Demystifying the Chinese Economy*

Justin Yifu Lin

Chief Economist and Senior Vice President, the World Bank

When China began its transition from a planned to a market-oriented economy in 1979, it was a poor, inward-looking country with a per capita income of US\$182, less than one-third of the average in Sub-Saharan African countries, and a trade dependence (trade-to-GDP) ratio of 11.2 percent. China's economic performance since then has been miraculous. Annual GDP growth averaged 9.9 percent over the 30-year period, and annual growth in international trade, 16.3 percent. China is now a middle-income country, with a per capita GDP of US\$4,260 in 2010, and more than 600 million people have escaped poverty. Its trade dependence ratio has reached 65 percent, the highest among the world's large economies. In 2009 China overtook Japan as the world's second largest economy and replaced Germany as the world's largest exporter of merchandise. China's car market is now the world's largest, and Shanghai has been the world's busiest seaport by cargo tonnage since 2005. The spectacular growth over the past three decades far exceeded the expectations of anyone at the outset of the transition, including Deng Xiaoping, the architect of China's reform and opening-up strategy.

Interest among academics in China's transition and development experience has increased exponentially in the past three decades.³ In this speech I will draw on my new book, *Demystifying the Chinese Economy, to* provide answers to six related questions: Why was it possible for China to achieve such extraordinary performance

^{*}The text of this speech is drawn on the *Demystifying the Chinese Economy*, published by the Cambridge University Press in November 2011.

¹ Unless indicated otherwise, the statistics on the Chinese economy reported in the paper are from the *China Statistical Abstract 2010, China Compendium of Statistics 1949–2008*, and various editions of the *China Statistical Yearbook*, published by China Statistics Press.

² Deng's goal at that time was to quadruple the size of China's economy in 20 years, which would have meant an average annual growth of 7.2 percent. Most people in the 1980s, and even as late as the early 1990s, thought that achieving that goal was a mission impossible.

³ The EconLit database includes 27 peer-reviewed scholarly journal articles with *China* or *Chinese* in the title published in 1979, a number that jumps to 70 for 1989 and 1,016 for 2009.

during its transition? Why was China unable to attain similar success before its transition started? Why did most other transition economies, both socialist and non-socialist, fail to achieve a similar performance? What costs does China pay for its extraordinary success? Will China sustain a similar dynamic growth in the coming decades? Can other developing countries achieve similar economic performance?

I. The Reason for China's Extraordinary Performance in Transition

Rapid, sustained increase in per capita income is a modern phenomenon. Studies by economic historians, such as Angus Maddison (2001), show that average annual per capita income growth in the West was only 0.05 percent before the 18th century, jumping to about 1 percent in the 19th century and reaching about 2 percent in the 20th century. That means that per capita income in Europe took 1,400 years to double before the 18th century, about 70 years in the 19th century, and 35 years thereafter.

A continuous stream of technological innovation is the basis for sustained growth in any economy. The dramatic surge in growth in modern times is a result of a paradigm shift in technological innovation. Before the industrial revolution in the 18th century, technological innovations were generated mostly by the experiences of craftsmen and farmers in their daily production. After the industrial revolution, experience-based innovation was increasingly replaced by field experimentation and, later, by science-based experiments conducted in scientific laboratories (Lin 1995; Landes 1998). This shift accelerated the rate of technological innovation, marking the coming of modern economic growth and contributing to the dramatic acceleration of income growth in the 19th and 20th centuries (Kuznets 1966).

The industrial revolution not only accelerated the rate of technological innovation but also transformed industrial, economic, and social structures. Before the 18th century every economy was agrarian; 85 percent or more of the labor force worked in agriculture, mostly in self-sufficient production for the family. The acceleration of growth was accompanied by a move of labor from agriculture to manufacturing and services. The manufacturing sector gradually moved from very labor-intensive industries at the beginning to more capital-intensive heavy and high-tech industries.

