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China and the Global Economy

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1. Introduction

It is a great pleasure to be here with you today to discuss the role of Asia in the post-crisis global economy—that is, to the extent that the global economy is truly “post-crisis.” My focus will be on my home country—China is obviously the biggest story out of Asia in terms of economic growth in recent decades, and the growth in China has been a driving force for the recovery from the global crisis since 2009. As a Chinese economist and specialist on economic development, I have had the good fortune to witness and participate in the policy debate over this remarkable period since returning to China with a PhD in economics in 1987.

I will organize my remarks around the following four themes: (i) China’s achievements since the initiation of economic reforms in 1979; (ii) prospects for China’s growth in the coming decades; (iii) challenges for China’s future growth; and (iv) the role of China in the multipolar growth world.

2. China’s Achievements since the Reform and Opening in 1979

China started its reform and opening in 1979 and achieved an annual growth rate of 9 percent between 1979 and 1990. At the end of that period and even up to early 2000s, many scholars still believed that China could not continue that growth rate much longer due to the lack of fundamental reforms.¹ However, China’s annual growth rate during the period 1990–2010 increased to 10.4 percent. On the global economic scene, China’s growth since the reform and opening started has been unprecedented. This was a dramatic contrast with the depressing performance of other transitional economies in Eastern Europe and the former Soviet Union.

As a result of the extraordinary performance, there has been a dramatic change in China’s status in the global economy. When China embarked on its economic reform program in 1979, the world’s most populous country barely registered on the global economic scale, commanding a mere 1.8 percent of

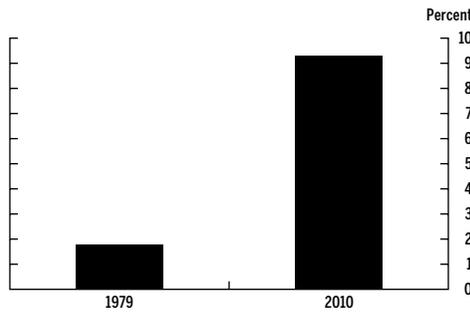
Author’s note: *I am grateful for David Rosenblatt’s help in preparing the paper.*

global gross domestic product (GDP) (measured in current U.S. dollars). Today, it is the world's second-largest economy and produces 9.3 percent of global GDP (Figure 1).

China's exports grew by 16 percent per year from 1979 to 2009. At the start of that period, China's exports represented a mere 0.8 percent of global exports of goods and nonfactor services. Now China is the largest exporter of goods in the world, with 9.6 percent of the global share and an 8.4 percent share of goods and nonfactor services (Figure 2).

In 1980, China was still a low-income country; in fact, its income per capita (measured in purchasing power parity or PPP) was only 30 percent of the level of the average sub-Saharan African country.² Today, its income per capita of

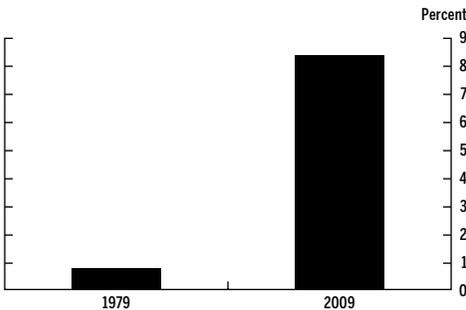
FIGURE 1
China's Share of World GDP
(share measured in current USD)



Source: World Development Indicators.

FIGURE 2
China's Place in the World as an Exporter

A China's Share of World Exports of Goods and Nonfactor Services (share measured in current USD)



B Merchandise Exports, 2009 (in trillions of USD)

China	1.20
Germany	1.13
United States	1.06
Japan	0.58

Source: World Development Indicators.

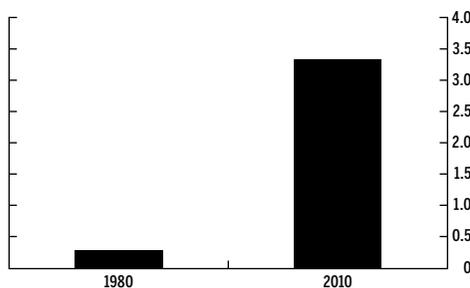
\$7,500 (in terms of PPP; \$4,400 in current dollars) is over three times the level of sub-Saharan Africa, and China is well-established as a middle-income country (Figure 3).

Behind this growth, there has been a dramatic structural transformation—in particular, rapid urbanization and industrialization. At the start of economic reforms in the 1980s, China was primarily an agrarian economy. Even in 1990, 73.6 percent of its population still lived in rural areas, and primary products composed 27.1 percent of GDP. These shares declined to 27.1 percent for the rural population and 11.3 percent for primary products composition of GDP in 2009. A similar change occurred in the composition of China's exports. In 1984, primary products and chemicals composed an important share of merchandise exports (about 55 percent). Now, almost all of China's exports are manufactures (Figure 4).

