



# Rising Economic Powers and the Global Economy: Trends and Issues for Congress

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## Summary

A small group of developing countries are transforming the global economic landscape. Led by China, India, and Brazil, these rising economic powers pose varied challenges and opportunities for U.S. economic interests and leadership of the global economy. They also raise significant policy issues for Congress, including the future direction of U.S. trade policy and negotiations, as well as for the multilateral economic institutions that have historically served as the foundation of an open and rules-based global economy.

This report addresses ongoing shifts in global trade and finance and projected future trends resulting from the emergence of these economies. It is the first of a three-part CRS series that focuses on how the *Rising Economic Powers* are affecting U.S. interests and raising challenges for congressional oversight of U.S. international trade and financial policies.

The major trends in the global economy identified and discussed in this report are:

- The balance of global economic power is shifting from the United States and Europe to a number of fast-growing and large developing countries. These economies account for rising shares of global GDP, manufacturing, and trade, including a significant expansion of trade among the developing countries (South-South trade). These shifts are driven by growing economic integration and interdependence among economies, particularly through new global production and supply chains that incorporate inputs from many different countries.
- Rising economic powers are becoming more important players in international finance. They have increased holdings of foreign exchange reserves, established sovereign wealth funds, borrowed capital from international capital markets, and attracted substantial foreign investment. Their multinational corporations, many state-owned, are investing assets globally and are competing with U.S. firms for natural resources and access to other developing-country markets.
- The long-standing distinction between advanced and developing countries, particularly for rising economic powers, is blurring. The advanced countries may still be the richest countries in terms of per capita income, but their economies may no longer be the largest, the fastest-growing, or the most dynamic. Rising economic powers are exerting greater influence in global trade and financial policies and in the multilateral institutions that have underpinned the global economy since World War II. These developments, in turn, have implications for U.S. global leadership that are subject to debate.
- While the impact of the rising economic powers is considered by most economists to be strongly positive for the U.S. economy overall, not all groups of Americans have benefitted equally. Highly educated workers are seen gaining more job opportunities and higher wages than workers with less education.

Issues for Congress on the international trade and finance policies raised by the changing global landscape could include:

- Seizing full advantage of growing markets for U.S. manufacturers, service providers, agricultural producers, and their workers, including preparing for increased competition.

- The future direction of U.S. trade negotiations and the global trading system, as well as specific policies and issues raised by the global economy. These might include the increasing role of state-owned enterprises, access to developing country markets for services and government procurement, the future role of the dollar as the primary reserve currency, and U.S. participation in global supply chains, among other issues.
- The evolution of international frameworks for financial integration, as well as multilateral and bilateral frameworks for foreign direct investment and sovereign wealth funds.

This report will be updated as events warrant.

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## Introduction

The global economy has undergone dramatic changes over the past 60 years. In the early 1950s, the world economy was essentially divided between developed or industrialized countries in the “North” and developing or non-industrialized countries in the “South.” Developed countries, excluding Japan, at that time accounted for 90% of world manufacturing output and 90% of world exports of manufactured goods. Production remained largely enclosed within national boundaries and trade patterns reflected the respective country specializations. Inputs for most products were sourced within national borders. In addition to a large imbalance in the structure of production and exports, there was a dramatic imbalance in living standards and political power as well.<sup>1</sup>

From the 1950s to the mid-1990s, these imbalances began to reverse gradually. By 1995, for example, the advanced countries’ share of manufacturing output had fallen to 80%. But the narrowing of the great 20<sup>th</sup> century divide between advanced and developing countries accelerated rapidly over the past two decades with traditional production, trade, and finance patterns being replaced by new and more balanced configurations.

Spurred by the information technology (IT) revolution, trade liberalization and other economic reforms, the entry of an estimated 2 billion people into the labor force as a result of the breakdown of the Soviet bloc and the opening of China, and the freer movement of capital and technology from developed countries to developing countries, the size of the global economy doubled over the decade preceding the 2008-2009 global financial crisis, increasing from \$31 trillion in 1999 to \$62 trillion in 2008. While the growth reached practically every region of the world and encompassed dozens of developing countries, a handful of large developing countries—led by China, India, and Brazil—accounted for a major share of the global growth. Other emerging economies with large populations, such as Indonesia, Mexico, Russia, Turkey, and Vietnam, also grew at a rapid pace. This faster growth has enabled developing countries to expand their share of global GDP, rising from around one-fifth of global GDP in 2000 to more than one-third of world output today, fueling speculation that the world’s economic balance of power is rapidly shifting away from the United States and Europe toward rising powers in Asia and Latin America.<sup>2</sup>

In addition to altering global GDP rankings, the changes in the global economy have affected the centers of economic growth, the location of manufacturing, and international trade patterns. Buttressed by their exporting success and rising incomes, developing countries are also becoming more important players in the international financial system. If current trends persist, the shifts in wealth and power could become more pronounced over the next several decades.

With important responsibilities for the formulation of U.S. international trade and financial policies, Congress has an interest in understanding how these shifts of wealth and power are affecting U.S. economic interests. This report addresses these concerns in two parts by (1) describing and analyzing trends that are transforming the global economy, and (2) highlighting varied policy challenges raised by the new global economy for congressional consideration.

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<sup>1</sup> Ronald Findlay and Kevin O’Rourke, *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*, Princeton University Press, 2007, p. 512.

<sup>2</sup> M. Ayhan Kose and Eswar S. Prasad, *Emerging Markets: Resilience and Growth Amid Global Turmoil*, Brookings Institution Press, 2010, p.1. [Hereafter cited as Brookings Institution, *Emerging Markets*].

Discussion and analysis of these trends has intensified over the past few years. International institutions, such as the Organization for Economic Cooperation and Development (OECD), the World Bank, the World Trade Organization (WTO), and the International Monetary Fund (IMF); private research institutions, such as the Brookings Institution and the Carnegie Endowment for International Peace; and private sector research entities, such as Goldman Sachs and Pricewaterhouse Coopers, have all issued analyses of the changing global economy. This report summarizes many of their key findings with a view to what the evolving global economy means for congressional concerns and responsibilities in the formulation of U.S. international trade and financial policies.

## **The Changing Global Economic Landscape**

Driven by technological changes that have reduced the costs of communication and transportation, a dramatic increase in the world supply of labor, and a reduction of trade barriers, broad shifts in economic activity from developed to developing countries have taken place over the past two decades. The biggest change involves a long-term shift in economic power from advanced to a handful of large developing countries that have grown twice as fast as advanced countries for more than a decade. These rising economic powers have become increasingly important generators of world economic growth. Their share of global trade has increased significantly, with trade and investment between developing countries (South-South trade and investment) becoming an important new force in the global economy. These countries now export a diversified range of manufactured products and are actively upgrading their ability to produce more sophisticated and higher value-added products.

These trends have been accompanied by a major shift in the location of manufacturing from advanced to developing countries, particularly to Asia. Often referred to as “Factory Asia,” this development has been driven by the proliferation of global supply chains that rely on significant amounts of goods and services inputs from different countries, including from the United States. In this new environment, countries no longer specialize exclusively in producing finished products, but rather in specific stages of the production process.

The rising economic powers have also increased their financial holdings and wealth and are becoming more important players in international financial markets. While a dominant share of financial assets, financial centers, and financial regulatory power remains concentrated in the United States and Europe, these emerging economies have accumulated large volumes of foreign exchange reserves, established sovereign wealth funds, borrowed capital from international financial markets, attracted foreign direct investment, and begun investing some of their assets abroad. Corporations based in these countries are playing an increasingly prominent role in global business and cross-border investment, often competing with U.S. and European multinationals for natural resources, technology, and investment in other developing countries. Singapore, Hong Kong, and Shanghai are growing in importance as financial centers and will perhaps rank someday with the traditional hubs of New York, London, Frankfurt, and Tokyo. As their role in international trade and investment increases, demand for emerging market currencies is also likely to grow over time, perhaps paving the way for an international monetary system with more than one key reserve currency.

As a result of these changes, the long-standing division between advanced and developing countries has eroded, particularly for the handful of rising economic powers. The advanced or developed countries may still be the richest countries in terms of per capita incomes, but their

economies may no longer be the largest, the fastest-growing, or the most dynamic. This development, in turn, has implications for U.S. economic well-being and global economic leadership that are subject to debate. Key changes in the global economy are documented in more detail below.

## Shifts in Global Production and Trade

### World GDP Rankings

The balance of international economic power is shifting from the United States and European powers that have dominated the world economy since the end of World War II to a few dozen developing countries located in Asia, Latin America, and the Middle East. As the world economy has grown larger, many economists emphasize that the shift in economic power is relative (not absolute) and that, on balance, a larger economic pie benefits everyone.

While there is often debate about which developing countries to include in any list of rising economic powers, the growing role of developing countries as a broad grouping is well documented in **Figure 1**.<sup>3</sup> As shown, the advanced economies' share of global economic activity declined from 80% in the period between 1960 and 1972 to 57% in 2008-2009, a 23 percentage point drop.<sup>4</sup> During these same time periods, the emerging economies' share of global economic activity rose from 17% to 39%, a 22 percentage point increase.<sup>5</sup>

The shift in economic power toward developing countries is projected to accelerate over the next 20 years. According to OECD estimates (**Figure 2**), developing- and developed-country shares of global GDP will be about equal by 2012; however, the developing countries' share is projected to rise to 57% and the developed countries' share is projected to drop to 43% by 2030.<sup>6</sup>

On a more disaggregated basis, as shown in **Figure 3**, the United States remains the largest economy in the world, although its share dropped nine percentage points, from 33% of the world economy between 1960 and 1972 to 24% in 2008-2009. The share of the G-7 (an economic and political grouping of developed countries consisting of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) and the EU-15 (the initial group that comprised the European Union until 2004) fell by even more. On the other hand, the three largest emerging economies—China, Brazil, and India—saw their shares of world GDP rise from 6% between 1960 and 1972 to 23% in 2008-2009, a gain of 17 percentage points.

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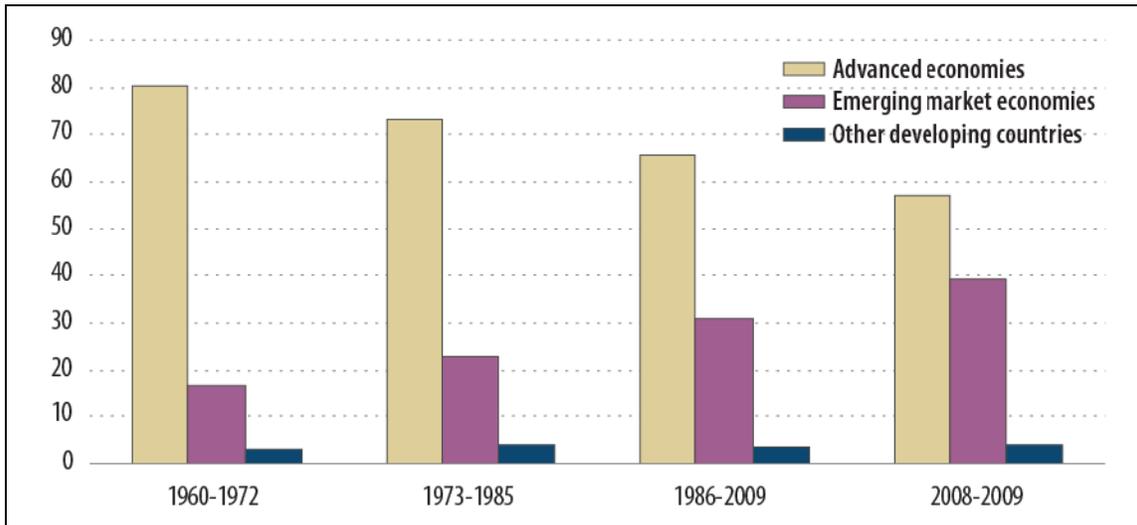
<sup>3</sup> The composition of the country groupings (i.e., developed versus developing or advanced versus emerging market) utilized in this report vary because they are drawn from different reports and analyses.

<sup>4</sup> This advanced country grouping includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States.

<sup>5</sup> This emerging economies grouping includes Argentina, Brazil, Chile, China, Colombia, Egypt, Hong Kong, India, Indonesia, Israel, Jordan, Korea Republic, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Singapore, South Africa, Thailand, Turkey, and Venezuela.

<sup>6</sup> Purchasing power parity estimates take into account the amount of adjustment needed in an exchange rate between countries in order for the exchange rate to be equivalent to each country's purchasing power. In other words, the exchange rate adjusts so that identical goods in two different countries have the same price when expressed in the same currency. Measuring output in PPP terms tends to increase the GDP of developing countries by taking into account that many non-tradable goods such as haircuts, meals, medical care, and housing tend to cost less in developing countries.