Finally, the service sector came to dominate the economy. Accompanying the change in industrial structure was an increase in the scale of production, the required capital and skill, the market scope, and the risks. To exploit the potential unleashed by new technology and industry, and to reduce the transaction costs and share risks requires innovations as well as improvements in an economy's hard infrastructure, such as power and road networks, and its soft infrastructure. Soft infrastructure consists of such elements as belief, the legal framework, financial institutions, and the education system (Lewis 1954; Kuznets 1966; North 1981; Lin 2010).

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 technologies and industries are located on the global frontier. Moreover, the institutional innovation required for realizing 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 in the catching up process can borrow technology, industry, and institutions from the advanced countries at low risk and costs. So if a developing country knows how to tap 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.

In the post–World War II period, thirteen of the world's economies achieved average annual growth of 7 percent or above for 25 years or more. The Commission on Growth and Development, headed by Nobel Laureate Michael Spence, finds that the first of five common features of these thirteen economies is their ability to tap the potential of the advantage of backwardness. In the Commission's language, the thirteen economies, "they imported what the rest of the world knew and exported

what it wanted" (World Bank 2008, p. 22).4

After the transition was initiated by Deng Xiaoping in 1979, China adopted the opening-up strategy and started to tap the potential of importing what the rest of the world knows and exporting what the world wants. This is demonstrated by the rapid growth in its international trade, the dramatic increase in its trade dependence ratio, and the large inflows of foreign direct investment. While in 1979 primary and processed primary goods accounted for more than 75 percent of China's exports, by 2009 the share of manufactured goods had increased to more than 95 percent. Moreover, China's manufactured exports upgraded from simple toys, textiles, and other cheap products in the 1980s and 1990s to high-value and technologically sophisticated machinery and information and communication technology products in the 2000s. The exploitation of the advantage of backwardness has allowed China to emerge as the world's workshop and to achieve extraordinary economic growth by reducing the costs of innovation, industrial upgrading, and social and economic transformation.

II. Why Did China Fail to Achieve Rapid Growth before 1979?

China possessed the advantage of backwardness long before the transition began in 1979. The socialist government won the revolution in 1949 and started modernizing in earnest in 1953. Why had China failed to tap the potential of the advantage of backwardness and achieve dynamic growth before 1979? This failure came about because China adopted a wrong development strategy at that time.

China was the largest economy and among the most advanced, powerful countries in the world before pre-modern times (Maddison 2007). Mao Zedong, Zhou Enlai, and other first-generation revolutionary leaders in China, like many other Chinese social and political elites, were inspired by the dream of achieving rapid

4

⁴ The remaining features are, respectively, macroeconomic stability, high rates of saving and investment, market system, and committed, credible, and capable governments. Lin and Monga (2010a) show that the first three features are the result of following the economy's comparative advantages in developing industries at each stage of its development, and the last two features are the preconditions for the economy to follow its comparative advantages in developing industries.

modernization.

The lack of industrialization—especially the lack of large heavy industries that were the basis of military strength and economic power—was perceived as the root cause of the country's backwardness. Thus it was natural for the social and political elites in China to prioritize the development of large, heavy, advanced industries after the Revolution as they started building the nation.⁵ In the 19th century the political leaders of France, Germany, the United States, and other Western countries pursued effectively the same strategy, motivated by the contrast between Britain's rising industrial power and the backwardness of their own industry (Gerschenkron 1962; Chang 2003).

Starting in 1953, China adopted a series of ambitious Five-Year Plans to accelerate the building of modern advanced industries with the goal of overtaking Britain in ten years and catching up to the United States in fifteen. But China was a lower-income agrarian economy at that time. In 1953, 83.5 percent of its labor force was employed in the primary sector, and its per capita income (measured in purchasing power parity terms) was only 4.8 percent of that of the United States (Maddison 2001). Given China's employment structure and income level, the country did not possess comparative advantage in modern advanced industries of high-income countries, whether latent or overt, and Chinese firms in those industries were not viable in an open competitive market.⁶

To achieve its strategic goal, the Chinese government needed to protect the priority industries by giving firms in those sectors a monopoly and by subsidizing them through various price distortions, including suppressed interest rates, an overvalued exchange rate, and lower prices for inputs. The price distortions created

⁵ The desire to develop heavy industries existed before the socialist elites obtained political power. Dr. Sun Yat-sen, the father of modern China, proposed the development of "key and basic industries" as a priority in his plan for China's industrialization in 1919 (Sun 1929).

