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China's Economic Rise— Fact and Fiction

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SUMMARY

- China's domestically driven economic expansion is not limited by export markets and can sustain high single-digit growth rates for decades.
- Beijing now seems likely to overcome potential stumbling blocks such as economic instability, pollution, inequality, corruption, and a slow pace of political reform.
- China's economic size will match America's by 2035 and double it by midcentury, with unclear but potentially wrenching strategic implications that demand U.S. economic and military reassessment.
- American policy makers should take this opportunity to enact wide-ranging domestic reforms and rethink their inherited concepts of global order.

China's economic performance clearly is no flash in the pan. Its growth this decade has averaged more than 10 percent a year and is still going strong in the first half of 2008. Because its success in recent decades has not been export-led but driven by domestic demand, its rapid growth can continue well into the twenty-first century, unfettered by world market limitations. Nor do other problems China faces jeopardize long-term growth prospects.

China's problems are in fact consistent with more developed countries' challenges at earlier similar levels of economic modernization. China's future success will undoubtedly also draw on its own thirty years of policymaking experience—for example, investing in infrastructure, fighting inflation, shifting its labor force and opening to foreign trade and investment.

China's likely continued success will eventually bring an end to America's global economic preeminence, requiring strategic reassessment by all major economies—especially the United States, the European Union, Japan, and even China itself.

China's Increasingly Sophisticated Success

Maoist China bequeathed to future generations high literacy rates and decent public health but a makeshift economy horribly suited to market-based development. Its complex system of ration coupons, industry



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Keidel's Ph.D. in Economics is from Harvard University. He speaks and reads Mandarin Chinese. allocation schemes for physical goods, nonprofit command incentives, and bureaucratic bottlenecks for even the most basic transactions strangled its economic potential.

Since then, China has gone through four phases of economic change. First, in the 1980s, China distributed land and animals to farmers, set up the shell of a modern economic management system, and created small privileged coastal zones to nurture global commerce and finance. The decade ended in protest and violence at Tiananmen Square, as market-driven price inflation helped farmers but hurt urban residents by reducing the purchasing power of their subsidized incomes.

Second, in the 1990s, strengthened profit incentives and modern management reforms energized an increasingly privatized corporate system. Business cost concerns in the face of newly market-based wages led to tens of millions of urban worker layoffs from overstaffed enterprises. Controlled food prices helped make these reforms politically possible but increased rural poverty. Urban layoffs and rural hardship led to widespread social unrest, which the government met with a new system of urban social safety nets, inadequate rural compensation efforts, well-funded police interventions, and the arrest of ringleaders, violent protesters, and some corrupt officials.

Third, from 2001 through 2007, with basic market institutions in place, China's surging domestic investment and consumption and its entry into the World Trade Organization (WTO) stimulated average growth to more than 10 percent. Urban job growth and rural tax reforms finally began alleviating hardships inherited from the previous period. But this rapid growth also intensified pollution. As rural and urban incomes rose rapidly throughout the country, popular and political attention turned to social and environmental concerns.

China's fourth reform phase began in 2008. Its newly formed government, with junior leadership appointments meant to last for the next fifteen years, has restructured its ministries and agencies to address the latest concerns. Its new "scientific development" strategy—based on government and academic studies—has dethroned growth of gross domestic product (GDP) as its overriding policy goal. Instead, it promotes a more promising combination of economic growth and other important goals, especially environmental protection and social welfare.

China's Development Strategy: An Old Paradigm Revived

China's heavily managed reforms are in some respects at odds with Adam Smith's free market paradigm of economic success rooted in two principles, that less government is best and that policy makers should rely on the market's "invisible hand." Instead, Chinese theorists—like their nineteenth-century Japanese predecessors—root their strategy in the work of Friedrich List, a less well-known classical economist.

List insisted that policy must make the state an integral player in development. Such strategies include selective protectionism and promoting champion industries. They also describe nineteenth-century American economic policies. This intellectual approach conforms with the analysis of economic historians who conclude that countries pass through phases of institutional maturation linked to their level of development—which is perhaps best summarized by their level of per capita GDP.

Research indicates that China today is in a phase not unlike South Korea's in the 1970s or Japan's in the 1950s. China's future institutional development, including its political institutions, will thus likely mature in coming decades in ways consistent with its level of economic development—that is, only gradually.

Exports: Not China's Engine of Growth

Skeptics about China's growth prospects most frequently question the sustainability of its