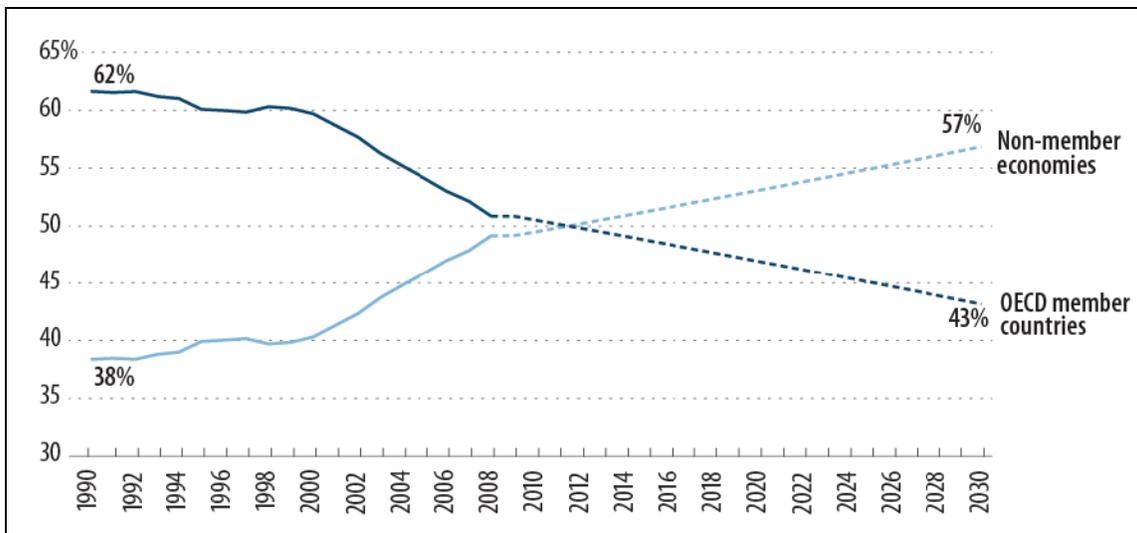
**Figure 1. World GDP Distribution by Economic Grouping, 1960-2009**  
(in percent)



**Source:** Brookings Institution, *Emerging Markets*, p. 30.

**Notes:** World GDP is measured in Purchasing Power Parity (PPP) adjusted dollars.

**Figure 2. Share of the Global Economy for OECD and Non-OECD Countries, 1990 - 2030**  
(in purchasing power parity)

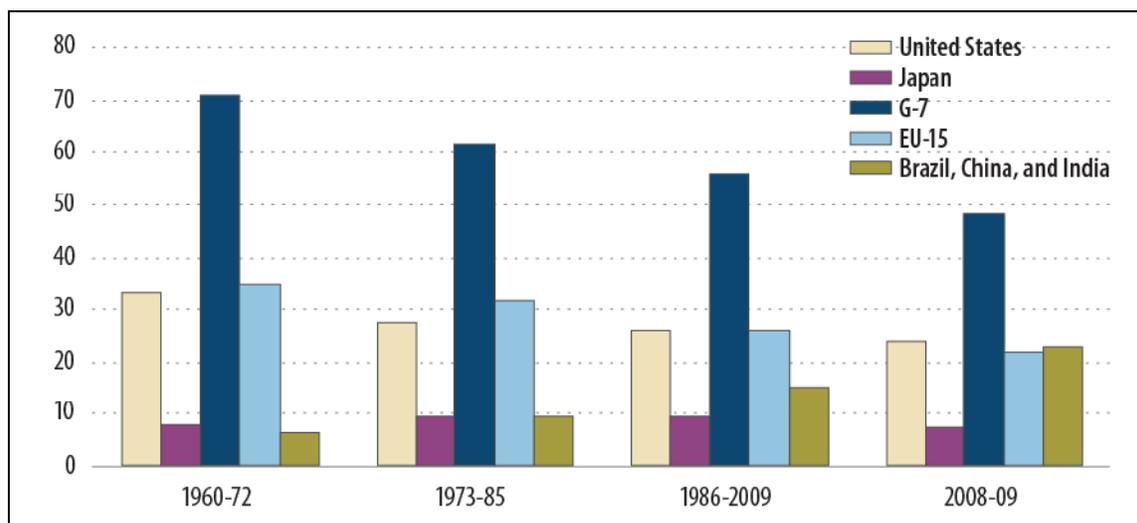


**Source:** OECD, *Perspectives on Global Development, Shifting Wealth*, p. 24

**Note:** Most OECD members, with the exception of Mexico, are high-income countries and are regarded as developed countries.

**Figure 3. World GDP Distribution by Country, 1960-2009**

(in percent)



**Source:** Brookings Institution, *Emerging Markets*, p. 30.

**Notes:** World GDP measures in Purchasing Power Parity (PPP) adjusted dollars.

The growing weight of Brazil, China, and India in the world economy, combined with Russia, was popularized by Goldman Sachs in 2003 when it coined the “BRIC” acronym. In the often-cited report *Dreaming with BRICs: The Path to 2050*, Goldman projected that the economies of Brazil, Russia, India, and China taken together could be larger than the G-6 (the United States, Japan, the United Kingdom, Germany, France, and Italy) by 2039.<sup>7</sup> Goldman also projected that among the G-6, only the United States and Japan would be among the top six largest economies in the world by 2050, and that only two European powers, the United Kingdom and Germany, would be in the top 10 (ninth and tenth place, respectively).

Among the BRICs, it is clear that China is in a class of its own. According to IMF data presented in **Table 1**, China’s weight in the world economy has more than quadrupled between 1995 and 2010, but the other three BRICs have also seen their shares grow.

**Table 1. Share of the BRIC Bloc in the World Economy**

(share of global GDP by percent)

Country	2000	2010
Brazil	2.0	3.3
Russia	1.0	2.4
India	1.5	2.3
China	3.7	9.3
Total	8.0	17.2

**Source:** IMF World Economic Outlook, October 2010.

<sup>7</sup> Goldman Sachs Global Economics Paper No: 99, *Dreaming with the BRICs: The Path to 2050*. October 1, 2003.

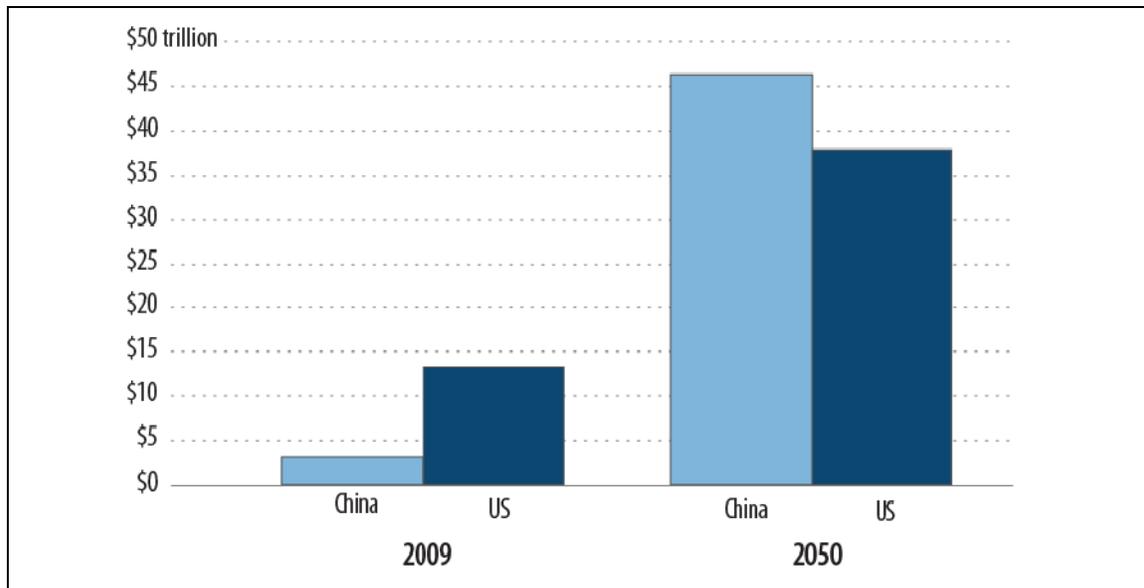
In 2009 (see **Figure 4** below), China's economic output of \$3.3 trillion (based on market exchange rates) was one-fourth the size of U.S. GDP (\$13.2 trillion). But according to a projection by Carnegie Endowment researchers, China's GDP may be almost 20% larger than the U.S. GDP by 2050 (\$46.3 trillion for China versus \$37.6 trillion for the United States). In purchasing power parity terms, China now ranks as the second-largest economy in the world and is projected by the Carnegie researchers to be almost twice the size of the U.S. economy by 2050.

### Measuring the Size of China's Economy

The actual size of China's economy has been a subject of debate among economists. Many economists contend that using market or nominal exchange rates to convert Chinese data (or that of other countries) into U.S. dollars fails to reflect the true size of China's economy and living standards relative to the United States. Nominal exchange rates simply reflect the prices of foreign currencies relative to the U.S. dollar and exclude differences in the prices for goods and services across countries. To illustrate, one U.S. dollar exchanged for local currency in China would buy more goods and services there than it would in the United States. This is because prices for goods and services in China are generally lower than they are in the United States. To make more accurate comparisons, economists attempt to develop estimates of exchange rates based on their actual purchasing power relative to the dollar. Such estimates increase the measurement of the size of China's economy and its per capita GDP by substantial amounts.

In addition, India's economy is projected to be the third-largest economy in the world, with no European country among the top eight largest economies by 2050.<sup>8</sup>

**Figure 4. U.S. and China GDP, 2009 and 2050**  
(real GDP, 2005\$)



**Source:** Carnegie Endowment, *Juggernaut*, pp. 48-49.

**Notes:** Carnegie projections for 2050.

<sup>8</sup> Uri Dardush and William Shaw, *Juggernaut: How Emerging Markets Are Reshaping Globalization*, Carnegie Endowment for International Peace, 2011. p. vii. [Hereafter cited as Carnegie Endowment, *Juggernaut*.]

## ***Qualifications to the GDP Projections***

These types of GDP projections should be interpreted with caution. Past projections that Russia and Japan would surpass the U.S. GDP, for example, proved far off the mark. Some economists argue, in fact, that the correlation between a country's growth rate in one decade and the next decade is remarkably low and extrapolative forecasting can be perilous.<sup>9</sup>

Each of the rising economic powers faces internal challenges or obstacles that could easily derail the long-term growth projections. China and India, the two largest and most important of the rising economic powers, stand in a class all by themselves both in terms of their potential impact on the global economy and the obstacles that could derail their growth over the next 40 years.

In the case of China, rising income inequality, a rapidly aging population, potential social unrest, territorial disputes, fuel scarcity, water shortages, environmental pollution, corruption, and an underdeveloped banking system are obstacles commonly cited. Whether China's leadership will prove capable of dealing with these challenges, any of which could lead to political instability, remains to be seen.<sup>10</sup>

India's internal challenges are no less daunting. To achieve its long-term growth potential, India may have to make progress on a wide range of economic and political reforms. According to a Goldman Sachs analysis, India needs to improve its governance, raise its educational standards, control inflation, liberalize financial markets and increase trade with its neighbors, boost agricultural productivity, and improve its infrastructure. Delivery of all of these changes will not be easy.<sup>11</sup>

It should also be emphasized that these projections foresee only a relative decline in the size of the G-7 economies. In absolute and real terms, all the studies project real increases in GDP for the advanced countries. So despite rapid growth in the emerging powerhouses, their populations will remain significantly poorer than those in advanced countries. By 2050, six of the largest developing countries will have per capita incomes far below Japan, the United States, and much of Europe. U.S. per capita income will be nearly three times that of China and eight times that of India, influencing the U.S. role in a global economy. Therefore, the advanced countries that have dominated the global economy for the past 50 years will continue to maintain the highest living standards, but their leadership role may be increasingly contested by a varied group of rising economic powers.<sup>12</sup>

## **Sources of World Growth**

Led by China, India, and Brazil, rising economic powers are responsible for a dramatic shift in the sources of world GDP growth. As shown in **Figure 5**, world GDP growth averaged 10.2% per year between 1973 and 1985; 6.2% between 1986 and 2007, and 2.7% from 2008-2009; advanced economies growth averaged 7.16%, 3.53%, and 0.17% during these three periods; emerging

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<sup>9</sup> *The International Economy*, "Larry Summers Exit Interview," Winter 2011, p.8.

<sup>10</sup> Robert Fogel, "China's Economy," *Foreign Policy*, January/February 2010, pp. 72-75.

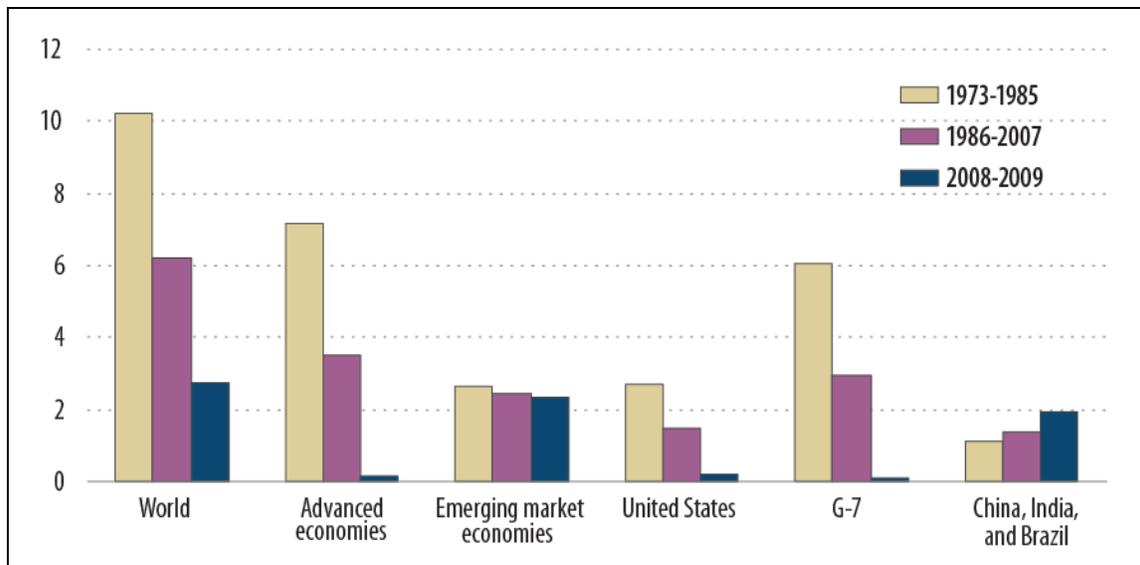
<sup>11</sup> Goldman Sachs Global Economics Paper No: 169, "Ten Things for India To Achieve its 2050 Potential, June 16, 2008.

<sup>12</sup> OECD (Organisation for Economic Co-operation and Development), *Perspectives on Global Development 2010: Shifting Wealth*. Paris, 2010, p. 32. [Hereafter referred to as OECD, *Shifting Wealth*.]

market economies averaged 2.66%, 2.43%, and 2.34%; and China, India, and Brazil combined averaged 1.11%, 1.37%, and 1.93%.

The relative contribution of advanced economies to global growth over time, thus, declined from 70% between 1973 and 1985 to 57% between 1986 and 2007, and then to 6% from 2008-2009, while the contribution of emerging markets rose from 26% to 39% and then to 86% during these same periods. China, India, and Brazil together accounted for an increasingly larger share of the developing countries' contribution, rising from 11% to 22% and then to 71% during the three periods. The global financial crisis, which hit economic growth in developed countries harder than in developing countries, helps explain why the changes in shares were so dramatic during the 2008-2009 period.

**Figure 5. Contribution to Global Growth, by Group and Region, 1973-2009**  
(in percent)



**Source:** Brookings Institution, *Emerging Markets*, pp. 34-35.

**Notes:** Share contributions are derived by dividing world GDP growth by group/region growth. Growth is calculated using PPP exchange rates.

Of these three countries, China's contribution to world growth is enormous. China accounts for almost half of the contribution of developing countries to global growth, and it also is having a huge impact on the growth rates of low- and middle-income developing countries. It is estimated that a one percentage point increase in China's growth rates results in a 0.2 percentage point increase in the growth rates of low-income countries and an even higher 0.4 percentage point increase in middle-income countries' growth rates due to their respective dependence on trade with China.<sup>13</sup>

The World Bank predicts that growth in emerging markets will average 4.7% over 2011-2025, compared with a projected growth rate of 2.3% for advanced countries. If this projection materializes, five emerging economic powers—Brazil, China, India, Indonesia, and the Russian

<sup>13</sup> OECD, *Shifting Wealth*, p. 45.