Accompanying the change in the composition of China's exports is the accumulation of foreign reserves. In 1990, China's foreign reserves were \$11.1 billion USD, barely enough to cover 2.5 months of imports, and its reserves today exceed \$3 trillion USD—the largest in the world.

Globally, China's economic performance was outstanding during the East Asian financial crisis (1998) and the current global crisis (2008) (Figure 5). China withstood the shocks and maintained dynamic growth in both crises. China's decision to maintain the renminbi's stability helped other East Asian economies avoid a competitive devaluation, which contributed tremendously to the quick recovery of the crisis-affected countries. China's dynamic growth in the current global crisis has been a driving force for the global recovery.

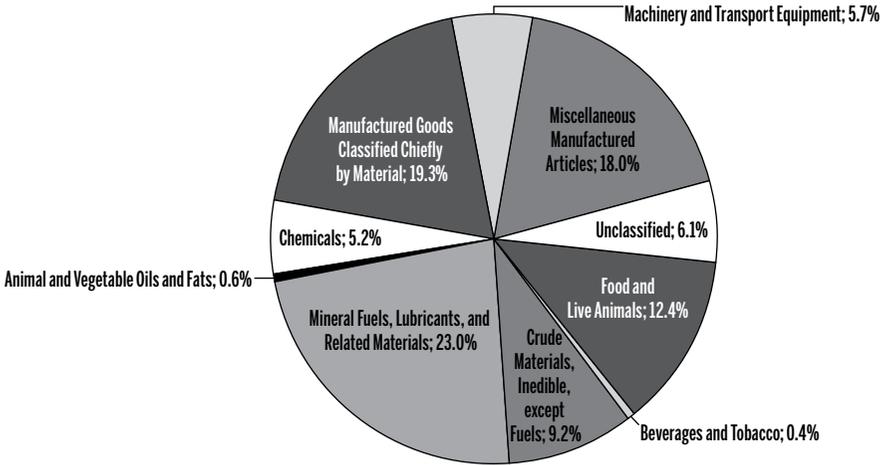
FIGURE 3
**Ratio of China's GDP per Capita
 Relative to Sub-Saharan Africa**
 (ratio measured in current
 PPP-adjusted dollars)



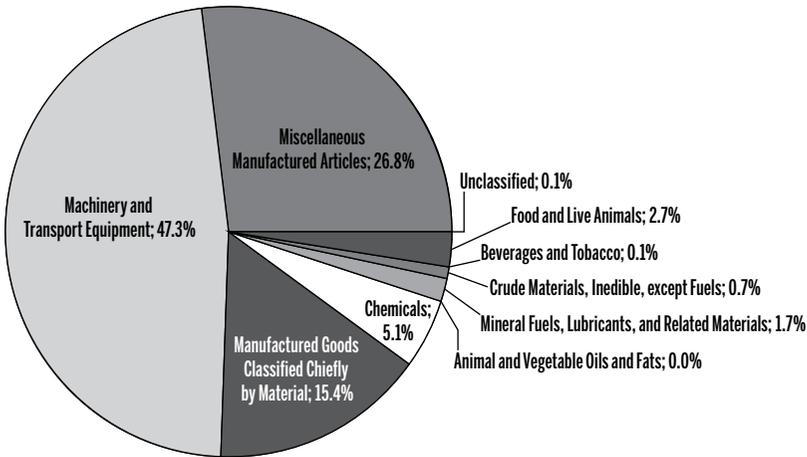
Source: World Development Indicators.

FIGURE 4
The Structural Transformation of China's Exports^a

A 1984 Structure of Chinese Exports



B 2009 Structure of Chinese Exports



^a Data are not available prior to 1984 for this classification.

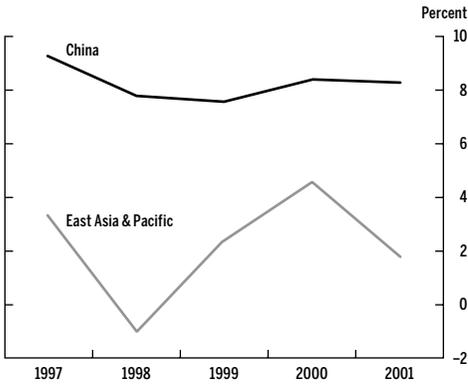
Source: WITS database.

The reasons for China experiencing such remarkable growth over the past 30 years were

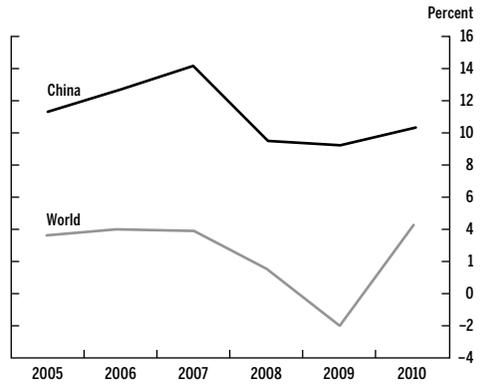
- 1 China adopted a dual-track approach and was able to achieve stability and dynamic transformation simultaneously.