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TABLE 1 Causes of China's Periods of Fast and Slow Growth, Showing Dissociation from Trade Patterns, 1978–2007										
PERIOD	GROWTH	CAUSES	TRADE AND EXPORT PATTERNS							
1978–1979	Fast	Post-Mao investment surge; price reform; war with Vietnam	Trade deficits; export growth weak							
1980–1982	Slow	Government budget and investment cuts to fight inflation	Deficit turned to surplus; export growth accelerated							
1983–1985	Fast	Farmland tenure reform; rapid money supply growth; negative real bank deposit rates; enterprise investment surge	Deficit increased dramatically; export growth slow; imports surged							
1985–1986	Slow	Government credit tightening to fight overheating; interest rates rose above inflation; banks' net new lending declined	Deficit shrank dramatically; exports surged; import growth weakened							
1987–1988	Fast	Overstimulation to restore growth; rapid money expansion; price reforms; inflation; interest rates set below inflation	Deficit increased; export growth slowed; import growth moderate							
1988–1990	Slow	Anti-inflation credit tightening started in 1988; money supply decline in early 1989; social unrest; credit tightening hardened by 1990	Trade surplus and exports both expanded dramatically; import growth mixed							
1991–1996	Fast	1989–1990 anti-inflation period officially ended; 1991 credit expansion; 1991 investment real growth jumped to 15 percent; 1991–1992 food price increases; ration coupons ended; 1994–1996 rural boom overpowered urban anti-inflation tightening	Surplus became deficit in 1991–1993; 1994 surplus contribution to growth was modest; export share in GDP declined 1995–1996							
1997–2000	Slow	Absolute declines in rural consumption overpowered urban safety net gains; increasingly severe government credit tightening after 1993 finally took hold; high interest rates and low or negative inflation; inventory declines; banks re-capitalized to cut corporate debt and bad loans	Surplus and exports increased in 1997; imports shrank 1997–1998; imports and exports recovered 1999–2000 as small surplus shrank; no trade impact from 1997–1998 Asian financial crisis							
2001–2003	Fast	Lower interest rates; 2001 bank lending surge; 2001 inventory jump; WTO accession stimulated investment in 2002; 2003 anti-SARS investment stimulus caused overheating; real investment growth rate up from 5 percent in 2000 to 17 percent in 2003	2001 surplus was zero; export share in GDP declined; 2001–2003 surplus share in GDP was negligible; in 2002–2003 both export and import growth were rapid for assembly and processing trade with little Chinese value added							
2004–2005	Pause	Government cooling-off policies cut 2005 domestic real demand growth from 10 to 8 percent; investment growth rate fell from 17 to 9 percent; grain price adjustments boosted rural consumption growth	Large surplus appeared as investment imports slowed significantly; rapid export growth rate little changed; 2005 surplus surge contributed 2.5 percentage points to 10.4 percent total GDP growth							
2006–2007	Fast	Inflation initially controlled; domestic demand real growth recovered to 10 percent; trade surplus contributed 2.6 percentage points to 11.9 percent total GDP growth; interior provinces, many with little trade, all had double-digit growth; inflation threat appeared in 2007 <i>Economic Fluctuations</i> (Washington, D.C.: Carnegie Endowment for Intern	Trade surpluses grew 35–40 percent, contributing just over one-fifth of 2007 total GDP growth of 11.9 percent							

Sources: Albert Keidel, China's Economic Fluctuations (Washington, D.C.: Carnegie Endowment for International Peace, 2007), www.CarnegieEndowment.org/Keidel; National Bureau of Statistics, People's Republic of China, China Statistical Abstract 2008 (in Chinese) (Beijing: National Bureau of Statistics, 2008), various tables, with supplemental calculations. export performance. In recent years, its exports and trade surplus have ballooned, leading to the common assumption that its growth is export-led and that limited global markets will curtail its expansion sooner rather than later. But this assumption is not supported by the data on the sources of Chinese growth, which are overwhelmingly domestic.

In fact, a detailed study of each of China's five macroeconomic booms and slowdowns since 1978 reveals that domestic shifts in investment and consumption have been responsible for China's growth (table 1). Even in recent years, the contributions to growth from the country's trade surplus have had secondary importance.

China's success will end America's global economic preeminence.

Moreover, though growth in Germany, Japan, South Korea, and other countries in recent decades has closely followed U.S. trends, China has run completely against the grain, surging as America has slowed and slumping as America has boomed. Because China has thus become an independent source of global growth, its imports will likely be an independent growth stimulus for others, securing its own long-term trade expansion and overall sustainable growth.

China's Currency Exchange Rate: A Secondary Influence at Best

Many critics contend that improper Chinese commercial practices have made its currency, the renminbi (RMB), cost too little in dollars, making all of China's exports to America unfairly inexpensive and hence artificially sustaining Chinese growth. The domestic origin of China's growth success undermines this line of thinking, but critics continue their arguments and interpret recent strengthening of the RMB in dollar terms as a sign that its value all along has been too low. By June 2008 the dollar cost of the RMB had risen nearly 19 percent compared to earlier in the decade, when its value was rigidly pegged to the dollar. But during this same period, the RMB's cost in terms of the euro, Europe's principal currency, had fallen sharply. As the dollar weakened and the euro strengthened, China's RMB shifts thus roughly split the difference between the currencies of its two major trading partners.

It is therefore a common error to refer only to "the RMB's appreciation," as if its link to the dollar were all that mattered. A better focus is China's global trade and its overall exchange-rate position, not just its trade and currency vis-à-vis the United States. This RMB global exchange-rate pattern is consistent with China's 2005 break with the RMB's peg to the dollar in favor of a more flexible exchange rate related to a basket of the currencies of its major trading partners. In retrospect, the euro's strengthening made such an RMB shift all but inevitable. Overall and in this most significant commercial sense, therefore, China's exchange rate has remained fairly stable.