Federation—will collectively account for about half of all global growth. A key characteristic of the new global economy—what the World Bank has dubbed a multipolar world—will thus entail centers of growth distributed across both developed and developing countries.<sup>14</sup>

## Location of Global Manufacturing and Services

The location of global manufacturing is shifting from advanced countries to developing countries, particularly the emerging economies. As shown in **Table 2**, industry is accounting for a growing share of output in emerging economies, rising from 27.9% between 1960 and 1972 to 34.2% between 1986 and 2008, but it represents a declining share in advanced economies, falling from 33.6% to 28.1% in these same periods.

**Table 2. Changes in Composition of Output by Group and Sector, 1960-2008**  
(by percent)

Group	1960-1972	1973-1985	1986-2008
<i>World</i>			
Agriculture	5.67	4.41	3.93
Industry	32.98	31.86	29.45
Services	61.39	63.73	66.63
<i>Advanced Economies</i>			
Agriculture	3.50	2.43	1.90
Industry	33.60	32.11	28.11
Services	62.90	65.46	66.63
<i>Emerging Market Economies</i>			
Agriculture	21.59	15.72	11.78
Industry	27.93	29.74	34.19
Services	50.48	54.54	54.03
<i>Other developing economies</i>			
Agriculture	28.96	20.97	19.93
Industry	29.91	33.90	32.12
Services	44.61	45.13	48.47

**Source:** Brookings Institution, *Emerging Markets*, p. 37.

At the same time, industrial activity is growing at a more rapid pace in emerging economies compared to advanced economies. As shown in **Table 3**, industrial output in emerging economies grew 6.47% from 1960 to 1972, 5.54% between 1972 and 1985, and 6.67% between 1986 and 2008. This compares to advanced countries' rates of industrial growth of 5.41% from 1960 to 1972, 1.65% from 1973 to 1985, and 1.78% for the 1986-2008 period. Taken together, the data in

<sup>14</sup> World Bank, *Multipolarity: The New Global Economy*, 2011, p. 3. (Hereinafter cited as World Bank, *Multipolarity: The New Global Economy*.)

**Table 2** and **Table 3** point to a continuing shift of manufacturing activity toward emerging economies.

The picture for the location of global services is different than manufacturing. Services are accounting for a growing share of economic activity in both advanced economies and emerging economies, rising by 3.7 percentage points in the former and by 3.6 percentage points in the latter between 1960-1972 and 1986-2008 (see **Table 2**). But the output of services is growing much more rapidly (6.3% in emerging markets versus 2.6% in advanced economies during the 1986-2008 period) (see **Table 3**).

**Table 3. Growth of Output by Group, Region, and Sector, 1973-2008**

(in percent)

Group or Region	1960-1972	1973-1985	1986-2008
<i>Advanced Economies</i>			
Agriculture	1.26	2.04	1.20
Industry	5.41	1.65	1.78
Services	4.67	3.21	2.55
<i>Emerging Market Economies</i>			
Agriculture	3.19	3.40	2.77
Industry	6.47	5.54	6.67
Services	4.96	5.94	6.29
<i>United States</i>			
Agriculture	0.91	2.87	3.06
Industry	3.90	1.63	2.61
Services	0.46	4.49	3.87
<i>China, Brazil, and India</i>			
Agriculture	3.38	4.04	3.35
Industry	6.43	6.56	8.46
Services	4.53	6.72	7.80

**Source:** Brookings Institution, *Emerging Markets*, pp. 39-40.

### *Globalization of Production and "Factory Asia"*

The transfer of manufacturing capability from advanced countries to emerging powers is also documented by the growth in manufacturing value added per capita (MVA).<sup>15</sup> According to OECD calculations, the growth in manufacturing value added per capita in the emerging economies has been in excess of 6% per year since 1990 while the growth rate in advanced

<sup>15</sup> Manufacturing value added is the net output of a sector after subtracting all intermediate inputs such as raw materials, electricity, and fuels from the total value of a product. It does not include deductions for depreciation of equipment or costs associated with the depletion or degradation of natural resources.

economies has been less than 2%. The authors maintain that there is a link between countries that have sustained strong growth in manufacturing value added and in strong economic growth.<sup>16</sup>

The accumulation of manufacturing value added has been concentrated in Asia. As shown in **Table 4**, MVA per capita has increased nearly six-fold in China since 1990, but it has stagnated in Latin America and Sub-Saharan Africa. In 2010, China overtook the United States as the world’s largest producer of manufactured goods with a market share of 19.8%, just slightly larger than the U.S. share of 19.4%.<sup>17</sup>

**Table 4. Manufacturing Value Added Per Capita, 1990-2007**  
(U.S. \$)

	1990	1995	1998	2000	2005	2007
World	812	837	886	944	1014	1060
Sub-Saharan Africa	30	26	28	28	30	30
China	100	199	256	303	491	597
Latin America	622	696	733	687	759	789
Developing Countries	171	215	239	253	326	366
Asia	117	170	195	222	314	367
Industrialized countries	3491	3658	3925	4238	4421	4542

**Source:** OECD, *Shifting Wealth*, p. 125.

The concentration of manufacturing in Asia (often referred to as “Factory Asia”) has been driven by outsourcing and off-shoring of production. Instead of concentrating on producing the total value of the product with domestic inputs, “Factory Asia” is characterized by fragmentation of production and supply chains incorporating a substantial amount of value added from each country involved, including the United States.

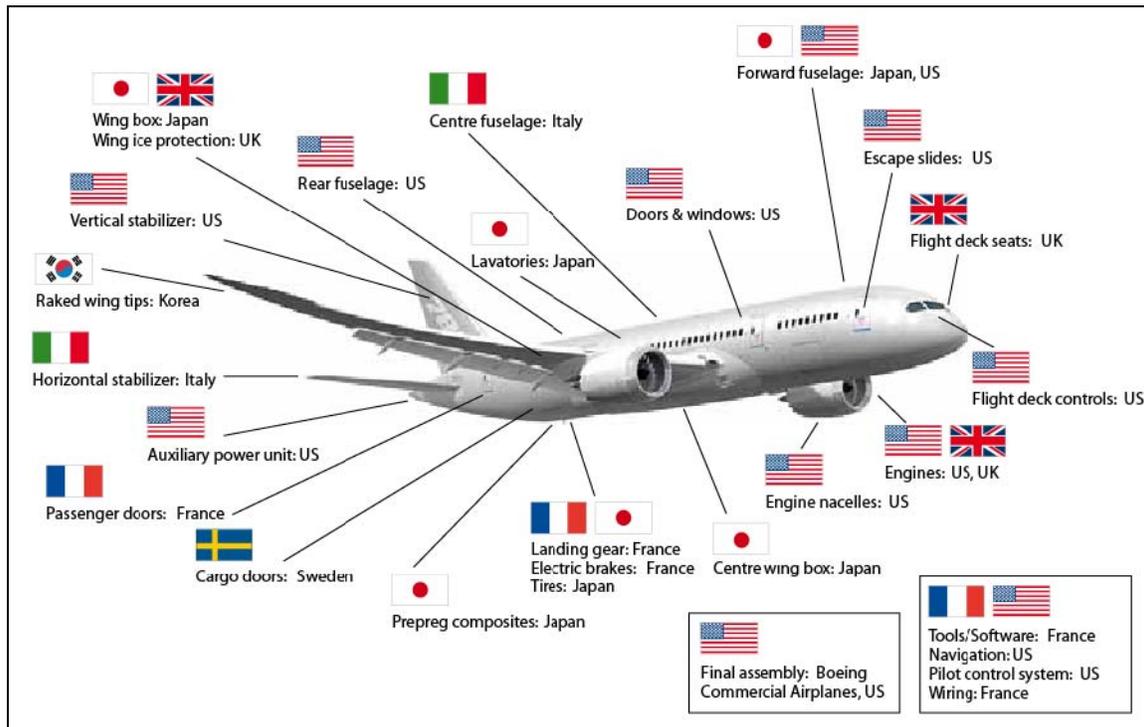
The globalization of production, of course, is not particular to Asia. As illustrated by the production of the Boeing 787 *Dreamliner* (see **Figure 6**), parts for major capital and consumer products are increasingly sourced on a global basis. What the diagram does not show, however, is that the growing tendency of companies to contract out to other companies for the production of components and services can run into problems. In the case of the *Dreamliner*, Boeing’s decision in 2003 to contract out or outsource substantial production proved problematic. Many parts did not fit together and dozens of sub-contractors failed to deliver their parts on time, resulting in cost over-runs and a three-year production delay.<sup>18</sup>

<sup>16</sup> OECD, *Shifting Wealth*, p.123.

<sup>17</sup> *Washington Post Editorial*, “The Coming Renaissance of U.S. Manufacturing,” May 10, 2011.

<sup>18</sup> *The Economist*, “The Trouble With Outsourcing,” July 30, 2011, p. 64.

**Figure 6. The Globalization of Production: The Example of the Boeing 787 Dreamliner**



Source: WTO report, p. 95.

China, as the hub of “Factory Asia,” has become competitive not only because of its lower labor costs, but also because it is a huge importer of sophisticated components from other East Asian countries for assembly and re-export to Western markets. Its integration into global production networks is reflected in the fact that it runs bilateral trade deficits with nearly all East Asian countries and bilateral trade surpluses with most developed countries—particularly the United States and European countries.<sup>19</sup>

Recognizing that their days as the lowest-cost producers of manufactured goods may not last forever, China and India are actively trying to upgrade their ability to compete in higher value-added segments of manufacturing—the design, innovation, and marketing of products—by increasing support for research and development and technological acquisition.<sup>20</sup> For example, since 2000, China has invested 1.4% of its GDP in R&D and India has invested 0.8%. China and India are increasing their R&D expenditures at over 8% per year, while U.S. expenditures are projected to increase by around 2%.<sup>21</sup> The World Bank study maintains that “the location of major research facilities in China by Microsoft, the invention of Nano micro-car by Indian firm *Tata*,

<sup>19</sup> World Trade Organization and Japan External Trade Organization, *Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks*, 2011, p.74. (Found at <http://www.wto.org> and hereinafter referred to as WTO, *Trade Patterns and Global Value Chains*.)

<sup>20</sup> OECD, *Shifting Wealth*, p. 129.

<sup>21</sup> *Oxford Analytica Daily Brief*, “Emerging Markets Change R&D Landscape,” March 31, 2011. The United States remains the global leader in R&D spending (\$384 billion in 2009), but China is now in third place with \$123 billion in expenditures in 2009.

and the continued string of aeronautical breakthroughs in Russia suggest the emerging-economy giants' strong potential for fostering growth through technological advancement."<sup>22</sup>

## **New Patterns of International Trade Flows**

Substantial changes in the patterns (shares, direction, and composition) of international trade flows are an important element of the changing global economic landscape. These changes are associated with the liberalization of trade policies around the world, export-led growth strategies of developing countries, the rapid declines in the costs of transportation and communication, and the impact of supply chain production and growing prominence of multinational corporations (MNCs) in world trade.<sup>23</sup>

According to the Brookings Institution study *Emerging Markets*, the emerging markets as a group became much more open to international trade (as measured by the ratio of total trade to GDP) over the past 25 years. Trade liberalization or reductions of trade barriers implemented either unilaterally or as a result of multilateral negotiations have increased their exposure to trade.<sup>24</sup> Since 1985, the trade openness ratio of these economies has increased from less than 30% to around 80%; the similar measure for advanced countries increased from 26% to 46%. During this period, the average growth rate of exports for emerging markets was two times greater than for advanced economies. Trade flows have thus been very important for integrating emerging economies into the global economy.<sup>25</sup>

## ***Global Shares and Directions***

The share of global trade accounted for by developing countries has increased significantly, rising from 23% in 1990 to 45% in 2010. Some predict that this share will reach 70% by 2050.<sup>26</sup>

Much of this rise has been due to an expansion of exports from developing countries to other developing countries (often referred to as South-South trade). Trade between developing countries rose from \$0.3 trillion in 1990 to \$3.0 trillion in 2008, or from 9% to 20% of global trade. As shown in **Figure 7**, if one adds developing countries' exports to developed countries (South-North trade) to South-South trade, developing countries were responsible for 37% of global exports in 2008, a 14 percentage point increase from a 1990 share of 23%. Correspondingly, trade among developed countries has declined as a percent of total world trade, going from 58% in 1990 down to 41% in 2008.

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<sup>22</sup> World Bank, *Multipolarity: The New Global Economy*, p.3.

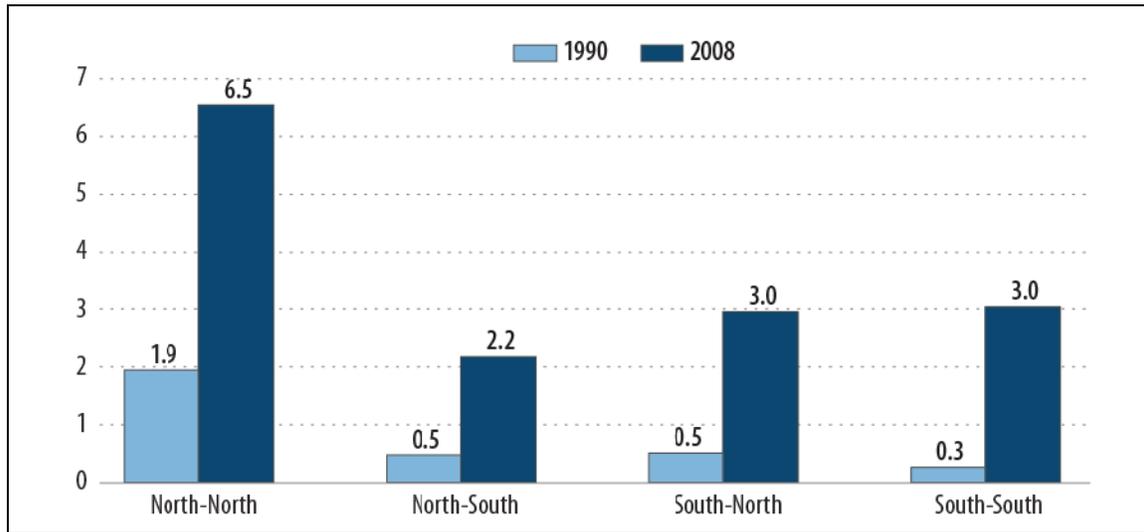
<sup>23</sup> Brookings Institution, *Emerging Markets*, p. 41.