FIGURE 5
China Glides Past Regional and Global Financial Crises

A GDP Growth during the Asian Crisis



B GDP Growth during the Global Crisis



Source: World Development Indicators.

2 China was a latecomer, developed according to its comparative advantage, and tapped into the potential advantage of backwardness.³

Many authors, myself included, have written extensively about the Chinese government's pragmatic approach to reforms. The result was to achieve “transition without tears.” This was no accident: It was based on the government's recognition that big-bang reforms could be self-defeating. It was necessary to let private enterprises prosper wherever feasible, but to continue to support important state-owned enterprises while reforming them gradually.

The second point is the latecomer advantage, as I wrote in my article “China's Miracle Demystified”:⁴

A developing country such as China, which started its modernization drive in 1949, potentially has the advantage of backwardness in its pursuit of technological innovation and structural transformation (Gerschenkron 1962). In advanced high-income countries technological innovation and industrial upgrading require costly and risky investments in research and development, because their vanguard technologies and industries are located on the global frontier. Moreover, the institutional innovation required to accommodate the potential of new technology and industry often proceeds in a costly trial-and-error, path-dependent, evolutionary process (Fei and Ranis 1997). By contrast, a latecomer country aspiring to be at the global technological and industrial frontiers can borrow technology, industry, and institutions

from the advanced countries at low risk and costs. So if a developing country knows how to tap into the advantage of backwardness in technology, industry, and social and economic institutions, it can grow at an annual rate several times that of high-income countries for decades before closing its income gap with those countries.

3. Prospects for China's Growth in the Coming 20 Years

Looking forward, China can still rely on the advantage of backwardness, and it has the potential to maintain dynamic growth for another 20 years or more because of the following reasons:

- 1 In 2008, China's per capita income was 21 percent of U.S. per capita income measured in PPP.⁵ The income gap between China and the United States indicates that there is still a large technological gap between China and industrialized countries. China can continue to enjoy the advantage of backwardness before closing up the gap.
- 2 Maddison's (2010) estimation shows that China's current relative status to the United States is similar to that of Japan's in 1951, Korea's in 1977, and Taiwan's in 1975. The annual growth rate of GDP grew 9.2 percent in Japan between 1951 and 1971, 7.6 percent in Korea between 1977 and 1997, and 8.3 percent in Taiwan between 1975 and 1995. China's development strategy after the reform in 1979 is similar to that of Japan, Korea, and Taiwan. China has the potential to achieve another 20 years of 8 percent growth. By that time, China's per capita income measured in PPP may reach about 50 percent of U.S. per capita income. (Note that Japan's per capita measured in PPP was 65.6 percent of that of the United States in 1971, Korea's was 50.2 percent in 1997, and Taiwan's was 54.2 percent in 1995.) Measured by PPP, China's economic size may then be twice as large as that of the United States; and measured by market exchange rates, China may be at least the same size as the United States.

That said, now China is becoming an innovator in its own right. As a middle-income country, in many sectors that China has comparative advantage, other higher-income countries have graduated, or are close to graduating, from those sectors—for example, household electronics and the high-speed train. If China wants to maintain leadership in those sectors, it will need to develop the technology/product innovation when it reaches the frontier. China can then become a global technological/industrial leader in those sectors. There are also some new sectors, such as green technology, which are important for China's sustainable growth. China has the potential to be a leader due to its large domestic market.

4. Challenges of China's Growth in the Twelfth Five-Year Plan

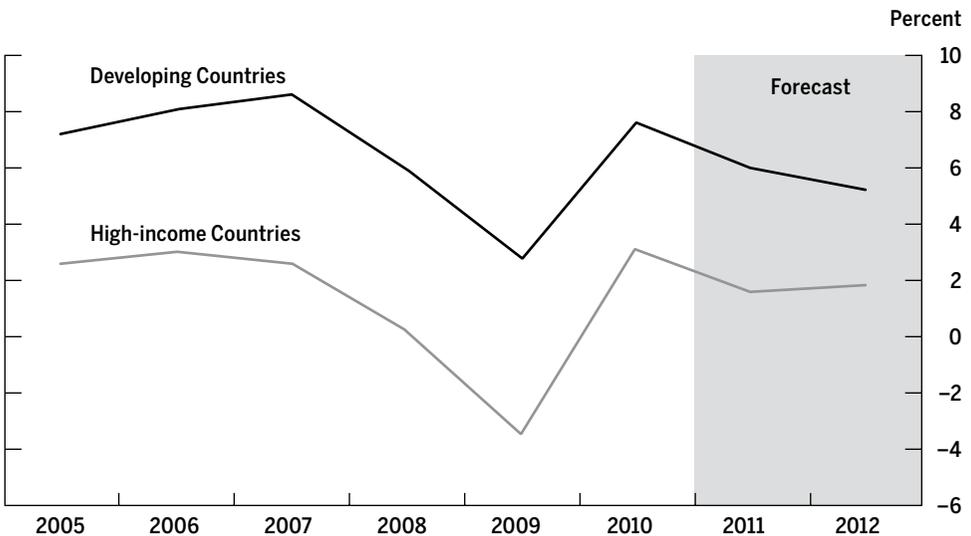
The Global Crisis and the “New Normal”