⁶ While the policy goal of France, Germany, and the United States in the late 19th century was similar to that of China in the mid-1950s, the per capita incomes of the three countries were about 60–75 percent of Britain's at the time. The small gap in per capita incomes indicated that the industries on the governments' priority lists were the latent comparative advantages of the three countries (Lin and Monga 2010b).

shortages, and the government was obliged to use administrative measures to mobilize and allocate resources directly to nonviable firms (Lin 2009; Lin and Li 2009).

These interventions enabled China to quickly establish modern advanced industries, test nuclear bombs in the 1960s, and launch satellites in the 1970s. But the resources were misallocated, the incentives were distorted, and the labor-intensive sectors in which China held a comparative advantage were repressed. As a result, economic efficiency was low, and the growth before 1979 was driven mainly by an increase in inputs. Despite a very respectable average annual GDP growth rate of 6.1 percent in 1952–78 and the establishment of large modern industries, China was almost a closed economy, with 71.3 percent of its labor force still in traditional agriculture. In 1952–78 household consumption grew by only 2.3 percent a year, in sharp contrast to the 7.1 percent average growth after 1979.

III. Why Didn't Other Transition Economies Perform Equally Well?

All other socialist countries and many developing countries after World War II adopted a development strategy similar to that of China. Most colonies gained political independence after the 1950s. Compared with developed countries, these newly independent developing countries had extremely low per capita income, high birth and death rates, low average educational attainment, and very little infrastructure—and were heavily specialized in the production and export of primary commodities while importing most manufactured goods. The development of modern advanced industries was perceived as the only way to achieve rapid economic takeoff, avoid dependence on the Western industrial powers, and eliminate poverty (Prebisch 1950).

It became a fad after the 1950s for developing countries in both the socialist and the non-socialist camps to adopt a development strategy oriented toward heavy industry and import substitution (Lal and Mynt 1996). But the capital-intensive modern industries on their priority lists defied the comparative advantages determined by the endowment structure of their low-income agrarian economies. To implement their development strategy, many socialist and non-socialist developing countries

⁷ Estimates by Perkins and Rawski (2008) suggest that the average annual growth of total factor productivity was 0.5 percent in 1952–78 and 3.8 percent in 1978–2005.

introduced distortions and government interventions like those in China. This strategy made it possible to establish some modern industries and achieve investment-led growth for one or two decades in the 1950s to the 1970s. Nevertheless, the distortions led to pervasive soft budget constraints, rent-seeking, and misallocation of resources. Economic efficiency was unavoidably low. Stagnation and frequent social and economic crises began to beset most socialist and non-socialist developing countries by the 1970s and 1980s. Liberalization from excessive state intervention became a trend in the 1980s and 1990s.

The symptoms of poor economic performance and social and economic crises, and their root cause in distortions and government interventions, were common to China and other socialist transition economies as well as other developing countries. But the academic and policy communities in the 1980s did not realize that those distortions came from second-best institutional arrangements, endogenous to the needs of providing protections to firms in the priority sectors. Without such protection, those firms would not have been viable. As a result, policymakers and academics recommended that socialist and other developing countries immediately remove all distortions by implementing simultaneous programs of liberalization, privatization, and marketization with the aim of quickly achieving efficient, first-best outcomes.

But if those distortions were eliminated immediately, many nonviable firms in the priority sectors would collapse, causing a contraction of GDP, a surge in unemployment, and acute social disorders. To avoid those dreadful consequences, many governments continued to subsidize the nonviable firms through other, disguised, less efficient subsidies and protections (Lin and Tan 1999). Transition and developing countries thus had even poorer growth performance and stability in the 1980s and 1990s than in the 1960s and 1970s (Easterly 2001).