<sup>24</sup> Unilateral reforms accounted for two-thirds of the 21 percent average cut in developing country tariffs from 1983 to 2003. See Carnegie Endowment, *Juggernaut*, p. 73.

<sup>25</sup> Brookings Institution, *Emerging Markets*, p. 43.

<sup>26</sup> Carnegie Endowment, *Juggernaut*, p. 65.

**Figure 7. Exports by Region, 1990 and 2008**  
(U.S. \$ in trillions)



**Source:** OECD, *Shifting Wealth*, p. 71.

**Notes:** North refers to developed countries and South to developing countries according to United Nations definitions.

Within the developing world, Asia plays the largest role, accounting for over 75% of South-South trade. China is the world's largest merchandise exporting country and the dominant trading partner of most countries. Other developing countries, such as India, Brazil, Indonesia, and Mexico, will likely join the ranks of the top exporting countries soon.<sup>27</sup>

Developing countries have become more important markets for developed countries, with their share of advanced economies' exports rising from 23.3% in 1985 to 33.9% in 2009.<sup>28</sup> For the United States, the developing country markets are even more important, accounting for 42.0% of total U.S. exports in 2009.<sup>29</sup>

### *Composition—Manufactured Exports and Intermediate Goods*

Since the mid-1980s, emerging economies have shifted from exporting primarily commodities to exporting a diversified range of manufactured products. As shown in **Table 5**, the share of emerging economies' exports accounted for by manufactured products has more than tripled over the past four decades, going from 23% during the 1960-1972 period to 75% during the 1986-2008 period.<sup>30</sup> This trend offers better prospects for value-added export earnings and provides greater price stability for emerging economies.

<sup>27</sup> Ibid., p.65.

<sup>28</sup> OECD, *Shifting Wealth*, p. 71; Brookings Institution, *Emerging Markets*, p.46.

<sup>29</sup> International Monetary Fund, *Directions of Trade Yearbook*, 2010.

<sup>30</sup> Exports of manufactured goods from developing countries might have increased even further if exports of mineral fuels had not surged in price and volume. For example, between 1996 and 2006, exports of mineral fuels from the Middle East and North Africa increased 1000 percent, rising from \$36.9 billion to \$360 billion. See Carnegie Endowment, *Juggernaut*, p.75.

**Table 5. Composition of Exports by Group, 1960-2007**  
(in percent)

Group	1960-1972	1973-1985	1986-2007
<i>Advanced economies</i>			
Primary non-fuels	24.92	19.48	14.11
Primary fuels	3.79	6.37	4.65
Manufacturing	71.37	74.22	81.24
<i>Emerging market economies</i>			
Primary non-fuels	60.80	37.76	16.51
Primary fuels	16.78	23.65	8.94
Manufacturing	23.30	38.59	74.55

**Source:** Brookings Institution, *Emerging Markets*, p. 45.

Within manufactured goods trade, trade in intermediate goods and services has increased significantly over the past 20 years.<sup>31</sup> World exports of intermediate goods nearly doubled between 1995 and 2009, going from around \$2.8 trillion to \$5.4 trillion. These changes are driven by increased globalization and the development of off-shoring activities (“slicing up of the value-added chain”) in the manufacturing and business services sectors.<sup>32</sup>

As shown in **Figure 8**, Asia’s share of world trade in intermediate goods has increased from 26% in 1995 to 35% in 2009, while the shares of North American and European exports of intermediate goods exports have declined significantly. North America’s share declined three percentage points during this period, going from 17% to 14%, and the European drop was nine percentage points, going from 50% to 41%.

Asia’s rising share of intermediate goods trade reflects the prevalence of production supply chains in the region and its key role in the processing and assembling of manufactured goods.<sup>33</sup> Numerous bilateral and regional free trade arrangements have also contributed to making Asia a highly integrated trading bloc, with intra-regional commerce accounting for 58% of its trade in 2009.<sup>34</sup>

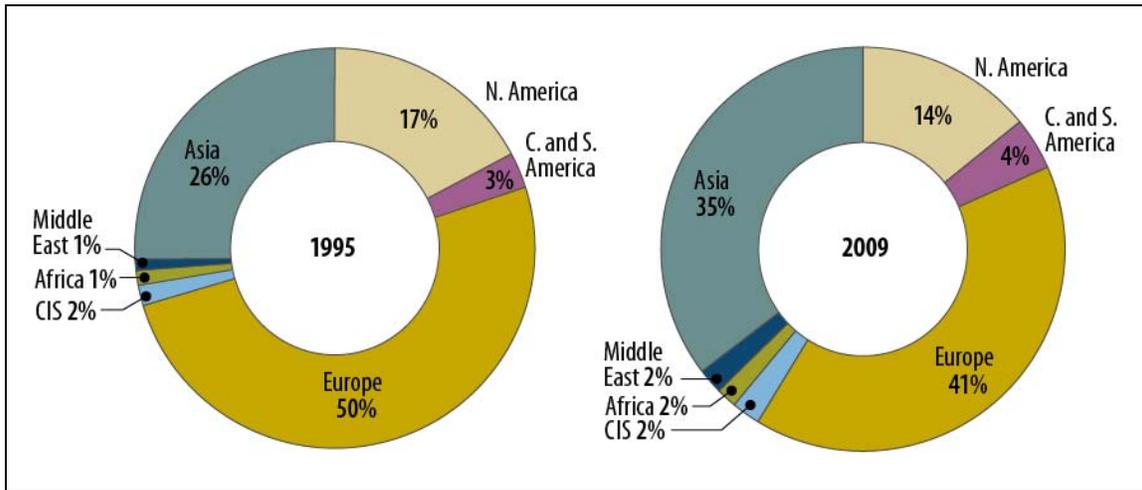
<sup>31</sup> The United Nations’ broad economic categories classification (BEC) groups commodities by main end-use, principally distinguishing between capital, consumption, and intermediate goods.

<sup>32</sup> WTO, *Trade Patterns and Global Value Chains*, pp. 80-81.

<sup>33</sup> *Ibid.*, p. 84.

<sup>34</sup> *Ibid.*, p. 41.

**Figure 8. Regional Shares in World Exports of Intermediate Goods, 1995 and 2009**  
(in percent)



**Source:** WTO, *Trade Patterns and Global Value Chains*, p. 81.

**Notes:** U.N. Comtrade databases and WTO estimates.

China, reflecting its role as the primary assembler of finished products in the region, is not only the top importer of intermediate goods in the region, but also the world. India and Vietnam have also become dynamic importers of intermediate goods within the past 15 years, with average growth rates that are double the regional average.<sup>35</sup>

Over the past 13 years, intermediate goods traded within Asia have shifted toward more complex and technically sophisticated products. Products used in the information technology sectors and electronics sectors, such as monolithic integrated circuits, account for an increasing share of this trade.<sup>36</sup>

### *Impact on U.S. Incomes and Jobs*

As developing countries increasingly produce high value-added components and become more competitive in the design and manufacture of advanced, high-tech products in which the United States and other advanced countries have historically been dominant, impacts on U.S. incomes and jobs are occurring. While economists tend to see these efficiency-promoting changes in the global economy as being strongly positive for the U.S. economy overall, there is debate as to how groups within the United States are affected.

Some research sees these changes contributing to growing income and employment changes throughout the U.S. economy with highly educated workers enjoying more job opportunities and higher wages than workers with less education. Both labor-saving technologies and the movement of production of many lower value-added items to developing countries are seen

<sup>35</sup> Ibid., p. 85.

<sup>36</sup> Ibid., p. 89.

contributing to falling employment in virtually all sectors of U.S. manufacturing, except at the high end of the value-added chain.<sup>37</sup>

Apple's video iPod, which is assembled in China by Taiwanese-owned factories using parts from all around the world, provides one illustration of wage and job impacts at high-end production. Researchers have calculated that the iPod, sold at \$299 in the U.S. market, yields \$163 to U.S. companies, \$132 to parts suppliers in other Asian countries, and \$4 to Chinese workers employed at the final assembly stage.<sup>38</sup> As shown in **Figure 9**, the iPod supported twice as many jobs overseas as in the United States. Of the 13,920 total U.S. jobs, 44% were engineers and other professionals and 56% non-professional. Of the 27,317 foreign jobs, 14% were engineers and other professionals and 86% were non-professional. The bulk of the earnings (70%) from the production of the iPod, however, went to U.S. workers.

U.S. multinational companies engaged in the computer industry and in producing related office products like the iPod have played a key role in boosting U.S. productivity growth by moving production of goods and services around the world in response to constantly changing supply chain and market opportunities. Employing 24% of the U.S. workforce in 2007, the most globally engaged U.S. firms also paid an average compensation that year of \$65,110—25% above the average of the rest of the private sector. In addition, U.S. multinational firms have accounted for an estimated 31% of GDP growth in the United States since 1990.<sup>39</sup>

While value added at the upper end of manufacturing may have increased so much as to outweigh the losses of economic activity and jobs at the lower end that have been transferred to developing countries, the range of employment opportunities in the tradable goods sector is declining. Moreover, the nontradable sector of the U.S. economy that produces goods and services that must be consumed domestically, such as government and health care, is expected to generate fewer jobs in the future as well. These two trends combined may pose a major challenge for generating high levels of employment opportunities for all Americans.<sup>40</sup>

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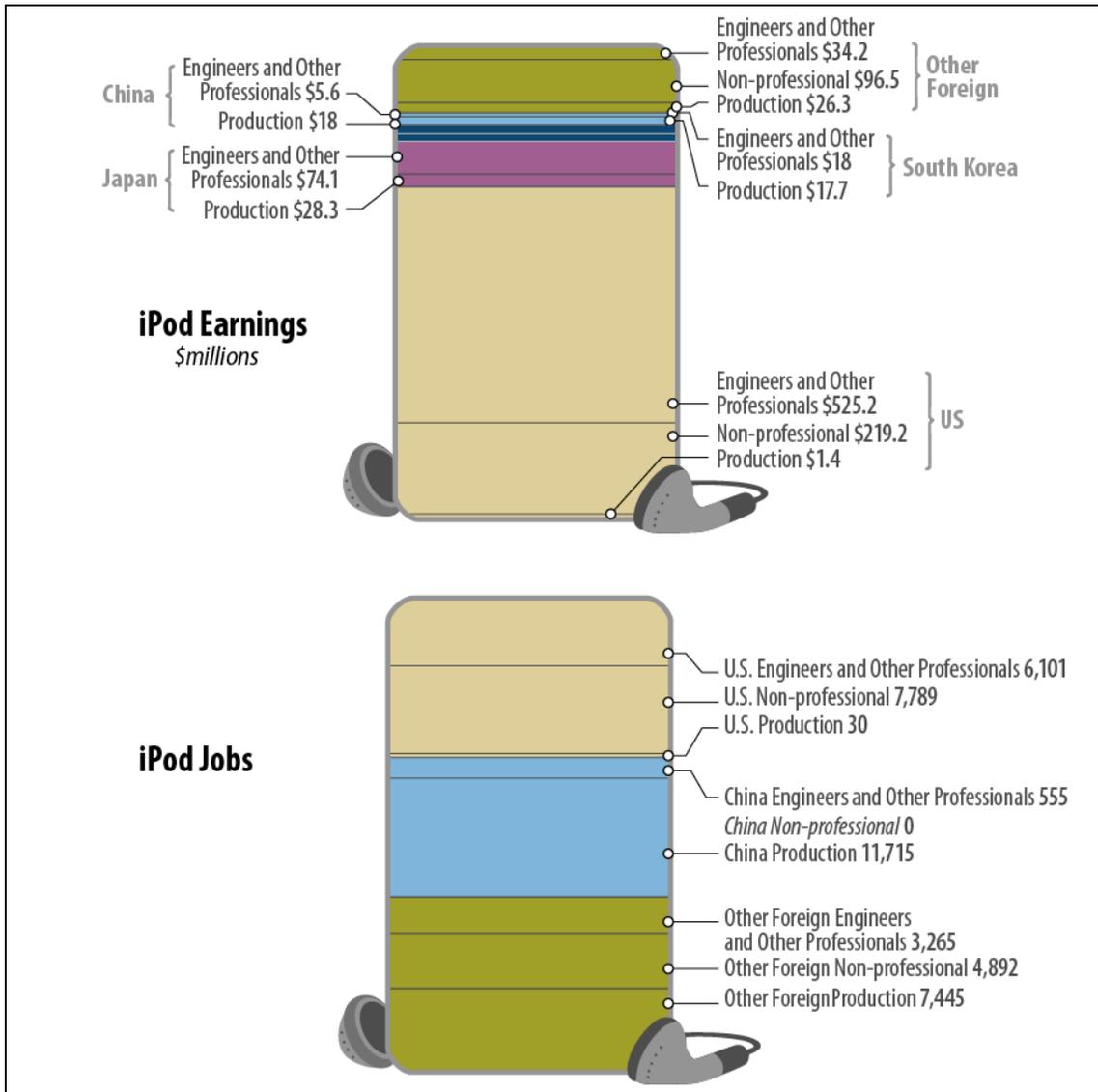
<sup>37</sup> Michael Spence, "The Impact of Globalization on Income and Employment: The Downside of Integrating Markets," *Foreign Affairs*, July/August, 2011, pp. 28-41.

<sup>38</sup> EU Trade Study Group, "A Modern Trade Policy for the European Union," *European Centre for International Political Economy* (ECIPE), January 2010.

<sup>39</sup> Matthew J. Slaughter, "Globalization and the U.S. Economy: Policy Challenges and Options," Congressional Research Service Seminar, Washington, D.D. June 7, 2010; McKinsey Global Institute, June 2010.

<sup>40</sup> Michael Spence, "The Impact of Globalization on Income and Employment," p. 41.

**Figure 9. iPod-Related Earnings and Jobs, Country and Category 2006**



Source: Personal Computing Industry Center, January 2009, adapted by CRS.

## International Finance

### Rising Wealth

The decade prior to the global financial crisis of 2008-2009 was associated with a major expansion in financial holdings and wealth in emerging markets. The expansion is prominently reflected in the accumulation of official foreign exchange reserves by monetary authorities. At the end of 2010, developing and emerging economies held approximately \$6.2 trillion (67%) of the

total foreign exchange holdings of \$9.3 trillion. Fifteen years earlier, their foreign exchange reserves were only \$0.46 trillion, or 33% of the world stock.<sup>41</sup>

In 2010, China, with \$2.8 trillion of foreign exchange reserves, accounted for 66% of all developing economies' exchange reserve holdings. Compared to its 16% share of holdings in 1995, this represents a dramatic increase. For developing countries, Russia held the next-largest amount of reserves, \$0.43 trillion or 7% of total developing country holdings in 2010.<sup>42</sup> Based on current account projections, global wealth and asset holdings may shift further toward emerging economies, such as China and major oil exporters in the Middle East, in the future.