But misalignment of China's currency exchange rate is, in any event, an unconvincing explanation for its trade surpluses, even though the argument is now less straightforward than earlier in the decade. Until recently and despite claims at the time that its currency was undervalued, China's world trade surplus was quite small. In 2003, Germany, Japan, and Europe's group of euro-currency countries each had individual global surpluses equivalent to roughly 20 percent of the total U.S. trade deficit, versus only 8 percent for China. By 2007, however, China's global trade surplus had increased dramatically, to 43 percent of the U.S. trade deficit, compared with 33 percent for Germany and 12 percent for Japan. What caused such a shift?

China's large surplus appeared suddenly in the second half of 2004 and had domestic economic—not exchange-rate—origins. More than a year before, in early 2003, China and its neighbors faced the Severe Acute Respiratory Syndrome (SARS) pandemic crisis. Fearing dramatic damage to economic growth from SARS, Beijing pumped cash into the economy. When the disease quickly subsided, China faced an inflationary overheating crisis, with investment levels and real estate prices soaring. Higher guaranteed grain prices in 2004 only added to the inflationary threat.

In response, Beijing dramatically tightened credit and curtailed investment. Through 2003, China's exports and imports had both been growing at the same rate, with no increase in the small surplus. But when Beijing's tightening policies slowed imports of investment goods by the second half of 2004, a large trade surplus opened up. China's export growth had not sped up; its import growth had slowed in response to domestic policies, not exchange rates (table 1).

More fundamentally, exchange-rate explanations for China's recent trade surplus ignore the asymmetry of its WTO accession. Investments in export production surged even before accession, while China's opening to imports was phased over many years and still has a long way to go to reach its full potential.

In fact, China's imports are once again increasing rapidly, especially those from the United States. In 2007, China became America's third-largest export market, after Canada and Mexico, buying more than \$65 billion in imports from the United States. U.S. exports to China are broad-based. In the seven years since China joined the WTO, 406 of the 435 U.S. congressional districts have seen triple-digit growth in exports to China. These national and local trends suggest good potential for further expansion.

At this point, therefore, it is not possible to say what the ultimate, balanced impact of China's WTO accession on its trade surplus will be several years hence. Compared to such powerful and rapidly shifting WTO accession influences, however, and further considering Chinese, U.S., and global GDP demand fluctuations, exchange-rate adjustments must at best have a secondary short- and mediumterm significance.

How Big Is China Now, and How Big Could It Become?

Conservative estimates are that China will overtake the United States as the largest economy in the world in thirty years' time. However, in 2007 China's commercially relevant GDP was barely more than \$3 trillion, compared with \$14 trillion for the United States. Hence, today, China's commercial GDP is less than one-fourth of America's.

An alternative purchasing power parity (PPP) measure—using survey-based price ratios to correct low labor-cost distortions—results in a China GDP figure roughly half of America's GDP, 2.4 times larger than China's GDP by commercial calculations (table 2). But this PPP GDP is only relevant for assessing China's standard of living; it says little if anything about China's commercial or military significance.

Despite this low starting point, if China's expansion is anywhere near as fast as the earlier expansion of other East Asian modernizers at a comparable stage of development, the power of compound growth rates means that China's economy will be larger than America's by midcentury—no matter how it is converted to dollars. Indeed, PPP valuation distinctions will diminish and eventually disappear.

Table 2 shows one conservative scenario. When Japan, South Korea, and Taiwan were at China's current level of per capita GDP of just over \$2,000 and growing to the \$10,000 level, they all sustained growth rates of between 8 and 10 percent. A long-standing principle of economic development (first deduced for economies in the nineteenth and twentieth centuries) is that the later an economy begins its "catch-up" modernization drive, the more rapid this drive will be. In keeping with this principle, China should grow more rapidly than Japan, South Korea, and Taiwan when they were at this stage. Thus, the projected growth rates for China in column 2 are, if anything, a little low. Conversely, the U.S. growth rates in column 1 may be too generous. With the exception of the near term (2005–2010), the U.S. assumption basically extends America's 1985–2005 average growth rate on into the century.

Even with these conservative assumptions, the results are striking. The world will be a very different place by midcentury. In terms of commercial exchange rate conversions to dollars, China's total economy will be twice as large as America's (columns 3 and 4), while its standard of living will be higher than America's is today though only two-thirds of America's at that time (columns 6 and 8).

Implications of China's Growth for Global Commerce and Institutions

A Chinese economy more than double the size of America's will almost certainly give China global commercial and institutional leadership. In commerce, China will take the lead in shaping trade and investment patterns. Fluctuations in its domestic demand will send ripples around the world, including in the United States. Market surveys will focus on China first. Its monetary policies will affect liquidity and interest rates everywhere. Its securities markets will be the world's largest and will heavily influence global standards for due diligence. Finally, its commercial and fiscal largesse will give it entrée to national capi-