During the transition process China adopted a pragmatic, gradual, dual-track approach. The government first improved the incentives and productivity by allowing

⁸ There are different explanations for the pervasive distortions in developing countries. Acemoglu, Johnson, and Robinson (2005); Engerman and Sokoloff (1997); and Grossman and Helpman (1996) proposed that these distortions were caused by the capture of government by powerful vested interests. Lin (2009, 2003) and Lin and Li (2009) propose that the distortions were a result of conflicts between the comparative advantages of the economies and the priority industries that political elites, influenced by the dominant social thinking of the time, targeted for the modernization of their nations.

the workers in the collective farms and state-owned firms to be residual claimants and to set the prices for selling at the market after delivering the quota obligations to the state at fixed prices (Lin 1992). At the same time, the government continued to provide necessary protections to nonviable firms in the priority sectors and simultaneously, liberalized the entry of private enterprises, joint ventures, and foreign direct investment in labor-intensive sectors in which China had a comparative advantage but that were repressed before the transition. This transition strategy allowed China both to maintain stability by avoiding the collapse of old priority industries and to achieve dynamic growth by simultaneously pursuing its comparative advantage and tapping the advantage of backwardness in the industrial upgrading process. In addition, the dynamic growth in the newly liberalized sectors created the conditions for reforming the old priority sectors. Through this gradual, dual-track approach China achieved "reform without losers" (Lau, Qian, and Roland 2000; Lin, Cai, and Li 2003; Naughton 1995) and moved gradually but steadily to a well-functioning market economy.

A few other socialist economies—such as Poland⁹, Slovenia, and Vietnam, which achieved outstanding performance during their transitions—adopted a similar gradual, dual-track approach (Lin 2009). Mauritius adopted a similar approach in the 1970s to reforming distortions caused by the country's import-substitution strategy and became Africa's success story (Subramanian and Roy 2003). ¹⁰

IV. What Costs Does China Pay for Its Success?

The gradual, dual-track approach to transition is a double-edge sword. While it enables China to achieve enviable stability and growth in the transition process, it also

-

⁹ In spite of its attempt to implement a shock therapy at the beginning, Poland did not privatize its large state-own enterprises until very late in the transition.

¹⁰ In the 1980s, the Former Soviet Union, Hungary, and Poland adopted a gradual reform approach. However, unlike the case in China, their state-owned firms were not allowed to set the prices for selling at markets after fulfilling their quota obligations and the private firms' entry to the repressed sectors were subject to severe restrictions, but the wages were liberalized (while in China the wage increase was subject to state regulation). These reforms led to wage inflations and exacerbated shortages. See the discussions about the differences in the gradual approach in China and the Former Soviet Union and Eastern Europe in Lin (2009, pp. 88-9).

brings with it a number of structural problems, particularly the disparities in income distribution, consumption and savings, and external accounts. When the transition started in 1979, China was a relatively egalitarian society. With rapid growth, income distribution has become increasingly unequal. The Gini coefficient, a measurement of income inequality, increased from .31 in 1981 to .47 in 2008 (Ravallion and Chen 2010). Meanwhile, household consumption as a percentage of GDP dropped from about 50 percent down to about 35 percent whereas the fixed asset investment increased from around 30 percent to more than 45 percent of GDP (see the right-panel of figure 1), and net exports increased from almost nothing to a high of 8.8 percentage of GDP in 2007 (see left-hand panel of figure 1). Such disparities are the by-products of the dual-track approach to transition.

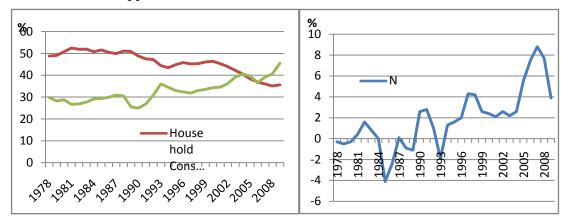


Figure 1: Contributions of household consumption, fixed asset formation, and net exports to GDP.

Source: National Statistical Bureau, China Statistical Abstract, 2010, p.36.