Some of the increased wealth accrued by emerging economies through their successful export-led growth strategies has been used to finance the United States' and other advanced countries' debt. As shown in **Table 6**, developing countries in May 2011 accounted for just over 51% of foreign holdings of U.S Treasury securities.<sup>43</sup> China, with \$1.2 trillion in holdings, alone accounted for 25% of total foreign holdings and 50% of developing country holdings. These holdings, which have had a substantial dampening effect on U.S. interest rates, in part reflect the tendency of the United States and several other industrial economies to consume beyond their current income or to consume more than they save.<sup>44</sup>

**Table 6. Major Developing Country Holders of U.S. Treasury Securities**  
As of May 2011

<b>Holder</b>	<b>Holdings (\$ billions)</b>	<b>Proportion of Total Foreign Holdings (%)</b>
China	1160	25.6
Oil Exporters (Ecuador, Venezuela, Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Algeria, Gabon, Libya, and Nigeria)	230	5.0
Brazil	211	4.7
Caribbean banking centers (Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles and Panama)	148	3.3
Hong Kong, China	122	2.7
Russian Federation	115	2.5
Thailand	60	0.1
Singapore	57	0.1
India	41	0.009
Turkey	39	0.009

<sup>41</sup> International Monetary Fund, *International Financial Statistics*, April 2011.

<sup>42</sup> Ibid.

<sup>43</sup> OECD, *Shifting Wealth*, p. 62.

<sup>44</sup> CRS Report RL34319, *Foreign Ownership of U.S. Financial Assets: Implications of a Withdrawal*, by James K. Jackson; and CRS Report R41838, *Sovereign Debt in Advanced Economies: Overview and Issues for Congress*, by Rebecca M. Nelson.

<b>Holder</b>	<b>Holdings (\$ billions)</b>	<b>Proportion of Total Foreign Holdings (%)</b>
Poland	28	0.006
Mexico	28	0.006
Philippines	24	0.005
Colombia	20	0.005
Chile	19	0.004
Egypt	13	0.002
Malaysia	13	0.002
Developing Country Total	2328	51.500
Grand Total	4514	100.000

**Source:** U.S. Treasury (2011)

**Notes:** Holdings include U.S. Treasury bills, bonds, and notes.

## Capital Flows

Private capital flows to developing countries have risen substantially over the past 25 years, growing from 1.3% of their GDP in the mid-1980s to 5% in recent years. International financial flows over the past two decades have grown much faster than trade flows. This development stems from the rapid liberalization of capital account regimes in emerging economies after the mid-1980s, including privatization of state-owned banks and removal of restrictions on the acquisition of assets by foreigners. The growth of financial flows was also aided by demographic changes in advanced countries and financial market changes that resulted in a search for higher returns.<sup>45</sup>

For emerging markets, the major increase in financial flows resulted in a sharp drop in the share of debt in gross stocks of foreign assets and liabilities. During the 1980s, debt accounted for nearly three-quarters of all assets and liabilities of emerging economies. This share was offset by a corresponding increase in the shares of foreign direct investment (FDI) and portfolio equity.<sup>46</sup> Of these two forms of capital flows, FDI (both inward flows and outward flows) has contributed substantially to accelerating the growth and integration of developing countries into the global economy.

### *FDI Inflows*

Historically, the majority of FDI inflows have gone to advanced countries, particularly the United States and European countries. As shown in **Figure 10**, the developing country share of FDI inflows has generally averaged 25%-33% of global inflows with no clear trend.<sup>47</sup> At the same time, the level of FDI in developing countries has risen rapidly over the past two decades, rising

<sup>45</sup> Brookings Institution, *Emerging Markets*, p. 54.

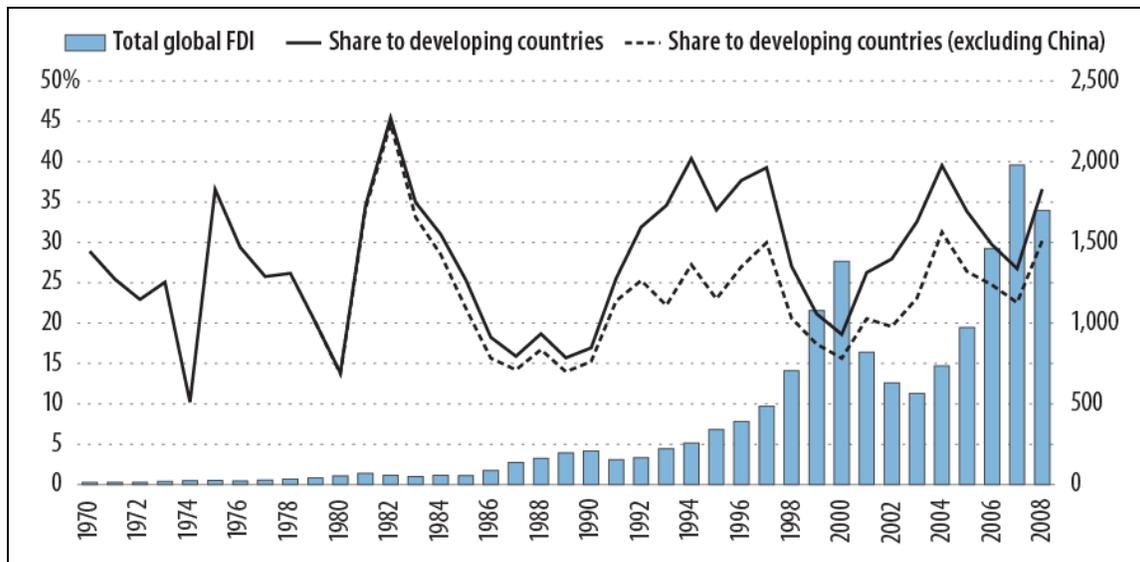
<sup>46</sup> Foreign direct investment involves acquisition of real assets such as real estate or a factory while portfolio investment comprises acquisition of financial assets such as equities, bonds, or loans.

<sup>47</sup> OECD, *Shifting Wealth*, p.81.

from \$43 billion in 1990 to \$621 billion in 2008. Much of this rise reflects tighter global production links between developing and advanced countries.<sup>48</sup>

In recent years, developing countries have accounted for three of the top six destinations for FDI flows, with China moving up to become the second-largest FDI recipient in 2009, behind the United States. Brazil and Russia are the other two emerging economies that have received substantial FDI inflows.<sup>49</sup>

**Figure 10. Global FDI Inflows, 1970-2008**  
 (% of global FDI (left-axis); U.S. \$ in billions (right-axis))



Source: OECD, *Shifting Wealth*, p. 83.

During the 2008-2009 financial crisis, global FDI inflows fell by nearly 40%, dropping from \$1.7 trillion in 2008 to \$1.0 trillion in 2009.<sup>50</sup> Much more severe declines occurred in developed countries than in developing countries. Preliminary indications for 2010 are that flows from developed to developing countries exceeded flows from developed to developed countries for the first time. Whether this will represent a permanent shift remains to be seen.<sup>51</sup>

According to a survey by the United Nations, the motives of multinational companies investing in developing countries are varied. Some 51% of respondents identified the market opportunities presented by the per capita income, size, and growth of the host country's market as the primary motive for investing. Other motives for investing include gaining access to natural resources (17%) and minimizing costs of production (10%).

<sup>48</sup> Carnegie Endowment, *Juggernaut*, p. 102.

<sup>49</sup> OECD, *Shifting Wealth*, p. 81.

<sup>50</sup> Much of the decline was due to the unavailability of financing for merger and acquisition activity.

<sup>51</sup> OECD, *Shifting Wealth*, p. 81.

## **FDI Outflows**

Outward FDI (and inward FDI) is a way for emerging market economies (and sometimes their governments) to access technology, know-how, and strategic raw materials. According to data from the United Nations, cash-rich emerging economies have been increasing their share of global FDI outflows. At the end of 2009, developing countries held about 16% of the global outward FDI stock.<sup>52</sup>

China is the largest developing country outward investor, with \$62 billion in FDI outflows in 2009. Its investment stock is probably in excess of \$1 trillion and the entry of its firms abroad is explicitly encouraged by the government. Access to energy and raw material sources, particularly in Africa and Latin America, is a major priority for China. In addition, Chinese firms are eager to gain access to state-of-the-art technology by way of the purchase of patents or the takeover of foreign firms.<sup>53</sup>

Sovereign wealth funds (SWFs) and other state-owned enterprises have become an increasingly important source of FDI from developing countries. Establishment of these funds has been prompted by a build-up of assets from surpluses based on manufactured goods or oil exports and by an effort to achieve higher returns than are possible through investment in government securities. With assets estimated at around \$3 trillion, SWFs invested \$23 billion in FDI outflows (mostly merger and acquisitions activity, or M&A) in 2009—more than double the level in 2005—and accounted for more than 2% of global FDI flows. About three-fourths of these investments have been in developed countries, mainly the United States, the United Kingdom, and Germany.<sup>54</sup> State-owned companies (such as the 10 largest Chinese companies and the world's 13 largest energy companies) also play an important role in outward FDI from emerging countries. Favored sectors include natural resources and telecommunications.<sup>55</sup>

## **Emerging Market Multinational Corporations**

Large companies based in China, India, Brazil, Malaysia, Mexico, Russia, Turkey, Vietnam, and other emerging economies are becoming stronger and more prominent in the global economy. Supported by ambitious leaders, low costs, modern facilities, and home market profits, these companies—such as China's *Haier Company* and *Lenovo Group*, India's *Infosys* and *Tata Group*, and Mexico's *America Movil*—are expanding overseas and transforming industries and markets throughout the world.<sup>56</sup>

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<sup>52</sup> *Oxford Analytica*, "BRICs' Outward FDI Is On the Rise," March 1, 2011.

<sup>53</sup> Sylvain Plasschaert, "Is the Renminbi Undervalued?", *European Centre for International Political Economy*, Working Paper No. 02/2011, p. 9.

<sup>54</sup> OECD, *Shifting Wealth*, p. 84.

<sup>55</sup> Carnegie Endowment, *Juggernaut*, p. 7.

<sup>56</sup> David Oakley, "Emerging Markets Grow Internally, Expand Internationally," *Financial Times*, June 9, 2011.

### **Emerging Market Multinationals on the Rise**

- Basic Element (Russia) is a world leader in alumina production.
- Bharat Forge (India) is one of the world's largest forging companies.
- BYD Company (China) is the world's largest manufacturer of nickel-cadmium batteries.
- CEMEX (Mexico) has developed into one of the world's largest cement producers.
- China International Marine Containers Group (China) is the world's largest manufacturer of shipping containers.
- Cosco Group (China) is one of the largest shipping companies in the world.
- Embraer (Brazil) has surpassed Canada's Bombardier as the market leader in regional jets.
- Galanz Group (China) has a 45% share of the microwave market in Europe and a 25% share in the United States.
- Hisense (China) is the number one supplier of flat-panel TVs to France.
- Johnson Electric (China) is the world's leading manufacturer of small electric motors.
- Nematik (Mexico) is one of the world's leading suppliers of cylinder head and block castings for the automobile industry.
- Sistema (Russia) is a conglomerate with a focus on telecommunications.
- Tata Chemicals (India) is an inorganic-chemicals producer with a significant global market share in soda ash.
- Techtronic Industries Company (China) is the number one supplier of power tools to Home Depot.
- Wipro (India) is the world's largest third-party engineering services company.

Source: The Boston Consulting Group, "The 2009 BCG 100 New Global Challengers Report," January 2009.

The number of emerging market corporations listed among the Fortune Global 500, an annual ranking of the world's largest corporations by revenue, rose from 47 firms in 2005 to 95 in 2010. These companies have become significant players in cross-border investment through mergers and acquisitions (M&A). In 2010, these companies accounted for 2,447 acquisitions, or 22% of global M&A transactions, which is up from 661 acquisitions, or 9% of total M&A acquisitions, in 2001. Of the 11,113 M&A deals announced in 2010, 5,623 (50%) involved emerging market companies either as buyers or takeover targets by MNCs in advanced countries.<sup>57</sup>

Investment by emerging market companies in new plants and facilities, so-called "greenfield" investment, rose from \$140 billion (13% of the global total) in 2003 to almost \$250 billion in 2009 (15% of the global total) in 2009. Greenfield investments accounted for 72% of emerging market firms' investment in other emerging markets from 2003 to 2009, and accounted for the majority of South-South FDI flows. Acquisition of technology and natural resources are primary motives behind their cross-border investments.<sup>58</sup>

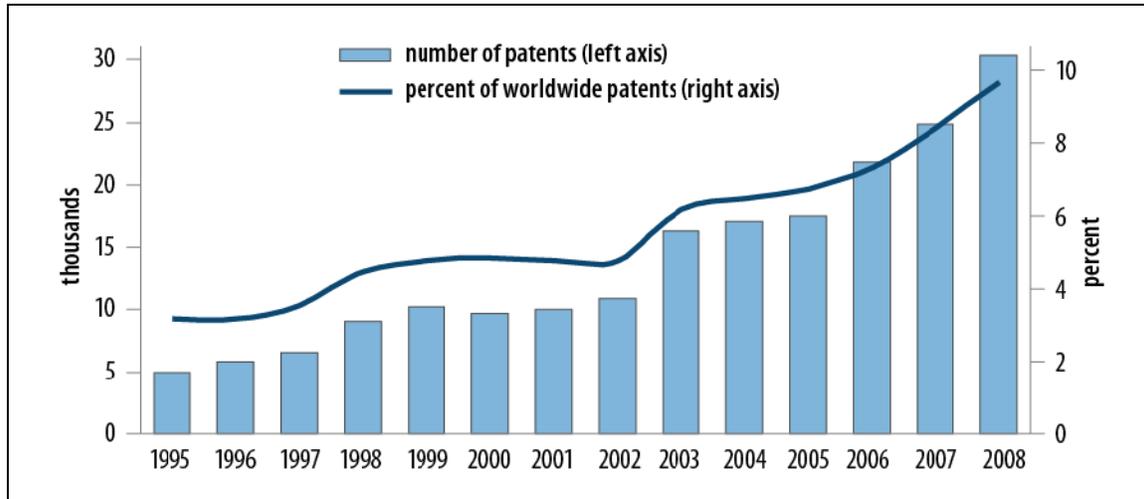
Some 114 firms based in emerging economies ranked among the top 1,000 firms worldwide in R&D spending in 2009, double the number in 2004. And, as shown in **Figure 11**, increased

<sup>57</sup> World Bank, *Multipolarity: The New Global Economy*, p. 76.