Over the last three years, the global economy has witnessed its most tumultuous times since the Great Depression. The impressive coordinated policy response of the G-20 nations has helped the world avoid the worst possible scenario. Economic activity started to recover around the world in 2009. Global GDP performance improved from a contraction of 2 percent in 2009 to a growth of 4.2 percent in 2010, and a projected growth of 2.7 percent in 2011.⁶

However, we are observing a two-speed recovery. On the one hand, high-income countries' growth rates in 2010 and 2011 are estimated 3.1 percent and only 1.6 percent, respectively—far below the historical average following other crises. On the other hand, developing countries have been growing at 7.6 percent in 2010 and are likely to be at 6.0 percent in 2011, much faster than advanced countries and returning to their pre-crisis rates (Figure 6). Developing countries, especially China and India, but others too, have increasingly become engines of the world economy growth.

However, there are tremendous risks underneath this global outlook. First and most importantly, the high-income countries are still beset with high

FIGURE 6
The Two-Speed Economic Recovery
GDP Growth



Sources: WDI and World Bank Development Prospects Group Forecasts.

unemployment rates and large excess capacities in housing and manufacturing sectors, which repress private consumption and investment and dampen growth. The combination of low returns and high risks on financial investment in these countries, caused by low growth and high unemployment rates, has been referred to as the “new normal” (Clarida 2010).

Second, the sovereign debts in a number of European countries and the government debts in some states in the United States may require restructuring, and they present a threat to the stability of global financial markets.

Third, the large short-term capital inflows to a number of middle-income countries creates appreciation pressures, and may damage their external competitiveness and stymie their growth prospects. The capital influx may also lead to the emergence of unsustainable bubbles in their equity and real estate markets.

Fourth, the resurgence in food, commodity, and fuel prices has hurt the poor and threatened social stability, as demonstrated by events in North Africa.

These risks to a sustained recovery are directly or indirectly related to the simultaneous existence of large excess capacity in the high-income countries. In spite of the recovery, industrial production in these countries is estimated to be more than 10 percent below its peak in 2008 (World Bank 2011, p. 36). The high unemployment rate is a reflection of their high underutilization of capacity. The need to increase social spending and provide stimulus to counter these conditions at the same time that public revenue is under stress presents a dilemma. Fiscal deterioration is a looming concern and has led to state and sovereign debt problems in the United States and several European countries. The adoption of low-interest rates in high-income countries as a countercyclical measure at the same time that investment opportunities are constrained by the underutilization of capacity encourages investors to seek high yields, resulting in large short-term capital outflows to emerging markets and contributing to the spikes of food, fuel, and commodity prices.

The Challenge of Triple Imbalances

Given the inevitable slowdown in exports to high-income countries in the coming years and the need to reduce trade surplus, it is prudent and pragmatic to consider ways to rebalance the Chinese economy towards domestic demand. Much is said about stimulating consumption, but the process should be balanced between consumption and continuing strong growth in investment. The latter is critical for industrial upgrading and sustainable increases of per capita income, as well as developing green economy sectors and investing in environmental protection. This shift towards domestic demand represents the first rebalancing.

A second form of rebalancing is a structural transformation to reduce income disparities. In spite of the general improvement of living standards, China has shifted from a relatively egalitarian society at the beginning of reforms in 1979 to a country with alarming income inequality. The Gini index reached 41.5 in 2005, approaching the level of Latin American countries (World Bank 2011, p. 94). The widening disparity may threaten social stability and hinder economic growth.

There is a third form of rebalancing that is overlooked by macroeconomists. China's extraordinary growth has come with almost inevitable environmental costs. China needs to rebalance short-term growth and long-term environmental sustainability. This poses a challenge for the future in terms of shifting the structure of production towards cleaner technologies.