During the transition process, the Chinese government retained some distortions as a way to provide continuous support to non-viable firms in the priority industries (see Section III). 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

-

Many of China's problems today including environment degradation and the lack of social protections are generic to developing countries. In this section, I will only focus on a few prominent issues that arose specifically from China's dual track approach to transition. The collective volume edited by Brandt and Rawski (2008) provides excellent discussions of other development and transition issues in China.

telecommunication, power, and banking. 12

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 banks' credit services and are relatively poor. The concentration of profits and wealth in large companies and widening income disparities are unavoidable. The low royalty levies of natural resources and the monopoly in the service sector have similar effects.

In general the marginal propensity to consume decreases with income. Therefore, if wealth is disproportionately concentrated in the higher-income group, the nation's consumption-to-GDP ratio will be lower and the savings ratio will be higher. The concentration of wealth in the large firms has a similar effect. A consequence of such an income distribution pattern is relatively high household savings and extraordinarily high corporate savings in China, as shown in Figure 2.

_

¹² Before the transition, the state-owned enterprises (SOEs) obtained their investment and operation funds directly from the government's budgets at no cost. The government established four large state banks in the early 1980's, when the fiscal appropriation system was replaced by banking lending. The interest rates have been kept artificially low in order to subsidize the SOEs. resources were kept at an extremely low level so as to reduce the input costs of heavy industries. In return the mining firms' royalty payments were waived. After the transition, the natural resources' prices were liberalized in the early 1990s but royalties remained nominal to compensate for the transfer of pension provision for retired workers from the state to the state-owned mining companies. However, the private and joint-ventured mining companies, which did not enter until the 1980's and thereafter, did not have any pension burdens. The low royalty payment was equivalent to a direct transfer of natural resource rents from the state to these companies, which made them extraordinary profitable. The rationale for giving firms in telecommunication and power sector a monopoly position before the transition was because they provided public services and made payments on large capital investment. After transition, the rapid development and fast capital accumulation after the transition, capital is less of a constraint now but the Chinese government continues to allow the service sector to enjoy monopoly rents (Lin, Cai and Li 2003).

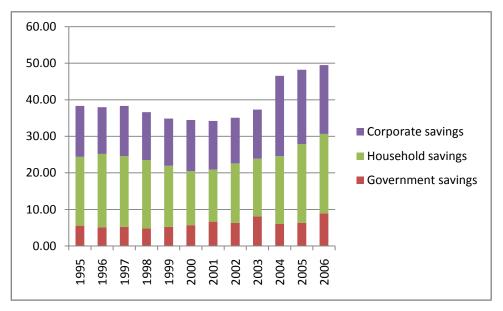


Figure 2: China's Corporate, Household, and Government Savings as Percentage of GDP

Source: National Statistical Bureau, China Statistical Yearbook (1998-2009)

The high household and corporate savings in turn lead to a high rate of investment and quick building up of production capacity. A large trade surplus is a natural consequence of limited domestic absorption capacity due to a low consumption ratio. Therefore, it is imperative for China to address structural imbalances by removing 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, and local financing institutions, including local banks, so as 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 an appropriate royalty taxes on natural resources; and 3.) Encouraging entry and competition in the telecommunications, power and financial sectors.

V. Will China Continue the Dynamic Growth in the Coming Decades?

Looking forward, China still has the potential to rely on the advantage of

backwardness and maintain dynamic growth for another 20 years or more because:

- 1. In 2008, China's per capita income was 21 percent of US per capita income measured in purchasing power parity. The income gap between China and the U.S. indicates that there is still a large technological gap between China and the advanced industrialized countries. China can continue to enjoy the advantage of backwardness before closing up the gap.
- 2. Maddison's estimation shows that China's current relative status to the US is similar to Japan's in 1951, Korea's in the 1977 and Taiwan, China's in 1975. The annual growth rate of GDP reached 9.2 percent in Japan between 1951-1971, 7.6 percent in Korea between 1977-1997, and 8.3 percent in Taiwan between 1975-1995. China's development strategy after the reform in 1979 is similar to that of Japan, Korea and Taiwan, China. China has the potential to achieve another 20 years of 8 percent growth. After 20 years' dynamic growth, Japan's per capita income measured in purchasing power parity was 65.6 percent of that of U.S. in 1971, Korea's was 50.2 percent in 1997, and Taiwan's was 54.2 percent in 1995. If China maintains 8 percent growth in the coming two decades, by 2030 China's per capita income measured in purchasing power parity may reach about 50 percent of U.S.' per capita income. Measured by purchasing power parity, China's economic size may then be twice as large as the US; and measured by market exchange rates, China may be about the same size as the US.