<sup>58</sup> *Ibid.*, pp. 75-80.

efforts at stimulating innovation are also documented by the growing numbers of cross-border patents obtained from residents of emerging economies.<sup>59</sup>

**Figure 11. Cross-Border Patents Granted Worldwide to Residents of Emerging Economies, 1995-2008**



**Source:** World Bank, *Global Development Horizons*, report, p. 77.

**Notes:** World Bank staff estimates based on World Intellectual Property Organization data.

The largest and fastest-growing emerging markets are the source of most cross-border M&A activity. Not surprisingly, China and India are home to the majority of developing country multinationals. In terms of the order of importance, other countries hosting a significant number of developing country multinationals include Brazil, Mexico, Russia, the United Arab Emirates, Turkey, and Thailand.<sup>60</sup>

A major difference between Chinese and Indian multinationals rests in their ownership structures. The majority of Chinese multinationals are state-owned or state-controlled, often with minority stakes in the hands of both domestic and foreign investors. Some Chinese multinationals have a mixed-ownership structure, but only a few are privately owned. In contrast, only one Indian multinational is state-owned.<sup>61</sup>

While the large emerging market firms have traditionally relied on international markets for financing investments, they may in the future rely increasingly on home equity markets to raise capital. The Korean and Singaporean stock markets, which are more developed, have already experienced rapidly increasing listings from firms based in other East Asian countries. With further reforms on market regulations and corporate governance, India and China's stock exchanges could also grow in importance as regional financial centers.<sup>62</sup>

<sup>59</sup> CRS Report RL34292, *Intellectual Property Rights and International Trade*, by Shayerah Ilias and Ian F. Fergusson.

<sup>60</sup> *The Boston Consulting Group*, "The 2009 BCG 100 New Global Challengers: How Companies from Rapidly Developing Countries Are Contending for Global Leadership," January 2009.

<sup>61</sup> *The Boston Consulting Group*, "The New Global Challengers: How 100 Top Companies from Rapidly Developing Economies Are Changing the World," May 2006.

<sup>62</sup> *Ibid.*, p. 96.

## Issues for Congress

The changing global economic landscape poses numerous challenges and opportunities for U.S. international trade and financial policies, including the functioning of the global economic institutions. Developing countries in 2009 accounted for 34% of U.S. exports of manufactured products (up from 25% in 1989) and 56% of U.S. imports of manufactured goods (up from 24% in 1989). They are also becoming an increasingly important destination, as well as a source, of foreign investment flows. A growing middle class population in these countries, estimated at up to several billion, along with increased South-South interactions, provide new opportunities for U.S. exporters and investors. At the same time, a range of U.S. stakeholders can expect growing competition and pressures on wages and employment in the years ahead. As many of these countries are engaged in various practices that provide preferences for their home companies at the expense of foreign companies, increased U.S. pressures to open their markets further to U.S. exports of goods and services can be expected.

The changes in the global economy are also raising challenges for the trading system and the role of rising economic powers in shaping it. These include continuing efforts to complete the Doha Round of multilateral trade negotiations and rising concerns about the “fairness” of the rules of the system. The Doha negotiations, launched 10 years ago under the aegis of the World Trade Organization, have been stymied, in large part, by resistance of the top emerging powers—China, India, and Brazil—to offer meaningful concessions. Some of the emerging economies have also been driven by interventionist, export-led growth strategies. These strategies, in turn, have prompted questioning in the United States and Europe about whether all WTO members are playing by the same rules or taking on responsibilities commensurate with their economic standing.

The future direction of U.S. trade negotiations—multilateral, regional, and bilateral—as well as analysis of trade relations, may need to take into better account the growing role that production chains and trade in intermediate products are playing in today’s global economy. These developments call into question traditional ways of calculating and analyzing the significance, in particular, of bilateral trade imbalances and country of origin labeling requirements. New issues raised by the changing global landscape include the role of state-owned enterprises, access to developing country markets for procurement, and distinctions among developing countries concerning their world trade obligations. In addition, South-South trade barriers remain high and, if reduced, could provide substantial global welfare benefits.

Just as in the goods market, the increasing weight of developing countries in international finance raises a number of policy concerns. These include concerns about the adequacy of the regulatory system for integrating developing countries into international financial arrangements, rules for direct investment, the role and operation of sovereign wealth funds, and the future of the dollar as world’s primary reserve currency.

As global trade and economic power becomes more balanced, pressures are increasing for making global economic governance and representation at the bedrock Bretton Woods institutions—the International Monetary System (IMF), the World Bank, and the World Trade Organization—more inclusive.<sup>63</sup> Although these institutions have adapted over time to provide the rising powers with

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<sup>63</sup> World Bank, *Multipolarity*, p.1.

more power and influence in setting the rules and arrangements of the world economy, there are concerns that many rising powers may not be willing to take on more responsibility for the maintenance of the system. While the evolution of the G-20 as a key forum for international economic policy coordination mechanisms is considered by many as a major step toward increasing the responsibility of the rising powers for the smooth functioning of the world economy, the G20 also raises questions about representation and legitimacy.

These issues are discussed in more detail below.

## **International Trade**

### **Growing Markets for U.S. Exporters and Investors**

Developing countries now account for more than one-third of U.S. exports of manufactured goods and are an increasingly important destination, as well as a source, of investment funds. The growing middle class populations in these countries are likely to provide more opportunities for U.S. exporters, investors, and financiers to grow their businesses.

Estimates of the increases in middle class consumers in these countries tend to be large. In the last decade alone, the number of people in China and India with incomes greater than \$6,000 and less than \$30,000 has grown by hundreds of millions. One study projects increases in developing country “middle class” consumers from 1.8 billion in 2010 to 3.2 billion by 2020 and to 4.9 billion by 2030. If these projections materialize, this could occasion a major increase in demand for high value-added goods, such as cars, office equipment, and technology, and provide new opportunities for U.S. exporters and investors.<sup>64</sup> In addition, cash-rich developing countries are also expected to spend heavily on infrastructure improvements (ports, docks, airports, roads, and transshipment facilities) in the years ahead.

In addition to producers of manufactured goods, such as autos, that are high value-added and others that cater to niche markets, potential U.S. beneficiaries include agricultural producers and a range of service providers. These could include companies providing business, logistics, information technology, healthcare, education, media, and financial services. U.S. retailers who can benefit from lower-cost imports and set up new stores in the emerging economies may also be positioned to take advantage of these growth markets.<sup>65</sup>

To remain competitive in selling goods and services to the developing countries, U.S. firms may need to adapt products and services to local conditions and tastes. Outside of highly sophisticated products and luxury goods, some U.S. companies may also need to consider investing in these markets in order to design and adapt their products and services to local conditions.<sup>66</sup>

Many successful U.S. small and medium size enterprises (SMEs) are already suppliers to U.S. multinational corporations (MNCs) that export capital goods around the world, as illustrated by

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<sup>64</sup> John Hawksworth and Gordon Cookson, “The World in 2050: Beyond the BRICs: A Broader Look at Emerging Market Growth Prospects, PricewaterhouseCoopers, March 2008.

<sup>65</sup> Ibid., p. 22.

<sup>66</sup> Carnegie Endowment, *Juggernaut*, p. 77.

General Electric's Evolution Locomotive. Many more SMEs may need to access global supply chains for generating sales and capitalizing on changes in the global economy.

#### **GE's Evolution Locomotive**

- GE's EVO locomotive is the most fuel-efficient diesel locomotive in history.
- 63 exported EVOs and exported kits in 2009.
- Assembled in Erie, Pa.
- Product series includes parts from over 350 suppliers across the United States.
- Almost 19% of EVO suppliers are SMEs (AC unit).
- At least \$200,000 in parts from SMEs in every completed AC ECO locomotive.
- Export markets include Asia, Latin America, and Europe.

Source: General Electric

As developing countries continue to grow faster than advanced economies, U.S. multinational corporations are also likely to rely increasingly on the faster-growing developing countries for their growth. Over the past decade, U.S. MNCs have grown much faster abroad than at home, and this trend will likely continue. For example, since 1989 the top 250 U.S. companies' sales attributed to foreign markets has jumped from 33% to 65%, and their share of employment has jumped from 21% to 33%.<sup>67</sup>

### **Preparing for Increased Competition**

If current trends persist, developing countries' share of world trade could double over the next 40 years, reaching nearly 70% by 2050. This dominant position in international trade flows translates into much more competition for U.S. producers and workers as well as much greater dependence on developing country markets. The emergence of developing country multinational firms may also create greater competition for U.S. firms for natural resources, technology, and access to capital markets. Developing country multinationals may also challenge U.S. firms in developing new technologies as they increase their spending on research and development.

U.S. producers and workers engaged in mass market manufacturing and who already have been exposed to Chinese or other Asian competition or been forced to move their production to China or other lower-cost economies are likely to receive the brunt of the competition. But as foreign governments move to increase the average skill levels of their workforces, providing incentives for promoting specific industries or adopting the latest technologies, they are hoping to move their competitive advantages from low-tech to high-tech areas of manufacturing. With their huge populations, they also have several hundred million workers who are highly skilled and therefore can compete in the advanced industries and sophisticated services. In the process, competitive pressures are likely to intensify for U.S. producers in more sophisticated and higher-value industries as well.

<sup>67</sup> U.S. Department of Commerce, *Survey of Current Business*, various editions.

The escalation of competition from developing countries in more sophisticated areas highlights the importance of further opening developing country markets to U.S. services exports. Currently, the United States has competitive advantages in the sale of many services, such as management and consulting services, computer systems design, finance, and insurance, that the rising powers tend to protect from competition. To capitalize on this advantage, however, the United States may need to persuade the rising powers to liberalize their considerable restrictions on services trade.<sup>68</sup> To date, however, the United States and other developed countries have had little luck in persuading these countries, particularly China and India, to satisfy their huge domestic potential demand in services by importing more of them. Given employment challenges at home, U.S. pressures to protect companies and workers could escalate in the absence of more market opening by the developing countries.<sup>69</sup>

The challenge of preparing the U.S. economy for participation in an increasingly competitive global economy, of course, goes well beyond trade policy considerations. This challenge is increasingly seen to entail reforms that could affect multiple areas of the U.S. economy, including education, research and development, health care, regulations, labor, and taxes.<sup>70</sup>

### **U.S. Trade Negotiations and New Trade Policy Challenges**

The growing redistribution of global economic power and rise of global supply chains has raised challenges for U.S. trade negotiations and trade policy. The challenges are manifested by continuing efforts to complete the Doha Round of multilateral trade negotiations, as well as by the need to address non-traditional issues that have arisen as a result of the changing global economic landscape.

In the 1960s and 1970s, when the economies of the United States, France, Germany, and the United Kingdom accounted for the predominant share of global GDP, agreement among these countries was sufficient to move multilateral trade negotiations forward. This is not the case now. The Doha negotiations have been stymied by persistent differences between the United States and Europe, on the one hand, and the largest rising economic powers, on the other hand. The United States and Europe, for the most part, have shared similar interests in encouraging the big emerging economies, such as China, India, and Brazil, to open their import markets further for services and manufactured goods, while retaining some measure of protection for their own agricultural sectors. Developing countries have sought the reduction of U.S. and European agricultural tariffs and subsidies, non-reciprocal market access for manufacturing sectors, and protection for their services sectors. Where in the past they might have taken any deal offered by the West, countries like India and Brazil are holding out until they get the deal of their choice. Because U.S. and European markets are already quite open, the rising powers may not believe that they have much to gain by giving up protection of their markets for goods and services.<sup>71</sup>

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<sup>68</sup> The Economist, "Cash Machines: Calls to Boost Manufacturing Ignore the Gains Still to Be Made From Services," April 2, 2011.

<sup>69</sup> Michael Spence and Sandile Hlatshwago, "The Evolving Structure of the American Economy and Employment," *Council on Foreign Relations*, March 2011.

<sup>70</sup> Grant Aldonas, *Globalization and the American Worker*, Center for Strategic and International Studies, Washington, D.C., 2009.

<sup>71</sup> According to USTR, under a 2008 draft agreement, China would be allowed to exempt up to 420 industrial products from tariff cuts, India would offer no new market access for 97 percent of its total tariff lines covering industrial products, and Brazil would be shielded from increasing market access on nearly half of its industrial products. Nor did (continued...)

According to former U.S. Trade Representative Susan Schwab, countries such as China, Brazil, India, and South Africa have hidden behind the WTO's long-standing practice of allowing "developing countries" to undertake significantly fewer obligations than developed countries. At Doha, these countries have shielded themselves from making market-opening concessions by seeking maximum flexibility for developing countries. One diplomat described this process as "the elephants hiding behind the mice." The fact that these rising and heavily populated economic powers, for the most part, will have low per capita incomes for many decades raises serious concerns that they will continue to resist supporting the open trading system from which they have accrued substantial economic benefits.<sup>72</sup>

Further progress in trade liberalization may thus require alternatives to existing WTO multilateral processes and practices.<sup>73</sup> Unilateral reform is likely to remain a chief driver, particularly as trade barriers in developing countries increasingly hurt other developing countries.<sup>74</sup> At present, developing countries effectively apply much higher tariffs on South-South trade than on trade with developed countries (North-South trade). The applied rates are almost twice as high in the primary sector (7.3% against 4.4%) and three times as high in the manufacturing sector (7.8% against 2.4%). Moreover, these average tariff levels mask even very high tariffs applied on selective agriculture and capital goods. Significant welfare gains, as well as increases in South-South trade, could result by bringing South-South tariffs down to developed country levels.<sup>75</sup>

Bilateral and regional agreements are also likely to proliferate further, given their greater ability (compared with multilateral approaches) to achieve stronger disciplines in non-traditional issues such as services, investment, intellectual property rights, competition, labor, and government procurement.<sup>76</sup> Currently, the United States is engaged in the Trans-Pacific Partnership (TPP) negotiations to create a wider Asian-Pacific free trade area. The proposed agreement, which the Obama Administration touts as a "21<sup>st</sup> century trade agreement," is also targeting new issues such as supply chain management, regulatory coherence, state-owned enterprises (SOEs) and participation of SMEs.<sup>77</sup>

The rapid rise of many emerging economies has been driven by interventionist, state-driven, export-led growth strategies. Comprised of a number of measures that escape close WTO scrutiny and disciplines such as subsidies, government procurement, foreign investment, and forced

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(...continued)

any of these countries offer to provide any significant liberalization of their services sectors. See remarks by Ambassador Miriam Spiro at the European Policy Centre, February 10, 2011, found at <http://ustr.gov>.