TABLE 2 C.S. and China GDF Glowth Fotential, Twenty-First Century												
	1	2	3	4	5	6	7	8				
	Real Growth (annual percent)		Total GDP (trillion 2005 dollars ^a)			GDP per Person (thousand 2005 dollars ^a)						
YEAR	United States	China	United States	China (X-rate \$ª)	China (PPP \$ ^a)	United States	China (X-rate \$ª)	China (PPP \$ ^a)				
2005	3.0 ^b	9.6 ^b	12	2	5	41	1.7	4.1				
2010	2.0	9.5	14	4	8	43	2.9	6.1				
2020	3.0	8.5	18	10	18	52	6.9	12.7				
2030	3.0	7.5	24	22	35	64	15	24				
2040	3.0	6.5	33	45	63	78	30	42				
2050	3.0	5.5	44	82	104	95	53	67				
2060	3.0	4.3	59	131	152	116	83	96				
2070	3.0	3.0	80	178	199	142	109	123				
2080	3.0	3.0	107	244	262	174	146	159				
2090	3.0	3.0	144	335	348	214	197	208				
2100	3.0	3.0	194	466	466	262	271	271				

TABLE 2 . U.S. and China GDP Growth Potential, Twenty-First Century

 a. "2005 dollars" means future current-valued dollars—either domestic U.S. values or converted from current China RMB values by either commercial exchange rates (X-rate \$) or PPP conversion (PPP \$)—deflated to 2005 constant dollars with assumed future U.S. inflation rates.

b. Growth rate figures for 2005 represent historical 1985–2005 average real growth rates.

Note: All growth rates after 2005 are projected. PPP = purchasing power parity.

Sources: 1985-2005 GDP growth rates from IMF International Financial Statistics and China State Statistical Bureau 2008 Statistical Abstract of China (in Chinese); 2005 PPP values from World Bank ICP Report (2007 and 2008); projections from a computational model using author's assumptions about growth rates, GDP composition, and domestic relative price changes for each country.

tals in all hemispheres. Thus, China's financial clout will spill into every conceivable dimension of international relations.

Leadership of international institutions will gravitate toward China. This movement could include the equivalents at that time of the United Nations, the World Bank, the International Monetary Fund, regional international development banks, and more specialized bodies. Various headquarters could shift to Beijing and Shanghai. The United States will have an important secondary influence, like Europe, but it will need to compromise, and its sphere for unilateral action will be increasingly curtailed.

China's Future Military Potential

The military repercussions of China's rapid economic expansion are more difficult to gauge, but should it want to, China by later in the century could become a major—and possibly the leading—global military power. Whether it chooses to pursue this goal depends in part on the international environment thirty or more years from now. Today, while China's military resources are still a small fraction of America's, the United States has time to lead the development of a system of international institutions and coalitions in which America can prosper when it is no longer the world's largest economy.

China's relative military capabilities today are even weaker than indicated by estimates of its annual military budgets like those in the Pentagon's recent report to Congress on Chinese military power. Conservative estimates show the U.S. 2005 military budget was at least eight times China's. But another indicator of China's global military strength is not annual budgets but rather the dollar value of accumulated stocks of sophisticated weapons.

Over the past several decades, China's military expenditures were not only lower than America's, but its ability to produce or acquire sophisticated weapons was also significantly weaker. Conservative calculations of what China's accumulated weapons systems must have been worth in comparison to America's by 2005, based on historical budget data, procurement patterns, and obsolescence assumptions, give the United States the advantage by more than a trillion dollars—a ratio of as much as thirteen to one.

China could also become the world's leading military power.

These estimates of the U.S. military capability further ignore the value of the United States' bases around the world, especially those that are found near China in central Asia, Southeast Asia, Guam, Japan, and South Korea. China has no such system of bases or agreements.

The United States today thus enjoys substantial military advantages. It is not clear whether or how quickly China's future economic success can change this imbalance. America's more than a half-century of technological advances, especially in space, might prove an insurmountable advantage. But the near certainty of a midcentury Chinese economy more than twice the size of America's, driven by the economic and political trends described below, should persuade American policy makers to consider their options wisely.

Can China Sustain Its Growth?

The scenarios described above depend on China's continued rapid, large-scale economic growth. How likely is this? China's recent record shows a maturing, increasingly sophisticated decision-making system that is resultsoriented. China faces numerous challenges in sustaining its growth. But historical comparisons show that China's current and impending difficulties are consistent with the challenges faced and surmounted by other fast-growing Asian economies when they were at China's lower-income level of development.

Since 1978, China's economic booms all ended with inflation crises that triggered

sharp corrective slumps in its growth. As its economic booms lengthened, those crises also became more severe. Will this past pattern of increasingly severe economic crises repeat itself and prevent the growth projected in table 2?

A careful analysis suggests that the answer is probably no. China's earlier crises reflected policy makers' inexperienced management of adjustment problems that were more severe than what it now faces. The outbursts of serious inflation in 1988 and 1993–1994 both involved major increases in low Maoist-era farm prices originally meant to benefit urban residents. The resulting urban inflation required higher urban cash subsidies and cascaded through the economy. Moreover, in the 1980s and early 1990s, China relied heavily on statistical measures of growth and inflation that only compared a month or a quar-

China's policy makers have effectively managed cyclical ups and downs.

ter's data with the same period twelve months earlier. These so-called year-on-year data were a major handicap for making timely policy decisions, because they accumulated all the change over a year, rather than telling policy makers what had just happened.