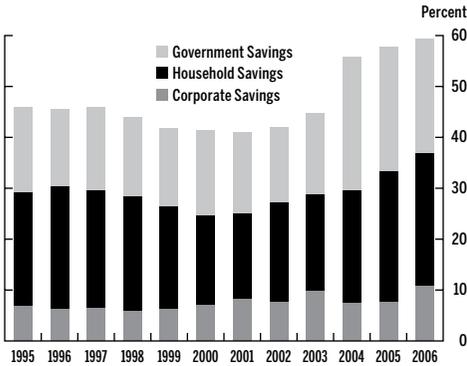
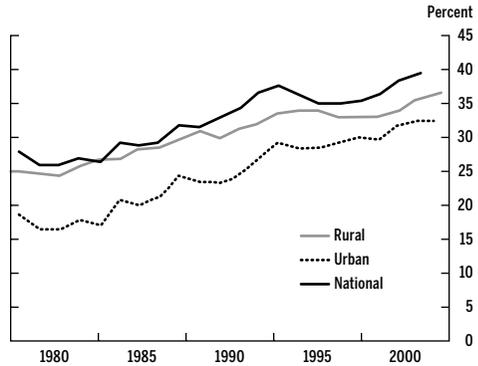
The question then becomes: How can China engineer this triple rebalancing?

Rebalancing toward Domestic Demand and Reducing Income Disparities

The first two rebalancing themes are closely related in the case of China, since in the end improving the distribution of income is the key to rebalancing towards domestic demand (see Lin, Dinh, and Im 2010). Specifically, I am referring to the distribution of income between aggregate households on aggregate and the corporate sector (essentially the functional distribution of income) and the distribution of income across households (or the size distribution of income). We know from the national accounts and from industry data that a large share of Chinese national income accrues to large corporations, and we also know that an increasing share of income accrues to rich people. Both groups have higher propensities to save than the middle-income and low-income households. Figure 7 displays the increasing share of corporate savings as a share of GDP and the rising Gini coefficient that summarizes the increasing concentration of household income. This pattern of income distribution increases investment and the accumulation of productive capacity while repressing domestic consumption, leading to a large current account surplus. Shifting more income towards workers can rebalance income between rich and poor and between the corporate sector and households. This redistribution would also reduce external imbalances.

After the economic reforms in 1979, China's economic development changed from a capital-intensive industry-oriented strategy, which went against China's comparative advantage, to a strategy that follows China's comparative advantage. In theory, as noted in my Marshall Lectures, following comparative advantage to develop industries should lead to improvements in the distribution of income. More specifically, I have noted, when an economy's development is in its early stage—with relatively abundant labor and scarce capital—enterprises

FIGURE 7

Distribution of Income in China**A Corporate, Government, and Household Savings to GDP, 1995–2006****B Income Inequality in China (Gini Index)**

Source: Panel A: China Statistical Yearbook, 1998–2009; panel B: Reprinted from *Journal of Development Economics* 82(1), Ravallion and Chen “China’s (Uneven) Progress Against Poverty,” pp. 1–42. © 2007, with permission from Elsevier.

will initially enter labor-intensive industries and adopt more labor-intensive technologies. This will create as many employment opportunities as possible and transfer labor from traditional sectors to modern manufacturing and service sectors. Accompanied with the upgrading in the endowment structure, labor abundance will be replaced gradually with labor scarcity and capital scarcity will gradually become capital abundance. Accordingly, the cost of labor will increase and the cost of capital will decrease. Because capital income is the major source of income for the rich, while labor is the major source of income for the poor, such changes in relative prices will make it possible to achieve economic growth and equity simultaneously (Lin 2009, p. 47).

In practice, however, the concentration of income in the corporate sector and among rich people is a consequence of the dual-track reform process, which retains certain distortions as a way to provide continuous support to nonviable firms in the priority industries. Those distortions favor large corporations and rich people. Major remaining distortions include the concentration of financial services in the four large state-owned banks, the almost zero royalty on natural resources, and the monopoly of major service industries, including telecommunications, power, and banking.

Those distortions contribute to the stability in China’s transition process. They also contribute to the rising income disparity and other imbalances in the economy. This is because only big companies and rich people have access to credit services provided by the big banks, and the interest rates are artificially

repressed. As a result, big companies and rich people are receiving subsidies from the depositors who have no access to bank credit services and are relatively poor. The concentration of profits and wealth in large companies and the widening of income disparities are unavoidable. Low royalty levies on natural resources and monopoly in the service sector have similar effects.

Therefore, it is imperative for China to address structural imbalances, by removing the remaining distortions in the finance, natural resources, and service sectors so as to complete the transition to a well-functioning market economy. The necessary reforms include (1) removing financial repression and allowing the development of small local financing institutions including local banks to increase financial services, especially access to credit, to household farms as well as small- and medium-size enterprises in manufacturing and service sectors; (2) reforming the pension system, removing the old retired worker's pension burden from the state-owned mining companies and levying appropriate royalty taxes on natural resources; and (3) encouraging entry and competition in telecommunications, power, and financial sectors.

In recent debates about the rebalancing toward domestic demand in China, much is made of the need for social safety nets to stimulate domestic demand. I would argue that a social safety net is needed for social harmony rather than for increasing the ratio of consumption in China. This is because, while households may increase the propensity for consumption with improved social safety nets, the government needs to increase savings in order to accumulate the provision funds for covering pension and other social program costs. As a result, the total aggregate savings of private households and the government may not change much.⁷ The reforms in social safety nets are desirable mainly for protecting the vulnerable and for providing transitory support to relieve temporary shocks to jobs and health and to maintain social harmony. The reforms can be based on lessons from international experience from both developed and developing countries. Note that there have been mixed results from pension privatization reforms, despite the need for a fiscally sustainable old-age security system. The question of full funding can be addressed separately from the question of who manages the savings, and a multipolar design is generally recommended.⁸ In other social programs, the lessons from the experience of conditional cash transfers are quite positive, and this is something that China could explore.⁹

The Environment: Rebalancing Short-Term Growth and Long-Term Sustainability

Pollution and global warming are real challenges for long-term sustainability. China is a continental economy, and as a result, environmental externalities from economic activity are internalized within China's borders. This implies

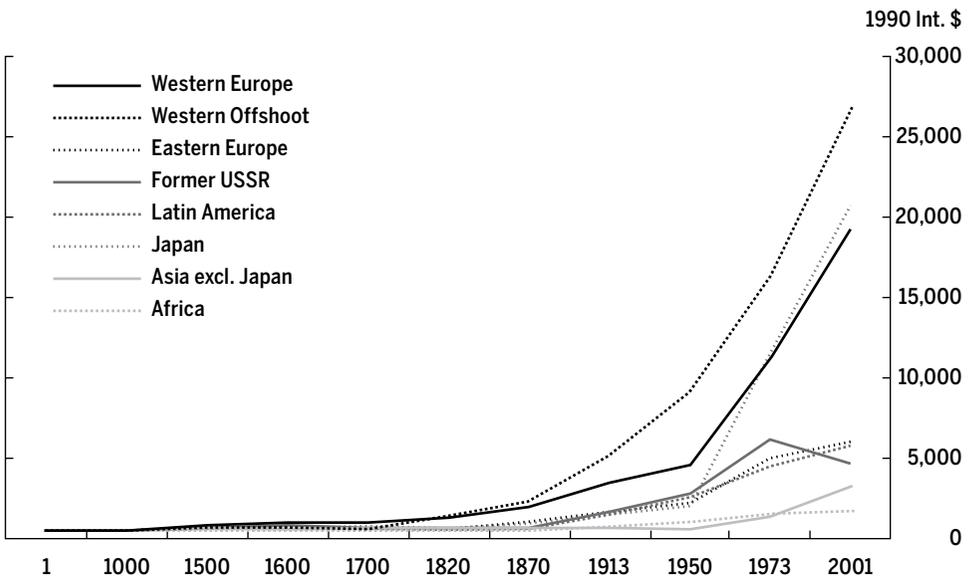
that there are direct impacts of pollution on the health of the population. Another challenge is that China is still in the high-carbon phase of development. These challenges for sustainable growth create the opportunity for China to become a technological leader in green growth. Theory and experience has shown that innovation in this area can have important positive spillover effects for technological upgrading more broadly in the economy as well.

I should note that the reforms I have discussed are the main items in the Twelfth Five-Year Plan which covers 2011–15.

5. China and the Multipolar Growth World

It is important to place this moment in history in a broader historical context. After the Industrial Revolution, the world was polarized. Growth in industrialized countries accelerated. Later in the 20th century, a few developing economies in East Asia were able to accelerate growth, and they caught up with the industrialized countries. Most other developing countries failed to have sustained and accelerated growth. As a result, there is a great divergence between the developed and developing countries, as Figure 8 shows.

FIGURE 8
History of Economic Growth



Note: In 1990 International Geary-Khamis dollars.

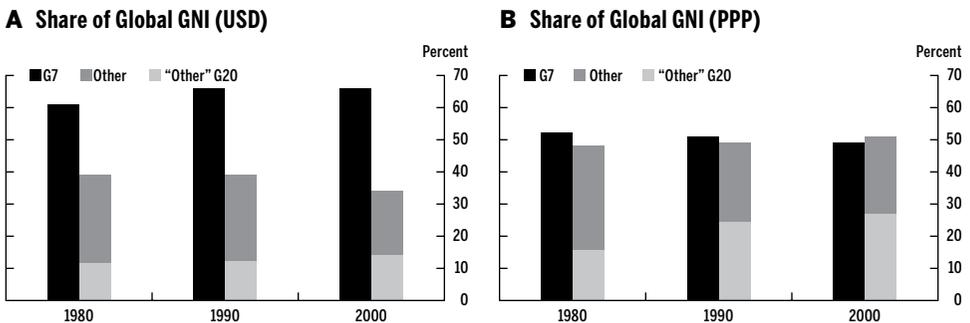
Source: Based on Maddison dataset.

Given this history, the global economy was dominated by the G-7 economies consistently throughout the latter half of the 20th century. At market exchange rates, the G-7 represented about two-thirds of the global economy. Even accounting for purchasing power parity, half of global income was concentrated in the G-7, as displayed in Figure 9.