<sup>72</sup> Susan Schwab, "After Doha: Why the Negotiations are Doomed and What We Should Do About It," *Foreign Affairs*, May/June, 2011.

<sup>73</sup> In addition to the "developing country" lesser obligation practice, the Doha Round has also operated according to a "single undertaking requirement." This means that all countries must agree to the whole package of commitments for any agreement to be finalized. As presently formulated, this requirement provides individual countries with considerable leeway to block forward movement.

<sup>74</sup> Trade-weighted applied tariffs in developing countries remain close to 10 percent, more than triple the 3 percent average for developed countries. As the developing countries trade increasingly with each other, these trade barriers will hurt other developing countries the most.

<sup>75</sup> OECD, *Shifting Wealth*, pp.79, 161.

<sup>76</sup> Carnegie Endowment, *Juggernaut*, p.8.

<sup>77</sup> See CRS Report R40502, *The Trans-Pacific Partnership Agreement*, by Ian F. Fergusson and Bruce Vaughn.

technology transfer, these strategies, in turn, have prompted questioning from many in the United States and Europe as to whether all WTO members are playing by the same rules.<sup>78</sup>

As many of these countries have become more powerful in relative terms, they have presented intellectual arguments in favor of international trade arrangements that provide a much larger role for state-led policies and enterprises and a much smaller role for market-driven forces. Moreover, since the 2008 financial crisis, U.S. arguments against state-led policies that support national champions arguably have been weakened. In the absence of adequate response, the concern is that much of the structure of the U.S. economy could be altered by the industrial policies of the rising powers.<sup>79</sup>

### **Reconsidering Traditional Statistics of International Trade**

The rise of global production chains and trade in intermediate products is affecting the relevance of some conventional trade measures. As the production of final goods increasingly relies on successive production and trade steps, assigning the full value of a product to one country does not necessarily reflect the geographical fragmentation of the production chain, where design, production of components, and assembly may take place in different countries. As more products are effectively made in the world production chain, concepts such as country of origin and bilateral trade imbalances may take on different meaning.<sup>80</sup>

For example, in the case of China's trade surplus with the United States, traditional statistics may double-count the value of China's exports. If this is the case, China's bilateral surplus may be greatly overstated. Similarly, assigning country of origin for customs purposes may be misleading, particularly for the handling of trade remedy cases involving subsidies.

Globalized supply chains of U.S.-based companies may also be affecting basic measures on the size and growth of the U.S. economy, as well as the growth of manufacturing. The source of this concern has to do with the price estimates for imported parts and materials. If the prices of "intermediate" goods are actually lower than assumed and the volume higher, then the economic value added to them by U.S. workers may be overstated by official GDP statistics. An implication of any measurement inaccuracy could be that the decline in GDP during the recession was greater than originally thought and the growth since has been weaker, which may help explain the disappointing jobs picture.<sup>81</sup>

Measuring trade in value-added terms can help overcome these problems by enabling domestic content embedded in exports to be assigned to each country that participated in the production of the final good. However, the value-added approach is very expensive and only practical for limited industry or product-specific examples.

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<sup>78</sup> It can be argued that many countries entered the global economy under protectionist and interventionist policies on their way to development. South Korea is a key example, as is the United States.

<sup>79</sup> Clyde Prestowitz, *The Betrayal of American Prosperity*, Free Press, 2010.

<sup>80</sup> WTO, *Trade Patterns and Global Value Chains*, p. 94.

<sup>81</sup> Steven Pearlstein, "How Overseas Profit Holds Back U.S. Success," *Washington Post*, June 13, 2011.

## International Finance

### Strengthening International Frameworks for Financial Integration

Strengthening international frameworks for financial integration may become more important with growing global interconnectedness, particularly with developing countries' rising role in foreign direct investment, bank loans, and portfolio flows. While the increasing weight of developing countries in global asset portfolios will help residents of advanced countries earn higher returns on their foreign investments and improve diversification, a financial crisis in either developing or advanced countries is likely to have global repercussions, as the Asian financial crisis in the late 1990s and the 2008-2009 financial crisis demonstrated. As these countries grow much larger, the risks remain as their financial sectors are still small and relatively undeveloped. Thus, it may be in the interest of advanced countries to support improvements in the institutions and rules to ensure prudential risk-taking—including capital requirements, limitations on the kinds of business commercial banks can conduct, transparency requirements, and rules governing derivative requirements. To move in this direction, developing countries may need to be part of any rebalancing of the global financial regulatory landscape.<sup>82</sup>

Changes in the global regulatory framework will arguably be more difficult now because of the 2008-2009 financial crisis. The crisis not only led to the demise of Wall Street icons such as Lehman Brothers and Merrill Lynch, but it also undermined the influence of some of the regulatory bodies in the United States and Europe. Institutions such as the U.S. Federal Reserve and Securities Exchange Commission and the UK Financial Services Authority all acknowledged errors in judgment. By contrast, Chinese, Indian, or Brazilian supervisors, long derided as underdeveloped, successfully prevented domestic financial turbulence and even applied “macro-prudential” instruments, such as loan-to-value ratios, that were ignored in the West.<sup>83</sup>

These developments likely will have an impact on efforts to strengthen regulatory frameworks. The Basel 3 capital accord, announced in 2010, may be the last prominent piece of international financial rulemaking whose negotiation took place mainly among developed countries. Several financial bodies, including the Basel Committee and the Financial Stability Board, have now enlarged their membership to include many of the rising economic powers.<sup>84</sup>

Incorporating the rising economic powers into global financial bodies may not be easy. As in the trade arena, some emerging powers are quick to see the opportunities, but not the responsibilities it creates for them. Some observers suspect that Western-driven regulation may be a way for the more established financial centers and firms to freeze the competitive playing field and prevent the rise of new entrants. On the other hand, some in the United States and Europe fear that as they re-regulate their financial systems as a consequence of the crisis, developing countries could attract business “unfairly” based on less demanding rules.<sup>85</sup>

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<sup>82</sup> Carnegie Endowment, *Juggernaut*, p.92.

<sup>83</sup> Nicolas Vernon, “Financial Newcomers Will Have Global Impact,” Bruegel, September 2010.

<sup>84</sup> Ibid.

<sup>85</sup> Ibid.

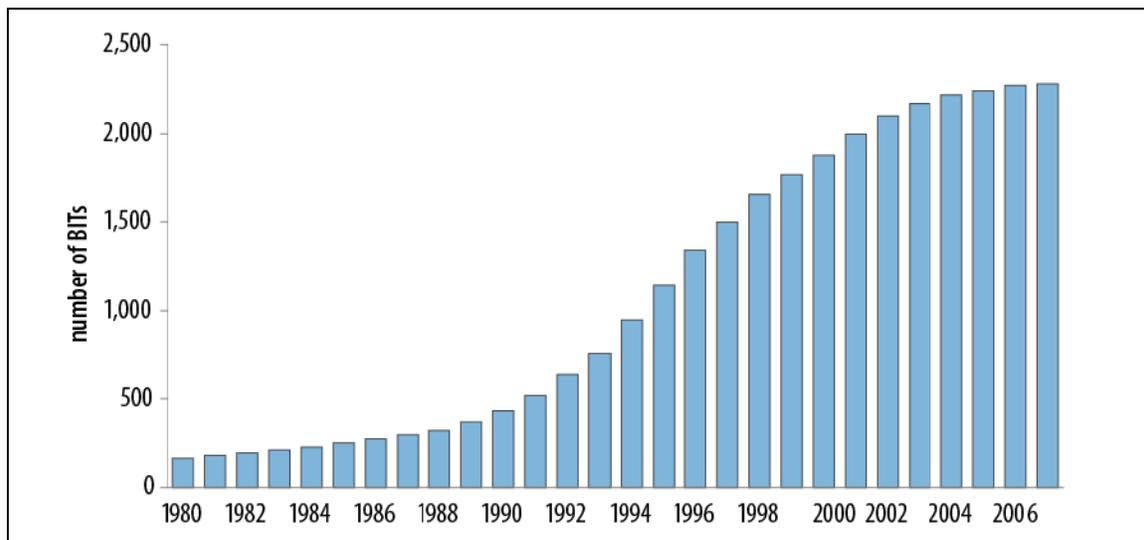
## Rules for Foreign Direct Investment

Beginning with a League of Nations conference in 1929, there have been many unsuccessful efforts to negotiate a multilateral investment framework. Difficulties in achieving consensus across different levels of economic development and different definitions of investor rights and protections are some of the reasons past efforts have been unsuccessful.<sup>86</sup>

The rapid increase in FDI flows since the early 1970s, combined with the growing importance of developing country multinationals, could, however, increase support for another attempt at establishing a multilateral framework for foreign investment. This view assumes that as the importance of foreign investment grows for developing countries and developing country multinationals, the need for a multilateral framework that provides adequate legal protection for foreign investors will become more apparent to many of the stakeholders who have opposed such attempts in the past.<sup>87</sup>

In the absence of a multilateral framework on foreign direct investment flows, bilateral investment treaties (BITs) have proliferated worldwide and become the dominant mechanism governing such flows. Over the past three decades, as shown in **Figure 12**, the number of BITs negotiated has increased more than tenfold, rising from about 200 in 1980 to 2,275 in 2007.

**Figure 12. Total Number of Active Bilateral Investment Treaties, 1980-2007**



**Source:** World Bank, *Global Development Horizons*, 2011, p. 106.

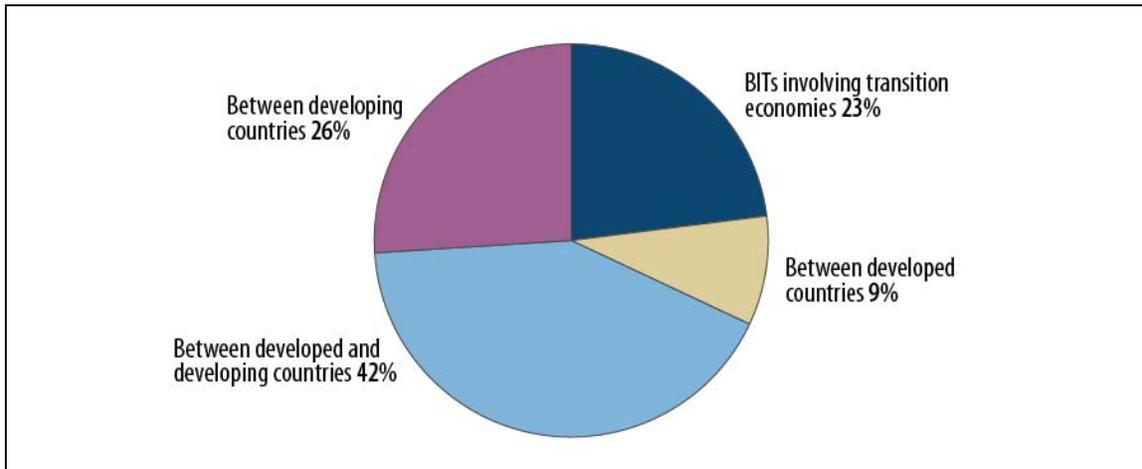
As shown in **Figure 13**, the majority (68%) of the BITs involve developing countries. This figure comprises BITs between developing countries (26%) and BITs between developed and developing countries (42%).

<sup>86</sup> World Bank, *Multipolarity*, p.104.

<sup>87</sup> Ibid.

**Figure 13. Distribution of Bilateral Investment Treaties (BITs), 2008**

Cumulative total (in %)

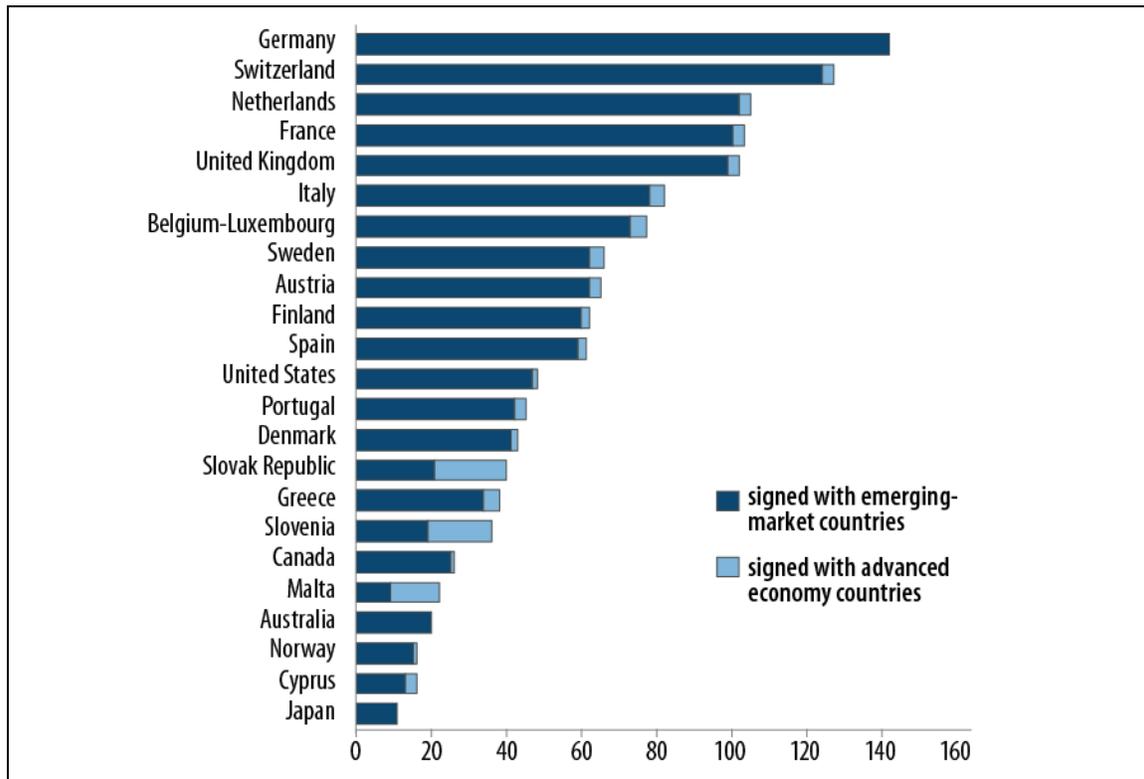


Source: OECD, *Shifting Wealth*, p. 139.

And as shown in **Figure 14**, European countries account for 90% of all BITs signed by developed countries. Germany, Switzerland, the Netherlands, France, and the United Kingdom have led the way. The United States currently has 41 BITs in force, all with developing countries.<sup>88</sup>

<sup>88</sup> Office of the United States Trade Representative website.