That said, China also needs to increasingly become 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, consumer electronics and the high-speed train. If China wants to maintain leadership in those sectors, China will need to develop the

¹³ The national data used in this and next paragraphs are taken from Angus Maddison's **Historical Statistics** of the World Economy: 1-2008 AD.

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. With foresight, China will be able to gradually shift from absorbing the existing technology to become an indigenous innovator of new technology for driving its growth.

VI. Lessons of China's Development for Other Developing Countries

Are there useful lessons that can be drawn from China's experiences over the past three decades? The answer is clearly yes. Every developing country has the opportunity to accelerate its growth if it knows how to develop its industries according to its comparative advantage at each level of development and if it can tap the advantage of backwardness in its technological innovation and structural transformation. A well-functioning market is a precondition for developing an economy's industries according to its comparative advantages, because only with such a market can relative prices reflect the relative scarcities of factors of production in the economy. Such a well-functioning market naturally propels firms to enter industries consistent with the country's comparative advantages. If a developing country follows its comparative advantage in technological and industrial development, it will be competitive in domestic and international markets. In other words, it will grow fast, accumulate capital rapidly, and upgrade its endowment structure quickly. When the endowment structure is upgraded, the economy's comparative advantage changes and its industrial structure as well as hard and soft infrastructure need to be upgraded accordingly. In the process it is desirable for the state to play a proactive, facilitating role. The state can do this by compensating for externalities created by pioneer firms in the process of industrial upgrading; the government can also coordinate the desirable investments and improvements in soft and hard infrastructure, for which individual firms cannot internalize in their decisions. Through the appropriate functions of competitive markets and a proactive, facilitating state, a developing country can tap the potential of the advantage of backwardness and

achieve dynamic growth (Lin 2010).

Many developing countries, as a result of their governments' previous development strategies, have various kinds of distortions and many existing firms are nonviable in an open competitive market. In this respect, China's experience in the past 30 years also provides useful lessons. In the reform process it is desirable for a developing country to remove various distortions of incentives to improve productivity and at the same time adopt a dual-track approach, providing some transitory protections to nonviable firms to maintain stability, but liberalizing entry into sectors in which the country has comparative advantages. Such an approach can improve the resource allocation and tap the advantage of backwardness. By adopting such an approach, other developing countries can also achieve stability and dynamic growth in their economic liberalization process.

Thirty years ago no one would have imagined that China would be among the thirteen economies that tapped the potential of the advantage of backwardness and realized average annual growth of 7 percent or above for 25 or more years. For developing countries now fighting to eradicate poverty and close the gap with high-income countries, I hope that lessons from China's transition and development will help them join the list of those realizing growth of 7 percent or more for 25 or more years in the coming decades.

References

- Acemoglu, D., S. Johnson, and J. A. Robinson. 2005. "Institutions as the Fundamental Cause of Long-Run Growth." In *Handbook of Economic Growth*, vol. 1A, ed. P. Aghion and S. N. Durlauf, 385–472. Amsterdam: Elsevier.
- Brandt, L., and T. G. Rawski, eds. 2008. *China's Great Economic Transformation*. Cambridge: Cambridge University Press.
- Chang, H. 2003. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. London: Anthem Press.
- Easterly, W. 2001. The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics. Cambridge, MA: MIT Press.
- Engerman, S. L., and K. L. Sokoloff. 1997. "Factor Endowments, Institutions, and Differential Paths of Growth among New World Economies: A View from Economic Historians of the United States." In *How Latin America Fell Behind*, ed. S. Haber, 260-304, Stanford, CA: Stanford University Press.
- Fei, J., and G. Ranis. 1997. *Growth and Development from an Evolutionary Perspective*. Malden, MA: Blackwell.
- Gerschenkron, A. 1962. *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge, MA: Belknap Press of Harvard University Press.
- Grossman, G. M., and E. Helpman. 1996. "Electoral Competition and Special Interest Politics." *Review of Economic Studies* 63 (2): 265–86.
- Kuznets, S. 1966. *Modern Economic Growth: Rate, Structure and Spread.* New Haven, CT: Yale University Press.
- Lal, D., and H. Mynt. 1996. *The Political Economy of Poverty, Equity, and Growth: A Comparative Study*. Oxford: Clarendon Press.
- Landes, D. 1998. The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor. New York and London: Norton.
- Lau, L. J., Y. Qian, and G. Roland. 2000. "Reform without Losers: An Interpretation