Today, China's food price adjustments, though significant, are milder and more easily absorbed in urban citizens' higher average spending levels. Furthermore, since the late 1990s, policy makers have learned to use seasonally adjusted month-to-month data (even though they still continue to publish only year-on-year statistics). They are therefore aware, for example, that what looks like sustained inflation over the past year (2007–08) in fact represents only a few discontinuous months of price rises. Inflation in June 2008, despite higher fuel prices, should remain stable or even come down. This is an important advance in macroeconomic management. More fundamentally, even if some unexpected price surge does require cooling-off policies, China has shown itself able to cool off and then recover again or even maintain rapid growth—as after the SARS epidemic of 2003. Even earlier, in 1991 and 1999–2000, its policy shifts capably reinvigorated growth. Cyclical ups and downs are inevitable. China's policy makers have increasingly shown an ability to manage them, which should only become more effective in the future.

POVERTY AND GROWING INEQUALITY— SIGNS OF POLICY FAILURE?

Measures of inequality in China have increased dramatically since 1978, raising the possibility that dissatisfied groups left behind by its booming economy will eventually pose problems serious enough to derail its longterm growth. At the same time, however, poverty in China has been in rapid decline. This latter trend may be more significant than what could prove to be temporarily increased gaps between regions and social groups.

Comparing standards of living for different countries best relies on PPP conversions, but even at higher PPP values, minimally acceptable consumption standards in countries like China and India defy credulity for rich-country residents.

Nowhere in America do we find families living in unheated caves or huts, eating only home-grown grains and greens but almost no meat, with few sets of clothing and consuming almost no medical or other supplementary services to speak of. But poor-country governments and international institutions calculate "poverty lines" in order to identify just such conditions.

World experts, initially using Asian consumption levels and PPP costs, settled in the 1980s on one PPP dollar per day as a minimum consumption standard for international comparisons. By 2005, inflation had raised this to \$1.45 per day, but after reassessing local poverty standards, experts now prefer \$1.25 per day. A family of four's minimally acceptable annual spending is thus just \$1,825. Families living below this poverty line, of course, consume even less.

It is hard to overemphasize how poor China was 30 years ago. In the 1980s, China independently established its own standard to identify regions and families most in need of assistance. This made sense, because we now know that, at that time, more than 70 percent of its population, over 700 million people, lived below the recently revised "dollar-aday" standard. In 1985, 15 percent of China's population, or 125 million persons, lived below China's own near-starvation poverty line. Today, only 1.6 percent of the population is still below this line, while the population share below a "dollar-a-day" has dropped below 15 percent-to 200 million persons. Globally speaking, this is an extraordinary poverty reduction accomplishment. But the fact that a population equivalent to two-thirds of the whole United States still lives at such low standards of living is a sobering reminder of the development challenge China's leaders know they still face.

While poverty incidence has declined dramatically, inequality measures for China-gaps between regions, between city and countryside, and between social groups-have risen steeply. The widely used Gini coefficient, according to which 0.3 and 0.5 represent low and high inequality, respectively, has gone from 3.3 to 4.5 in just twenty years. The most basic explanation is that some groups and regions have been able to capitalize more quickly than others on opportunities from China's economic reforms and opening to world commerce. As benefits spread more widely, historical development experience indicates a period of growing inequality is often followed by a second period of declining inequality.

Regional inequality clearly increased between 1985 and 2005 as coastal areas in China with most of the trade, foreign investment and traditional financial centers outpaced the already lower-income interior. But all regions experienced more than twenty years of rapid income improvement averaging at least 6 percent a year. Such rapid gains everywhere markedly weaken the significance of the modest increase in interregional gaps. Census data indicate that interregional migration is heavily from poorer to richer areas, promising a gradual amelioration of such disparity trends.

China's rural–urban gap is statistically its most serious source of inequality. Yet the overall importance of the rural–urban gap has risen largely because of the rapid pace of rural-to-

Growing inequality in China reflects a successful dynamic of reforms and high rates of investment.

urban migration. A once heavily rural economy is now more evenly split between poor rural and wealthier urban populations. In other modernizing economies, measures of inequality have tended to peak when such urban migration is in midstream. Once a population's urban share becomes predominant and almost all families enjoy higher urban-style living standards, overall inequality usually declines. Urban migration in China has not yet reached the halfway point, but it will within a decade or so at current trends, and eventually this aspect of overall inequality can also be expected to decline. Indeed, urban migration is also the ultimate solution to rural poverty.

Inequality between different groups in Chinese society, inequality's third major component, reflects China's recent success in rewarding with higher incomes those individuals who get a better education, who work harder, who take entrepreneurial risks, and who voluntarily change jobs or locations to capitalize on more productive and hence better-paying opportunities. Older and less educated workers or those conditioned by an earlier subsidized and less demanding work regimen have fared poorly. With generational change, increased educational opportunities and continued speedy job creation through high investment rates, the gap between haves and have-nots in this dimension also promises eventually to moderate if not decline.

Unlike in other parts of the world where serious and worsening inequality is a sign of failing income-making opportunities, recently growing inequality in China reflects a successful dynamic of reforms and high rates of investment. Beginning from a poverty-stricken

Pollution is unlikely to undermine China's growth in coming decades.

condition, Chinese reforms have allowed those taking the most initiative to improve their lots more rapidly than others. Opportunities for individual upward mobility are thus a key ingredient in China's national upward mobility among the global family of nations.

This pro-development dynamic is a notable achievement, and recently increasing inequality in China can be considered a sign of policy success, not policy failure—although its effect on social stability requires monitoring.

SOCIAL UNREST—THE COMMUNIST PARTY'S ULTIMATE NIGHTMARE?

Social unrest in China has posed serious challenges for over twenty years. In most cases the underlying cause is some form of dissatisfaction over perceived economic injustices, frequently worsened by local corruption. Some of the clearest examples are the impact of inflation on student and urban resident subsidies in the 1980s, large-scale urban layoffs in the 1990s, low food prices and high rural taxes and fees at the turn of the century, and the combination of land confiscation and worsening pollution in this decade. In many cases the complaints of corruption and unfair treatment are legitimate, while in others they reflect disgruntled reactions to the impact of markets and competition on accustomed and often subsidized lifestyle expectations.

One of Beijing's greatest challenges in coming decades is to strengthen dramatically its capabilities for distinguishing different kinds of social unrest and handle each category of dissatisfaction or injustice in the most appropriate way. Its new "Scientific Development" strategy needs to apply significantly more resources for professionalized courts, more even-handed judicial proceedings, and local government oversight-by both central authorities and increasingly empowered nongovernmental civil society actors. These changes must include both more sophisticated and rules-based crowd-control capabilities and more adequate systems of compensation for legitimate grievances.

For a country with China's rapid pace of change, social unrest seems inevitable. China's new crop of leaders and its publicized focus on social welfare are promising indications that more flexible even-handed remedies will continue to strengthen broadly, although responses to temporary crises may lead to apparent setbacks.

POLLUTION: LIKELY TO CHOKE GROWTH?

Domestic pollution in China is a growing source of citizen dissatisfaction and public health concerns. With respect to air pollution, sixteen of the twenty most polluted cities in the world are in China. Whole urban water supply systems have been shut down by major chemical spills. In rural areas, industrial wastewater and chemical effluents have ruined croplands and sparked social unrest. This pollution reflects rapid industrialization and weak emissions controls. Is it bad enough to slow China's long-term growth?

The record for several other East Asian economies argues that pollution is unlikely to undermine China's growth in the coming decades. In particular, Japan, South Korea, and Taiwan all passed through similar periods of serious pollution associated with rapid industrialization. In these cases, policy responses were also delayed but eventually reduced pollution levels that in some dimensions were worse than China's today.

A 1977 report by the Organization for Economic Cooperation and Development called Japan in the late 1960s "one of the most polluted countries in the world." In Beijing by 2004, ambient sulfur dioxide levels had fallen rapidly from their peak in the mid-1990s and were already far below peak levels in Japan in the middle 1960s and even below levels in Seoul in the early 1990s. Levels of suspended particulate matter in Beijing by 2004 were already lower than those in Tokyo in the mid-1970s and Seoul in the mid-1990s-although the comparability of China's particle measurements is open to question. Nitrogen dioxide levels in Beijing, however, had by 2004 not yet reached Tokyo's and Seoul's levels in 1980 and 1985, respectively.

Other pollution challenges will likely be more difficult to fix. China has serious water shortages beginning north of the Yangtze River, where nearly half its population lives. It lags behind other countries in its income class in providing potable water. Heavy chemical pollution settled on lake bottoms will be expensive to neutralize—if it can be cleaned up at all.

Research covering a range of countries confirms a strong link between successful economic development and eventual reduction in three pollutants: sulfur dioxide, suspended particulate matter, and nitrogen dioxidealthough the link for nitrogen dioxide is the weakest of the three. Abatement of other pollutants has a less clear-cut relationship with successful development, especially ozone and carbon dioxide. Water quality, conversely, strongly improves in developing countries as per capita GDP increases. Such patterns of decreasing pollution have been the result of public demand, international pressures, pressure from nongovernmental organizations, and government policy shifts.

Shifts in China's environmental policies mirror those in Japan in the late 1960s and early 1970s. Japan's first environmental agency received de facto cabinet status in 1971. In 2008, the China Environmental Protection Agency, already ten years old, was given ministerial status.

For China, we can ask, will pollution stop growth or will growth eventually reduce pollution? Given the shifts already under way in China's environmental policies and the rapid year-by-year increase in available resources, the chances seem good that sooner or later higher incomes and greater public concern will win out, despite China's reluctance to strengthen democratic politics.

DOES THE STATE STIFLE ECONOMIC INITIATIVE AND PRODUCTIVITY GAINS?

Many critics claim that China's state-owned enterprises symbolize the intrinsic inefficiencies of what they say is still a "socialist" system. But one of the clearest results of China's market-friendly reforms is the strength of its corporate and individual profit incentives.

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After 25 years of these reforms, beginning with the competitive recruitment of factory managers in 1983, profit-making enterprises now dominate China's economy. Even the largest state-controlled corporations have modern, for-profit structures and reward management accordingly. Small and medium-sized state enterprises have all been sold outright to their managers, workers, and outside investors. Small-scale enterprises, now universally privatized, reward entrepreneurial risk taking, in both cities and the countryside.

Other reforms have complemented these profit-seeking incentives. The commune land reform of the 1980s awarded land rights and revenues directly to household farmers. Price reforms in the 1980s and 1990s raised prices and wages for scarce goods and skills. The privatization of housing in the late 1990s spawned a market-based renovation scramble to maintain home values.

Incentive reforms have also powerfully affected China's international commerce. China encouraged early improvements in the business climate for foreign investment that Japan and South Korea never allowed. And its WTO membership provides incentives for foreign technology transfers.

In just a few decades, China's economy has become a multi-tiered moneymaking machine.

CHINA'S FINANCIAL SYSTEM— AN INSOLVENT THREAT TO STABILITY?

Some of the fiercest criticism of China's economy is leveled at its financial sector, calling its banks insolvent, its bond markets pathetic, and its overall performance inefficient. Yet,

Corruption will abate as per-capita incomes rise.

while enjoying the full financial backing given to major state-owned institutions, China's financial sector also outperforms India's in promoting GDP growth. During the past fifteen years, China has needed less additional investment for additional GDP output than India, even though India has a more marketoriented financial system, a lower and hence less demanding growth rate to sustain, and a services economy that is less capital-intensive than China's. How can this be?

China's taxation system is reforming rapidly, and its revenues from increasingly diversified sources are growing quickly. But even these growing public revenues and their public debt-servicing capabilities will remain inadequate for China's large public investment needs for a long time—indeed, for decades.

Instead, the strength of Chinese finance is a bank-based system for supplementing the budget resources needed for public investmentsespecially in infrastructure like roads, ports, water supply, sanitation, and telecommunications. Government-set deposit interest rates are low—and sometimes even negative when inflation is taken into account. The government channels these low-cost funds through loans for crucial infrastructure projects that benefit growth and require rapid completion but have low—or uncertain—long-term financial returns.

Most poor countries fail to finance even minimally necessary infrastructure. China's solution resembles earlier similar schemes in Japan and the other rapidly developing East Asian countries. A premature dismantling of this financial system, as urged on China by foreign governments and financial interests, would probably present the greatest danger for its sustained economic development.

Other elements of the financial sector banks and capital markets—are still immature and urgently require decades of investment in human talent and regulatory rigor to meet international standards. In the meantime, companies and individuals are directly reinvesting their cash profits and savings in either their own businesses or those of close associates. This funding has become the single largest and at the same time the most market-oriented aspect of China's financial system.

China's financial system, rather than a liability, is on the whole a source of confidence in optimistic growth scenarios.

THE COMMUNIST PARTY AND CORRUPTION—AN ACHILLES' HEEL?

The role of the Communist Party is a special feature of China's governance. Critics describe it as a jealous, rigid opponent of participatory practices that resists the policy flexibility needed for modernization. But recent academic research has revealed a rapidly evolving, increasingly sophisticated body of party officials and intellectuals who have been largely freed from ideological blinders and are now seeking practical leadership solutions. The party continues to successfully recruit talented youth and professionals, and its reach into virtually every corner of Chinese life remains long and strong.

On the positive side, the Communist Party provides a second line of authority, parallel to government and corporate chains of command, which can strengthen policy coordination and operational stability. But it also represents a backdoor network with old-boy risks for the system's integrity. One of the most damaging consequences of this backdoor authority is corruption.

Many officially reported corruption cases involve not only government officials but also Communist Party secretaries at one level or another. News media and academic reports of corruption in China are full of egregious examples of official corruption that not only siphons off outrageous sums of money but also, and more seriously, results in deadly health care scandals and poisonous pollution disasters.

Is corruption in China serious enough to threaten the country's prospects for sustained high-speed growth in future decades? Expert opinion acknowledges that, although it is an issue, corruption has clearly not prevented rapid growth in the past and is unlikely to do so in the future. More objectively, the two most authoritative global surveys of corruption, by Transparency International and the World Bank, put China's level of corruption close to where it would be expected to be, given the country's level of development-far better than that of Indonesia, Thailand, the Philippines, or even Argentina; similar to or better than India's; but not as good as Poland's. In this framework, and given the vigor of China's reported prosecutions for corruption, its level of corruption will likely continue to abate as per-capita incomes rise.

Seen as an extension of the Communist Party, China's political system is for many the greatest barrier to sustained rapid economic expansion. Must China quickly introduce Western-style democracy based on direct popular elections as the only way to strengthen the checks, balances, and sensitivity to public demands required for governing a more affluent and politically vocal population? Or can it continue to evolve participatory institutions more gradually?

China is a corporate technocracy—no longer a one-man authoritarian system.

China no longer has a one-man authoritarian system. Its government now is perhaps best described as a corporate technocracy. Its direction is set by the Communist Party Central Committee, with its various leadership bureaus, standing committees, subcommittees, so-called leading groups, and commissions. The Central Committee appoints and supervises implementation by management, which is China's government administration—its president, premier, and cabinet (State Council).

The system has a high degree of overlap between party leadership and government. But leaders now have term limits and mandatory retirement ages. Leadership advancement appears to require reviews of candidates' abilities, performance (judged in part by opinion surveys), and political loyalties. The selection process for new leaders is reportedly increasingly based on consensus and compromise rather than one man's decisions.

Looking ahead, experiences in other countries indicate that China has a real chance of continuing its introduction of participatory governing mechanisms, including an eventually more broad-based system of elections. Other government regimes have gradually evolved from authoritarian arrangements to more participatory systems. The experiences of post–Francisco Franco Spain, post–Augusto Pinochet Chile, post–Park Chung-Hee South Korea, and post–Chiang Kai-shek Taiwan may be relevant. The decades-long evolution of Japan's Liberal Democratic Party is also often mentioned as offering potentially useful lessons.

In the span of history, many democratic governments, including Britain's and America's, began with a narrowly enfranchised source of authority and only gradually, and much later in their economic development, shared that authority more broadly. The United States only passed a definitive voting rights act in the 1960s. Of course, the Communist Party's

China's emergence reveals America's need for broad reforms.

complete political control in China is so unlike any stage in U.S. political evolution that potential parallels are tenuous at best. Indeed, China could conceivably slide into a paranoid mode of Party power conservation—leading to stagnation and instability. This appears not to be the current trend, however.

Is China's Communist Party at all interested in pursuing such a gradual devolution of its authority? A tantalizing but far from authoritative 2008 book by some faculty of the Communist Party School—once headed by China's current president, Hu Jintao—proposes just such a gradual process of democratic reform. It describes a decades-long process through midcentury. This pace, though seemingly slow, follows what economic historians describe as a consistent link between measures of economic development and the emergence of effective parliamentary systems. Its success is an objective worth encouraging.

POLICY RECOMMENDATIONS: Maximizing the Benefits of China's Rise

The likelihood that the overall size of China's economy will enable it commercially to be the largest on the globe by midcentury calls for a range of policy initiatives and even fundamental shifts in course for the United States and other major global actors:

- **Reforms in the United States:** China's rapid economic emergence in the coming decade will increasingly reveal America's need for broad reforms, especially in its public investment systems. China's legitimate challenge can motivate U.S. reform initiatives that would otherwise be difficult to achieve—such as for infrastructure, primary and secondary education, health care finance, and pensions.
- The benefits of broad-based engagement: China's meteoric growth over the last three decades and its likely continuation argue for intensified U.S. engagement with China over as broad a spectrum as possible. Along with its technical and commercial advantages for all parties, engagement serves at least three important functions. First, it more clearly transmits information to China about its alternative choices for solving social and political challenges. Second, it increases American appreciation for the complexity and depth of the problems China has to cope with as a lower-income country. Third, it reduces the risk that either side might misinterpret the other's behavior or intent as hostile.

The U.S.–China Strategic Economic Dialogue (SED), initiated by U.S. Treasury Secretary Henry Paulson and Chinese Vice Premier Wu Yi in 2006, has improved short-term communication on such issues as currency and product safety, while setting the stage for addressing longer-term challenges, like energy, climate change, and bilateral investment demands. Its potential for an even greater role is significant, even if semiannual meetings are replaced with annual meetings.

- An "SED Club" Combining China's SED relationships: China has developed three additional SED relationships, with Japan, the European Union, and the United Kingdom. The United States should propose that Chinese and foreign counterparts in all four SED relationships meet together to discuss global economic and financial developments of common interest. This four-country "SED Club" would be smaller yet potentially more useful than less representative or at times more unwieldy gatherings such as the Group of Seven finance ministers' meetings and the Asia-Pacific Economic Cooperation forum.
- The payoff from engagement with autocratic regimes: Contrary to popular understanding, China did not "open itself" to reforms and global commerce in the 1970s. Rather, the United States, which had "closed" China during the Korean War, decided under President Richard Nixon to engage the highly autocratic authorities in Beijing. It might thus be more accurate to say that the United States and China both contributed to "opening" China. The subsequent benefits are obvious, including the evolution of China's more sophisticated and decreasingly autocratic economic and political structures. This experience argues for considering the replacement of blanket U.S. sanctions against other countries

with broad-based engagement, keeping an eye on potential benefits several decades hence.

- Modes for promoting poor-country development: China's remarkable economic achievements since 1978 suggest new alternatives for reversing the economic failure of many poor countries around the world. Policy makers and social scientists should focus on exploring the potential lessons of China's development success. At a minimum such lessons could form an essential supplement, not necessarily an alternative, to the "Washington consensus" on economic development.
- Adjustments to long-term plans for global security cooperation: China's military capacity is now relatively quite weak and will remain so for some time. The United States therefore still has time to prepare for the longer term, when China's potentially much-enhanced military capabilities could make China globally competitive and eventually even the world's leader. The United States should not wait until it is too late to shape the character of broad-based security arrangements around the world that can best serve its national interests in what will likely be very different circumstances after 2050.

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RESOURCES

Visit www.CarnegieEndowment.org/pubs for these and other publications.

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