**Figure 14. Number of Bilateral Investment Treaties Signed by Advanced Countries, as of 2007**



Source: World Bank, *Global Development Horizons*, 2011, p. 106.

While the provisions within each BIT can differ substantially, most BITs grant protection for investors’ contractual rights, allow for repatriation of profits, and provide a mechanism for disputes and international arbitration. While BITs, on balance, may improve the investment climate, the large number of BITs arguably increases the complexity of rules for foreign investment and the costs of compliance. In addition, negotiation of rules on a bilateral basis may provide the capital exporting country with most of the negotiating leverage.<sup>89</sup>

Whether the rising prominence of developing countries in foreign investment flows will facilitate negotiation of a multilateral framework remains to be seen. While some experts maintain that such a framework could enhance the climate for foreign investment flows, many countries may still remain wedded to bilateral approaches embodied in their BITs.

### Operation of Sovereign Wealth Funds and State-Owned Multinationals

Operating as investment funds owned and managed by national governments, sovereign wealth funds (SWFs) have been created since the 1950s by oil- and resource-producing countries to stabilize their economies against fluctuating commodity prices and to provide a source of wealth for future generations. More recently, the shift of wealth from advanced countries to emerging economies in which governments play a large role in the management of economic activity has

<sup>89</sup> Ibid., p. 107.

allowed a number of countries, mostly Asian (China, Japan, Singapore, and Korea), to create SWFs by diverting foreign exchange reserves from other than natural resources proceeds. The fact that the policies that led to some of the accumulations of foreign exchange reserves have been internationally criticized suggests that the activities of these SWFs will be more closely scrutinized than the SWFs of other countries.<sup>90</sup>

While the standard objective of most SWFs is to maximize their “risk-adjusted financial return” by investing in a broader array of assets than U.S. Treasury bills, concerns have surfaced that such investments may also be motivated by pursuit of national political or economic power. Some U.S. policymakers have expressed concerns that countries will use SWFs to secure strategic assets around the world in areas such as telecommunications, energy resources, and financial services.<sup>91</sup>

Some of these concerns may have lessened in recent years due to the adoption in 2008 of voluntary guidelines by 26 countries, including China, Singapore, and South Korea. Known as the Santiago Principles, these guidelines seek to increase the transparency and disclosure requirements of the SWFs. However, the size of some Asian SWFs alone (e.g., China Investment Corporation has \$332 billion in assets and Singapore’s Investment Corporation has \$248 billion) suggests these concerns will not disappear quickly.

Some of the same issues may arise regarding state-owned multinational companies. While there is no reason on the surface that firms such as China’s *Lenovo* should be treated any differently by host country national authorities, the implicit backing that these firms have from their governments may give them some unfair advantages in terms of financing and market power.<sup>92</sup>

### **Future of the Dollar as the Primary Reserve Currency**

Since the United States emerged as the world’s preeminent power a century ago, the dollar has become the world’s main currency for carrying out international transactions. Oil and virtually all other commodities in international markets are bought and sold in dollars. In addition, the dollar is the main currency in which most countries hold their monetary reserves—an arrangement that has costs and benefits for the United States.

On the one hand, this arrangement allows the United States to finance its budget deficits less expensively due to the large demand for U.S. Treasuries from foreign banks. It also allows the United States to run large trade and current account deficits. On the other hand, the special role that the dollar plays in the global economy can be seen as a liability because it provides few binding checks on government spending and accumulation of debt. With its reserve currency status, the dollar serves as a credit card with a nearly unlimited ceiling except as provided for in U.S. law. If the United States did not enjoy this privileged position, it would have much more budgetary discipline imposed on it by the rest of the world.<sup>93</sup>

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<sup>90</sup> Edwin M. Truman, “Sovereign Wealth Funds: Is Asia Different?,” Peterson Institute for International Economics, WP-11, June 2011.

<sup>91</sup> CRS Report RL34336, *Sovereign Wealth Funds: Background and Policy Issues for Congress*, by Martin A. Weiss.

<sup>92</sup> OECD, *Shifting Wealth*, p. 142.

<sup>93</sup> James Grant, “We spent our way to a debt crisis with a faith-based dollar: time to reverse course.” *Washington Post*, July 10, 2011.

The ongoing shifts in the balance of international economic power, however, are raising questions about the continued dominance of the dollar. China and Russia, two rising economic powers, have called for an end to the long reign of the dollar as the world's reserve currency. They argue that an international monetary system in which the dollar, the euro, and China's renminbi (RMB) share the reserve currency role will be an improvement over the system where countries seeking to accumulate reserves have no alternative to accumulating dollars.<sup>94</sup>

In 2010, the RMB played a negligible role in global currency markets, accounting for less than 1% of foreign exchange market turnover. By contrast, the U.S. dollar figured in 85% of transactions, the euro in 39%, and the Japanese yen in 19%. The RMB clearly has years to go before it reaches the market level with secondary currencies like the Australian dollar and Swiss franc, let alone joining the ranks of major currencies.<sup>95</sup>

At the same time, it is true that the RMB is internationalizing rapidly. This implies that a large number of people and companies will buy and sell RMB every day to settle trade and other current transactions. This is inevitable given that China is now the world's biggest exporter. But internationalization of the RMB does not imply that it will become a reserve currency at anywhere near the same rate. Gaining reserve status means that foreign central banks will hold large balances of RMB, which they will need to invest in RMB assets, preferably safe and liquid debt securities. Despite the emergence of an offshore RMB market in Hong Kong, there is nowhere near enough supply of such bonds to make the RMB an attractive reserve currency.<sup>96</sup>

The dollar and the euro dominate the composition of official reserves. Since the introduction of the euro in 1999, these two currencies have comprised essentially 90% of global reserves. The UK pound and Japanese yen, the third- and fourth-ranking currencies, account for just 4% and 3% of global reserves.<sup>97</sup>

The dollar replaced the pound sterling as the world's major reserve currency in the mid-1920s, about a decade after the United States surpassed Great Britain as the world's largest exporter and about 50 years after the United States became the world's largest economy. Since then, the dollar's share of global reserves has fluctuated, but averaged around 60%. There is limited evidence that the dollar's position is now under serious threat, as both likely challengers—the euro and the RMB—have serious limitations.<sup>98</sup>

Many observers, however, argue that an international monetary system in which the dollar, the euro, and the RMB share the reserve currency role would be an improvement over a system in which countries seeking to accumulate reserves have no alternative to accumulating dollars. But to reach this point, China will have to make many changes, including opening its financial market to foreign investors and de-linking its currency to the dollar, as well as restructure its economy away from exports, and away from manufacturing in favor of services. These kinds of far-reaching changes entail significant economic costs and could take decades to occur.<sup>99</sup>

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<sup>94</sup> Keith B. Richburg, "A New Economic World Order," April 15, 2011, *Washington Post*, p. A17.

<sup>95</sup> Arthur Kroeber, "The Chinese Yuan Grows Up – Slowly," *New America Foundation*, March 18, 2011.

<sup>96</sup> Sylvain Plasschaert, "Is the Renminbi Undervalued,?" p.11.

<sup>97</sup> International Monetary Fund data.

<sup>98</sup> Arthur Kroeber, "The Chinese Yuan Grows Up – Slowly," p. 4.

<sup>99</sup> Neil Irwin, "U.S. Pushed Strong Dollar Without Flexing Its Muscle," *Washington Post*, May 6, 2011.

## Functioning of the Global Economy

### Reform of the Bretton Woods Institutions

The United States was a prime mover in the creation of the so-called Bretton Woods international economic institutions, including the IMF, the World Bank, and the General Agreement on Tariffs and Trade (now the World Trade Organization) more than a half-century ago. These institutions, premised on the values of open markets, trade liberalization, financial stability, and the rule of law, were designed to promote post-war reconstruction and a prosperous and stable global economy.

The current shift in economic and political power has occasioned a debate on the reform of these institutions, as well as on the very foundation of the post-World War II open global international economic system. Many rising developing countries want more power and influence in setting the rules and institutional arrangements of the world economy. They see existing arrangements as preserving the status quo and maintaining U.S. and, particularly, European power at the expense of developing countries.<sup>100</sup> Although the IMF and World Bank have taken some steps to increase representation to reflect the shift in economic power toward developing countries, many rising powers remain unsatisfied.<sup>101</sup>

U.S. and European policymakers perceive that the rising powers are reluctant to take on more responsibility for the maintenance of the system based on a recognition of how much they benefit from open trade. They are also skeptical that the rising powers fully accept the norms and values of these institutions. For example, in the aftermath of the global financial crisis, authoritarian states such as China took delight in lecturing Americans about the shortcomings of their economic model and the value of free markets. Instead of free markets, deregulation, and the encouragement of capital and investment flows, leaders from the rising powers touted the value of state-led development. With their large populations and low per capita incomes, Western policymakers also see the emerging powers as less willing to commit to international standards or agreements to limit their ability to achieve national objectives.<sup>102</sup>

It remains to be seen whether and how the governance and functioning of these institutions for international cooperation can be reformed to become more representative of the new global landscape while retaining Western norms and values. The establishment of the G-20 as the principal forum of international policy coordination is deemed by many observers as the most promising recognition of the problem and institutional response to date.<sup>103</sup>

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<sup>100</sup> Most proposals to provide greater representativeness to these institutions call for European countries, and not the United States, to give up some of their power.

<sup>101</sup> The WTO is in a unique position given that it is the only Bretton Woods institution to use the principle of “one country, one vote.” While this is a strength from the point of view of democratic representation, it also makes decision-making more cumbersome. See OECD, p. 155.

<sup>102</sup> Carnegie Endowment, *Juggernaut*, p. 198.

<sup>103</sup> World Bank, *Multipolarity*, pp. 152-153.

## Role of the G-20

Established initially in 1999 to facilitate discussions among finance ministers, the G-20 started meeting at the leader level (Summits) in September 2009 in response to the global financial crisis.<sup>104</sup> The crisis starkly illustrated the need for fiscally strapped advanced economies to rely on increases in government spending from cash-rich developing countries to keep the global economy from entering into a depression. Representing two-thirds of the world's population, 90% of world GDP, and 80% of world trade, the G-20 has come to symbolize the growing diffusion of economic power and the fact that the advanced countries do not have the capacity to manage global economic problems alone.<sup>105</sup>

With much broader representation than its predecessor coordinating groups (the G-7 and the G-8), the G-20 has the potential to fill a large gap in global economic governance by creating coalitions that cut across advanced and developing country lines.<sup>106</sup> Working groups on issues such as global imbalances are co-chaired by representatives from both camps, thereby giving each side opportunities to develop reforms and establish buy-in among their respective constituencies. In addition, the G-20 has pushed other international institutions to increase the representation of developing countries. To strengthen international standards of global finance, the G-20 replaced the Financial Stability Forum, which included only G-7 members, with the Financial Stability Board, which included developing countries. And the G-20 has worked to ensure that developing countries gain greater representation at the IMF and World Bank and that the Doha Round of multilateral trade negotiations be brought to a successful conclusion.<sup>107</sup>

While the G-20 has received high marks for its response to the global economic crisis through its decisions regarding fiscal stimulus, regulatory reform, and a tripling IMF's resources, it is uncertain that such a diverse grouping of leaders will be able to reach agreements on global economic issues that tend to be viewed in "win-lose" terms. It is also unclear how the G-20, by including only the large rising economic powers, can support multilateralism. Moreover, given that the G-20 lacks enforcement powers and a permanent institutionalized bureaucracy, commitments agreed to at summits can easily be ignored or remain unimplemented. To wit, despite several G-20 declarations urging a rapid conclusion of the Doha Round of trade negotiations, the stalemate endures.<sup>108</sup>

## Outlook

The global economy has been reshaped over the past two decades. Shifts in global shares of production and trade from advanced nations to a small group of developing countries, many

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<sup>104</sup> For background and analysis of the G-20, see CRS Report R40977, *The G-20 and International Economic Cooperation: Background and Implications for Congress*, by Rebecca M. Nelson. The G-20 grouping includes Australia, Canada, France, Germany, Italy, Japan, South Korea, United Kingdom, United States, the European Union plus 10 emerging economies—Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, and Turkey.

<sup>105</sup> David Wessel, "Fund Falls Behind in Global Changes," *Wall Street Journal*, May 19, 2011.

<sup>106</sup> Prior to 2009 the G-7 was the lead grouping for international economic coordination. The G-7 members include Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. The Group of Eight included the G-7 plus Russia for meetings at the leader level.

<sup>107</sup> Carnegie Endowment, *Juggernaut*, p. 114.

<sup>108</sup> CRS Report R40977, pp. 18-19.

located in Asia, have been pronounced and dramatic. Shifts in financial holdings and assets are also occurring, but at a slower rate. As a result of these changes, the global economy has seen the rise of more countries that can contribute to global growth and that have the resources to be important regional and global actors. Whether these trends will continue over the next few decades remains unknown.

Most projections of the shift in global economic power are based on some assumptions about the future rates of growth of developed and developing countries. Fiscally constrained developed countries are predicted by a number of economic forecasters to grow at rates that are three to five percentage points lower than developing countries. Much could happen that would narrow this gap in growth rates, thus offsetting predicted outcomes.

In the case of advanced countries, successful efforts at consolidation and reduction of public debt levels could instill investor confidence and unleash growth-creating, entrepreneurial activity that leads to higher than projected growth rates. In the case of developing countries, whose growth has been facilitated by access to export markets, capital, and technology, a rise in world-wide trade barriers could adversely affect their growth rates. Most rising economic powers, which have grown by borrowing and adapting existing technology, may also have to become more successful at innovation if they are to continue on a rapid growth trajectory. Moreover, many of these countries face formidable internal obstacles to growth, such as an aging work force, corruption, and political stability, that could easily alter projections for growth.

Regardless of future trends, the rise of many heavily populated developing countries to date has posed significant opportunities and challenges for U.S. economic interests. On the one hand, most economists view the transition of developing countries from low to higher levels of production and wealth as being a “win-win” situation and mutually advantageous. This view is that a larger world economic pie, combined with hundreds of millions of people in developing countries escaping poverty, is good for everyone via dramatic increases in world production and consumption. On the other hand, the rising economies have affected U.S. employment opportunities and incomes differentially, with more favorable impacts for highly educated workers. Because many of these countries’ governments play a large role in guiding market developments and corporate growth, there is also concern that the distribution of the benefits that are derived from international trade and investment flows may be distorted. Shifts in relative economic power positions also raise broader questions concerning possible impacts on U.S. influence and leadership of the global economy. Nevertheless, under either scenario, Congress, the executive branch, and the private sector will be pressed to find new ways of partnering and cooperating with these rising powers in order to maximize benefits and minimize costs for American companies and workers.

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