. If one assumes that the share of trade in China's GDP will also continue to increase, but at a slower rate, it is forecast to rise to between 40 and 50 percent by 2050. The share of trade in GDP in the other BRICSAM countries also increases, but slightly. If present trends were to continue, China would become a formidable player in international trade, accounting for almost 20 percent of world exports by 2050. This seems unrealistic – the

Table 14: Share of World Exports, BRICSAM Countries, 2005, and Forecasts for 2025 and 2050

Country	2005	2025 Forecast	2050 Forecast
	<i>(% of world total)</i>		
Brazil	1.2	1.5	1.7
China	7.3	12.7	20.4
India	1.5	3.4	8.5
Mexico	2.0	2.1	3.0
Russia	2.3	1.2	2.0
South Africa	0.4	2.4	1.1

Source: Author's calculations, based on Chenery and Taylor (1968) and Chenery and Syrquin (1975)

largest share currently is of the United States, at 10 percent, with Germany at 9 percent – and it is unlikely that China's share of world trade will go on increasing at its current rapid rate.

A discussion of capital flows is beyond the scope of this paper, but it is clear that outward foreign investment from China and India is increasing, and is geared to meeting these economies' needs. In the case of China, it seems to be directed more towards investment in natural resources; in the case of India, the investment is by private companies to acquire technologies, marketing networks, or brand names.

6. Conclusions about International Governance

The past four decades have seen Asian countries grow considerably faster than other countries. This growth has two pillars: high rates of savings and investment, and integration with the world economy. Continuation of these trends is likely to see a significant change in the configuration of economic forces. The BRICSAM countries, particularly China and India, will account for an increasing share of world income and trade. The Chinese

and Indian economies have depended on exports to accelerate their growth, while capital inflows have been important in China to raise productivity. Indian companies now seem to be investing abroad to benefit from the technology and other characteristics of foreign companies. China is also investing abroad to tap sources of raw materials. The other BRICSAM countries need foreign capital to augment their domestic savings if they are to maintain a high rate of growth. It is in the common interest of these countries that the international system be conducive to the free flow of goods, services, and capital. In particular, they need a better-functioning international financial system, to enable them to access world capital markets reliably and consistently, without having to hold large reserves as a form of insurance. Most would also benefit considerably from a freer flow of labour.

Currently, these countries are not in a position to negotiate large changes in the institutions of international governance. Some have been able, with other developing countries, to immobilize the current round of multilateral trade negotiations because their concerns have not been met, but they are not yet able to push forward their own agenda. They have even less influence in the Bretton Woods institutions: the IMF and the World Bank. Meanwhile, attempts to engineer a new financial architecture have stalled. Of the BRICSAM countries, only China will have the power to negotiate changes in the institutions of international economic governance on its own. The influence of the others will depend very largely on their willingness to negotiate as a group.

Works Cited

- Agarwal, M. (1991). "South-South Trade: Building Block or Bargaining Chip." In *Rules, Power and Credibility*, edited by J. Whalley. Toronto: Macmillan.
- Bhagwati, J. (1978). *Anatomy and Consequences of Exchange Control Regimes*. Cambridge, MA: Bollinger.
- Bhagwati, J., and A. Panagariya, eds. (1996). *The Economics of Preferential Trade Arrangements*. Washington: DC: American Enterprise Institute Press.
- Bhagwati, J., and J.R. Ruggie. (1984). *Powers, Passions and Purpose: Prospects for North South Negotiations*. Cambridge, MA: MIT Press.
- Bhagwati, J., and T.N. Srinivasan. (1975). *Foreign Trade Regimes and Economic Development: India*. Cambridge, MA: National Bureau of Economic Research.
- Barro, R., and X. Sala-i-Martin. (1992). "Convergence." *Journal of Political Economy*: 223-51.
- Chenery, H., and M. Bruno. (1962). "Development Alternatives for an Open Economy: The Case of Israel." *Economic Journal*. Vol. 72: 79-103.
- Chenery, H., and A.M. Stout. (1966). "Foreign Assistance and Economic Development." *American Economic Review*. Vol. 56, no. 4: 679-733.
- Chenery H., and M. Syrquin. (1975). *Patterns of Development, 1950-70*. Oxford: Oxford University Press for the World Bank.

- Chenery, H., and L. Taylor. (1968). "Development Patterns among Countries and over Time." *Review of Economics and Statistics*. Vol. 50, no. 4: 391-416.
- De Grauwe, P. (1996). *International Money: Postwar Trends and Theories*. Oxford: Oxford University Press.
- Grilli, E.R., and M.C. Wang. (1988). "Primary Goods Prices, Manufactured Goods Prices, and the Terms of Trade of Developing Countries." *World Bank Economic Review*. Vol. 2, no. 1: 1-47.
- Keohane, R.O., and J.S. Nye. (2000). "Globalization: What's New? What's Not? (And So What?)." *Foreign Policy*. Vol. 118 (Spring): 104-19.
- Krugman, Paul. (1994). "The Myth of Asia's Miracle." *Foreign Affairs*. Vol. 73, no. 6: 62-78.
- Lewis, W.A. (1969). *Aspects of Tropical Trade, 1883-1965*. Wicksell Lectures. Stockholm: Almqvist and Wicksell.
- Prebisch, R. (1950). *The Economic Development of Latin American and Its Principal Problem*. Santiago: United Nations.
- _____ (1951). *The Spread of Technical Progress and the Terms of Trade*. UN Economic Survey of Latin America 1949. New York: United Nations.
- Rodrik, D. (1995). "Trade and Industrial Policy." In *Handbook in Development Economics*. Vol. 3, edited by J.R. Behrman and T.N. Srinivasan. Amsterdam: North Holland.
- Rodriguez, F., and D. Rodrik. (2000). "Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence." In *Macroeconomics Annual 2000*, edited by B. Bernanke and K. Rogoff. Cambridge, MA: MIT Press for the National Bureau of Economic Research.

- Spraos, J. (1980). "The Statistical Debate on the Net Barter Terms of Trade between Primary Products and Manufactures." *Economic Journal*. Vol. 90: 109-28.
- Taylor, L. (1991). "Economic Openness: Problems to the Century's End." In *Economic Liberalization: No Panacea*, edited by T. Banuri. Oxford: Clarendon Press.
- Triffin, R. (1960). *Gold and the Dollar Crisis: The Future of Convertibility*. New Haven, CT: Yale University Press.
- Williamson, J. (1977). *The Failure of International Monetary Reform*. New York: New York University Press.
- World Bank. (various years). *World Development Indicators*. Available at: <http://go.worldbank.org/U0FSM7AQ40>.
- World Bank. (various years). *World Development Report*. Available at: <http://go.worldbank.org/LOTTGBE910>.

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57 Erb Street West
Waterloo, Ontario, Canada N2L 6C2
tel +1.519.885.2444 fax +1.519.885.5450
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