With the rapid growth in the past 20 years, China has become a major driving force for the emergence of a multipolar growth world. As shown in Figure 10, in the 1980s and the 1990s, except for China, the other top five contributors to the growth of global GDP were all members of the G-7 industrialized countries, and China's contributions were respectively 13.4 percent and 26.7 percent of the contributions of the United States in those two decades. However, in the decade beginning in 2000, China became the top contributor to the growth of global GDP. Among the G-7 countries only the United States and Japan remained in the top-five list, and China's contribution exceeded that of the United States by 4 percentage points. A multipolar growth world emerged in the 21st century, with many of the new growth poles in emerging market economies.

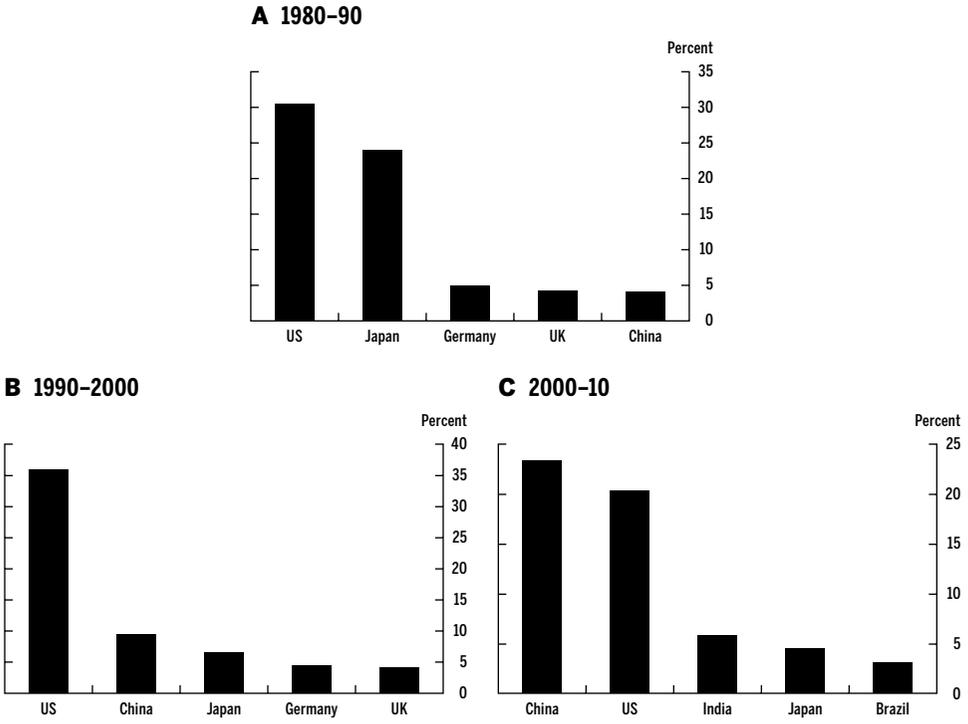
Leading up to the global crisis, a burst of convergence occurred, as developing countries grew substantially faster than the high-income countries. As we can see in Figure 11, this superior growth was widespread in developing countries across regions. This tendency is likely to continue as growth prospects in developing countries remain favorable and prospects for high-income countries remain subdued. This is not to say that the latter will not affect the former, but there is sufficient momentum in developing countries' own demand—combined with increasing south-to-south economic linkages—that should sustain a gap in growth rates between the developing and the high-income countries.

FIGURE 9
Global Shares of Gross National Income



Source: Author's calculations based on World Development Indicators.

FIGURE 10
Top Five Contributors to Growth By Decade



Source: Author's calculations based on data from the WDI.

Fortunately this convergence has also been fairly broad-based across regions of the developing world.

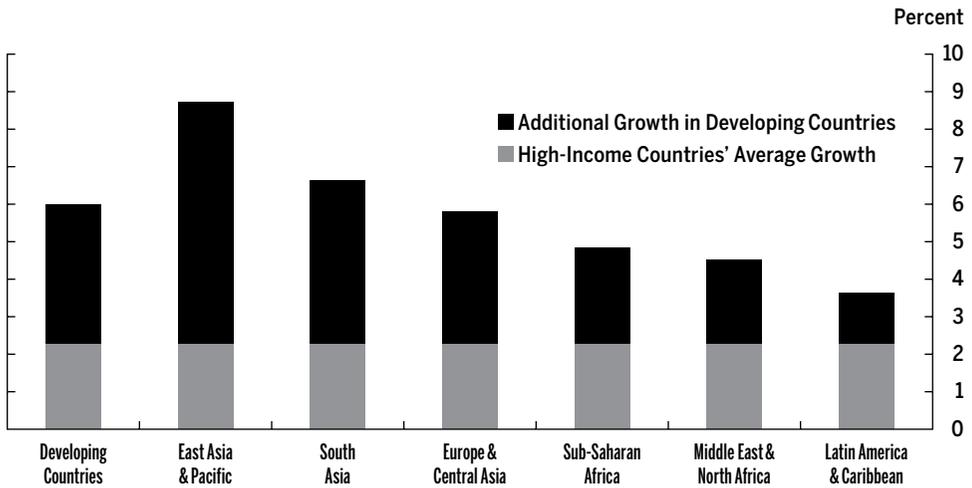
As a result of this superior growth in the developing world, we have witnessed a shift toward a more multipolar growth world. Figure 12 shows this shift in economic weight from the G-7 economies to the developing economies—both the larger members of the G-20 and other countries beyond the G-20.

As discussed in Section 3, China has the potential of maintaining an 8 percent annual growth rate for another two decades. If China can maintain this growth rate in the coming years, it may contribute to the multipolar growth world in many other ways in addition to GDP growth and trade.

There will be benefits shared and opportunities created by China's growth—for both high-income and developing countries. For high-income countries, China's growth will expand the markets for capital goods and intermediate goods exports.

Many developing countries are still major producers of agricultural and natural resource commodities. Chinese consumption and production growth

FIGURE 11
Growth Acceleration in Developing Countries
 (average for 2000–08)



Source: World Development Indicators.

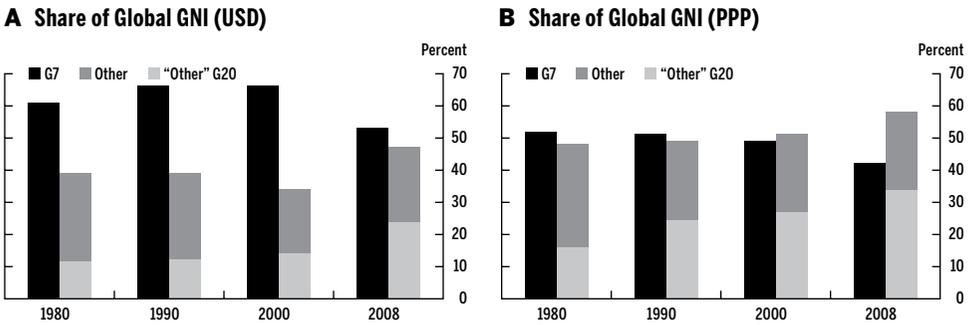
will continue to support adequate prices for commodities and thus help these exporters.

In addition, the Chinese government and Chinese firms will also provide funds for natural resource and infrastructure investment in emerging markets and low-income countries. This is already happening, and it is likely to continue into the future. In particular, there is a growing role for Chinese finance in the African region—the developing region with the most constrained access to finance (Wang 2009).

The continued structural transformation of the Chinese economy will create other opportunities. As China undergoes industrial upgrading to more sophisticated product markets, it will leave the market space for other developing countries to enter the more labor-intensive industries. Chinese enterprises are expected to relocate their existing production to other lower-wage countries as they upgrade to higher value-added industries, like Japan and East Asian economies did a few decades ago. The difference is that, because of its size, China may become a “leading dragon” for other developing countries instead of a “lead goose” in the traditional flying geese pattern of the international diffusion of industrial development.¹⁰

China also has an important and expanding role in the new global economic architecture. As the economic landscape changes to a multipolar growth world, the international architecture will reorganize, as evidenced by the shift from

FIGURE 12
Rebalancing of the Global Economic Landscape



Sources: Author's calculations based on World Development Indicators.

the old G-7 to the broader G-20. China has become a key member in regional and international forums, such as APEC and the G-20. Over time, there is also the possibility of the gradual emergence of the Chinese renminbi as a global reserve currency. This is something that would require many fundamental reforms in the Chinese economy; however, it is almost inevitable given the growing relative strength of China in the multipolar world.

Whether we are on the verge of an Asian century or not, one thing is clear: There has already been a dramatic shift in the geographic center of the global economy. China is very much at the center of this transformation, and its role as a leading dragon can be beneficial for growth prospects for the overall economy. The world is desperately in need of engines of growth right now, and fortunately—with continued strong and pragmatic economic policymaking—China can provide that impetus for economic growth.

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NOTES

- 1 Chang (2001) was one representation of such views.
- 2 PPP data do not go back to 1979 in the World Development Indicator database.
- 3 For further discussion of these two points, see Lin (2012).
- 4 Lin (forthcoming).
- 5 The national data used in this and next paragraphs are taken from Maddison (2010).
- 6 Historical data from World Development Indicators. The forecast for 2011 is from a preliminary World Bank projection.
- 7 An example of this phenomenon is Singapore, which has one of the best social safety nets in the world, but its savings as a percentage of GDP have been as high as 40 percent.
- 8 See Holzmann and Hinz (2005).
- 9 Conditional cash transfers form one of the most carefully analyzed public policy programs in developing countries, with numerous impact evaluations completed. For a survey, see Fiszbein and Schady (2009).
- 10 For the flying geese pattern of industrial diffusion, see Akamatsu (1962).