- of China's Dual-Track Approach to Transition." *Journal of Political Economy* 108 (1): 120–43.
- Lewis, W. A. 1954. "Economic Development with Unlimited Supply of Labour." Manchester School of Economic and Social Studies 22 (2): 139–91.
- Lin, J. Y. 1992. "Rural Reforms and Agricultural Growth in China", *American Economic Review* 82 (1): 34–51.
- ——. 1995. "The Needham Puzzle: Why the Industrial Revolution Did Not Originate in China." *Economic Development and Cultural Change* 43 (2): 269–92.
- ——. 2003. "Development Strategy, Viability and Economic Convergence." Economic Development and Cultural Change 53 (2): 277–308.
- ——. 2009. *Economic Development and Transition: Thought, Strategy, and Viability*. Cambridge: Cambridge University Press.
- ———. 2010. "New Structural Economics: A Framework for Rethinking Development." Policy Research Working Paper 5197, World Bank, Washington, DC.
- Lin, J. Y., and F. Li. 2009. "Development Strategy, Viability, and Economic Distortions in Developing Countries." Policy Research Working Paper 4906, World Bank, Washington, DC.
- Lin, J. Y., and C. Monga. 2010a. "The Growth Report and New Structural Economics," Policy Research Working Paper 5336, World Bank, Washington, DC.
- ——.b. "Growth Identification and Facilitation: The Role of the State in the Dynamics of Structural Change." Policy Research Working Paper 5313, World Bank, Washington, DC.
- Lin, J. Y., and G. Tan. 1999. "Policy Burdens, Accountability, and Soft Budget Constraints." *American Economic Review* 89 (2): 426–31.
- Lin, J. Y., F. Cai, and Z. Li. 2003. The China Miracle: Development Strategy and

- Economic Reform. Hong Kong SAR, China: Chinese University Press.
- Maddison, A. 2001. *The World Economy: A Millennial Perspective*. Paris: OECD Development Centre.
- ——. 2007. Chinese Economic Performance in the Long Run—Second Edition, Revised and Updated: 960–2030 AD. Paris: OECD Development Centre.
- Naughton, B. 1995. *Growing Out of the Plan: Chinese Economic Reform, 1978–1993.*New York: Cambridge University Press.
- North, D. 1981. Structure and Change in Economic History. New York: W.W. Norton.
- Perkins, D. H., and T. G. Rawski. 2008. "Forecasting China's Economic Growth to 2025." In *China's Great Economic Transformation*, ed. L. Brandt and T. G. Rawski, 829–85. Cambridge: Cambridge University Press.
- Prebisch, R. 1950. The Economic Development of Latin America and Its Principal Problems. New York: United Nations. Reprinted in Economic Bulletin for Latin America 7, no. 1 (1962): 1–22.
- Ravallion, Martin and Shaohua Chen, 2007, "China's (Uneven) Progress Against Poverty." Journal of Development Economics, 82(1): 1-42.
- Subramanian, A., and D. Roy. 2003. "Who Can Explain the Mauritian Miracle? Mede, Romer, Sachs, or Rodrik?" In In Search of Prosperity: Analytic Narratives on Economic Growth, ed. D. Rodrik, 205–43. Princeton: Princeton University Press.
- Sun, Y. S. 1929. *The International Development of China* (Shih yeh chi hua). 2nd ed. New York: G.P. Putnam's Sons.
- World Bank (on behalf Commission on Growth and Development). 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank.