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Capitalism & democracy in 2040

What, if any anything, can economic and demographic forecasts tell us about the prospects for capitalism and democracy around the world?[1] To help answer that question, I divided the world into groups based on economic output, tabulated population and gross domestic product (GDP) in 2000, and then forecast population and GDP for 2040. The population forecasts are those of the United Nations. The economic forecasts are mine, but were influenced by the forecasts of the CIA and *The Economist*.

In the year 2000, as Table 1 shows, six groupings of countries dominated the global economy: the United States, the European Union (which then consisted of fifteen countries [EU15]), India, China, Japan, and a group of six Southeast and East Asian countries (Singapore, Malaysia, Indonesia, Thailand, South Korea, and Taiwan [SE6]). As measured by GDP, these six groupings accounted for 73 percent of the world's economic output and 57 percent of the global population. The balance of the world (including Latin America, Africa, and Eastern Europe) accounted for about 28 percent of GDP and 42 percent of the global population.

Although political power is difficult to define, the United States, at least according to its advanced military technology and its ability to project its military might anywhere, obviously ranks first. The EU15 also has great wealth and advanced military technology. The number of active troops in the armies of the EU15 nations is collectively slightly higher than that of the United States; and although their annual defense budgets, taken together, are only a third of that of the United States, they have nearly as many fighter aircraft as, and more tanks than, the United States does. Perhaps the biggest gap is in hard assets: the EU15 is

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1 A fully annotated version of this essay is available on http://ironwood.cpe.uchicago.edu/publications/publication_list.php?query_type=list.

Table 1
The Global Distribution of Gross Domestic Product (GDP) in 2000, by Grouping of Nations

Grouping	Population (in millions)	Percent of total	GDP in billions of dollars (PPP)	Percent of total
United States	282	5	9,601	22
EU15[a]	378	6	9,264	21
India	1,003	16	2,375	5
China	1,369	22	4,951	11
Japan	127	2	3,456	8
SE6[b]	381	6	2,552	6
Subtotals	3,540	57	32,199	73
Rest of the World	2,546	42	12,307	28
World	6,086	99*	44,506	101*

* Totals do not equal 100 percent due to rounding.
a The fifteen countries that comprised the European Union in 2000.
b A group of six Southeast and East Asian countries: Singapore, Malaysia, Indonesia, Thailand, South Korea, and Taiwan.

far behind the United States in aircraft carriers, missile cruisers, destroyers, and submarines.

It is noteworthy that the United States and the European nations that control these military resources generally have freely elected representative governments, and constitutions that guarantee basic human rights. Ever since World War II, the countries that have dominated the world economy have shared a broad commitment to liberal and democratic values.

Table 2 presents the forecasts for 2040. To my mind, the most striking feature of Table 2 is the relative decline in economic power of the EU15, implied by its stagnant population and its modest growth in GDP. This is unsettling, not least because of the central political role that Europe, along with the United States, has long played in promoting open societies.

Although the EU15 population in 2000 exceeded that of the United States by about a third, by 2040 the EU15 population will be somewhat smaller than that of the United States. The projected stagnation of the EU15 population is based primarily on the persistence of extremely low fertility rates. The *total fertility rate* (roughly the average number of children a woman is expected to have during the course of her childbearing years) has fallen far below the level required for the reproduction of the population (2.1 children) in most EU15 countries, and has been that way for several decades.

One implication of the low fertility rate is that the population of the EU15 is aging rapidly. In the year 2000, the

Table 2
The Global Distribution of Gross Domestic Product (GDP) in 2040, by Grouping of Nations

Grouping	Population (in millions)	Percent of total	GDP in billions of dollars (PPP)	Percent of total
United States	392	5	41,944	14
EU15[a]	376	4	15,040	5
India	1,522	17	36,528	12
China	1,455	17	123,675	40
Japan	108	1	5,292	2
SE6[b]	516	6	35,604	12
Subtotals	4,369	50	258,083	85
Rest of the World	4,332	50	49,774	16
World	8,701	100	307,857	101*

Note: GDP in U.S. dollars of 2000.
* Total does not equal 100 percent due to rounding.
a The fifteen countries that comprised the European Union in 2000.
b A group of six Southeast and East Asian countries: Singapore, Malaysia, Indonesia, Thailand, South Korea, and Taiwan.

median age in Italy and Germany, for example, was about forty, which is a decade higher than in China and half a decade higher than in the United States. By 2040, the median age in Italy and Germany is predicted to be about fifty. This rapid aging of many EU15 countries means that their *dependency ratios* (the ratio of economically inactive to economically active persons) will soar. These demographic factors will, by themselves, significantly curtail the capacity for economic growth.

However, political and cultural factors appear to be reinforcing the impediments to economic growth. These include limitations on the length of the workweek and increasingly heavy taxes on businesses to support large social-welfare programs (which are nevertheless facing bankruptcy). These measures are threatening to make EU15 firms uncompetitive in the global market.

I do not mean to imply that labor productivity and per-capita income in the EU15 will not grow. They will grow at a rate that by past standards was not bad (about 1.8 percent per annum), but they will not be able to match the surge in growth that will prevail in Asia (see Table 3). The European market will be about 60 percent larger in 2040 than it was in 2000. But the U.S. market will be over 300 percent larger, India's will be over 1,400 percent larger, and China's will be 2,400 percent larger. Indeed, the Chinese market in 2040 by itself will probably be larger than the combined markets of the United States, the EU15, India, and Japan. It may well be the case

Table 3
Annual Rates of Growth, 2000 – 2040

Grouping	Population (percent)	GDP (percent)	GDP per capita (percent)
United States	0.8	3.8	2.8
EU15[a]	0.0	1.2	1.2
India	1.0	7.1	6.0
China	0.2	8.4	8.0
Japan	-0.4	1.1	1.5
SE6[b]	0.8	6.8	6.0
Subtotals	0.5	5.3	4.8
Rest of the World	1.3	3.6	2.2
World	0.9	5.0	4.0

a The fifteen countries that comprised the European Union in 2000.
b A group of six Southeast and East Asian countries: Singapore, Malaysia, Indonesia, Thailand, South Korea, and Taiwan.

that English will survive as the principal commercial language until 2040, but I suspect that there will be an explosion of business managers in the West who speak Mandarin.

To many, the most provocative aspect of Table 2 is the forecast that, in 2040, the Chinese economy will reach $123 trillion, or nearly three times the output of the entire globe in the year 2000. Moreover, the per-capita income of China will reach $85,000, more than twice the forecasted per-capita income of the EU15, and also much higher than India's or Japan's. In other words, China is predicted to go from a poor country in 2000 to a superrich country in 2040, although it will not have overtaken the United States. The basis for so optimistic a view of the course of the Chinese economy needs to be elucidated, with attention paid to both economic and political issues.

When analyzing the constraints on Chinese economic growth, I have found it useful to divide the economy into three sectors: agriculture, services, and industry. Over the quarter century between 1978 and 2003, the growth of labor productivity has been high in each of these sectors, averaging about 6 percent per annum. At the national level, output per worker grew by 9 percent. That is because the level of output per worker was much higher in industry and services than in agriculture. Hence, by shifting workers from agriculture – where the bulk of labor was concentrated – to industry or services, the economy obtained an additional boost. This interindustry shift added 3 percentage points to the annual national growth rate. I expect interindustry shifts to continue to affect China's economic growth over the next generation.

In addition, a more important factor in sustaining China's high growth rate will be the enhancement of the quality of labor by education. China has invested heavily in rapidly expanding enrollment ratios in both secondary and tertiary education. As I have reported elsewhere, U.S. data indicate that college-educated workers are 3 times as productive, and a high-school graduate 1.8 times as productive, as a worker with less than a ninth-grade education. Thus, increasing the enrollment ratio in high school to 100 percent and in college to 50 percent over the next generation would, by itself, add over 6 percentage points to the annual growth rate.

These targets for higher education are not out of reach. One should remember that as recently as 1980, the Western European nations had tertiary enrollment ratios of about 25 percent. Only the United States had tertiary enrollment ratios above 50 percent. The movement to ratios of 50 percent in Western Europe was a product of the last two decades of the twentieth century. In the case of the United Kingdom, two-thirds of the increase from 19 to 52 percent took place between 1990 and 1997.

The significance of investment in human capital as an engine of economic growth has not eluded the State Council. In 1998, Jiang Zemin called for a massive increase in enrollments in higher education. The response was swift: over the next four years enrollment in higher education increased by 165 percent (from 3.4 million to 9.0 million), and the number of students studying abroad also rose by 152 percent. Since the tertiary enrollment ratio increased by about 50 percent between 2000 and 2004 (from 12.5 to 19.0 percent), my projection for 2040 is not overly optimistic.

So far I have focused purely on economic issues. Some analysts argue that political instability is a serious impediment to China's ability to maintain high rates of economic growth. They have outlined several scenarios in which political factors could thwart economic goals. Some of these scenarios begin with an economic breakdown brought on by a sharp cyclical downturn that would raise unemployment and undermine a precarious social stability. Others warn that the financial problems and inefficiencies of the state-owned enterprises (SOEs) have brought on a growing social unrest. These problems have not only led to rising urban unemployment but have also resulted in the failure to pay promised wages, pensions, health-care allowances, and housing allowances. Still others warn of an impending collapse in the banking system, which is beset by a huge burden of nonperforming loans, a breakdown that could undermine the microeconomic stability of the economy.

When speculating about the future, the range of possible scenarios is virtually unlimited. The point at issue is not what might occur, but what is likely to occur. Moreover, many of the problems singled out are of long standing, such as the inefficiency of many SOEs. While these SOEs may be a drag on the economy, China has nevertheless been able to grow at over 8 percent per capita for more than a quarter of a century. The idea that these inefficient firms will suddenly go bankrupt is far-fetched. The policy of China's State Council has been to phase them out gradually or to reorganize them on a profitable basis so as not to increase unemployment sharply. Not only does the Chinese government have the finances needed to continue subsidizing inefficient firms if it chooses to do so for economic or political reasons, but also the burden of these subsidies will progressively diminish as the share of the industrial output supplied by these underperforming SOEs steadily declines and the burden of a given level of subsidies rapidly diminishes with the economy growing so quickly.

Although China's top leaders disagree about points of economic policy, the proposition that China should continue to transform itself into a market economy is no longer at issue. Nor do they disagree over the policy of promoting increasing autonomy in economic decisions as a lever of rapid economic growth. As many analysts have pointed out, the government is unified around a policy called "market-preserving federalism." This Chinese form of federalism limits the central government's control over economic decision making, promotes creative competition among local governments, constrains rent seeking, and provides an array of incentives to induce innovative local enterprises. This type of federalism is also apparent in the design of the tax system, "fiscal federalism," which aims to prevent taxation from stifling economic growth. In the tax reform of 1994, the central government limited its primary administration to VAT and taxes on centrally owned enterprises. It also set up local tax bureaus under the direction of local governments to supervise income taxes.

While much remains to be done in the design of the fiscal system, especially with respect to narrowing regional inequalities, these issues are on the leadership's agenda of needed reforms. The central leadership is also aware of the danger that local autonomy may move in counterproductive ways that promote rent seeking, moral hazard, and other forms of corruption, and that it must monitor performance and penalize corruption where possible. The successful unfolding of autonomy requires a center strong enough to integrate national and local goals, to discipline local authorities whose corrupt practices threaten the progress of reform, and to provide rewards to those who advance it.

Some analysts argue that unless China permits competing political parties, powerful pressures will build up between the provinces and the center that will undermine political stability and thwart continued high rates of economic growth. Others caution that the unsolved inequalities have also built up pressures at the grassroots that threaten to become unmanageable. Additional issues stressed by analysts include mounting environmental hazards, lagging development of public-health programs, and endemic corruption.

The difficulty with these arguments is that they assume that the leaders of the Chinese Communist Party (CCP) and the State Council are unaware of these problems. The leaders are quite well aware that the successes of their growth policies have weakened the central government's control over daily life and access to information. Indeed, their reforms were meant to promote creativity at the local level by fostering local initiative, and to facilitate new ideas and technologies by encouraging the entry of global firms into the Chinese market. Moreover, the leaders of the CCP encourage critiques of current policies that hamper economic growth, although they prohibit competitive political parties. Debates over governmental policies at all levels are as vigorous and wide-ranging at the meetings of the Chinese Economists Society as they are at the American Economic Association.

The leaders of the CCP have responded to changing economic and social conditions by modifying the central goal of the CCP and by co-opting the elites who are at the forefront of China's economic and social transformation. The slogan of the CCP, "Three Represents," introduced by Jiang Zemin in the spring of 2000 to replace the slogan of "Three Revolutionary Classes" (peasants, workers, and soldiers), reflects this process of adaptation. Zemin's slogan portrayed the CCP as: (1) the embodiment of society's most advanced productive forces; (2) the promoter of an advanced culture; and (3) representing the needs and interests of the great majority of the Chinese population.

To extend its connections with the elites who are bringing about the transformation of China, the CCP encouraged the formation of a wide array of new business and professional societies with strong ties to the state. It also transformed the membership of the CCP, bringing into its fold the technocratic leaders of business, social, and intellectual life. During the two decades following 1982, the proportion of the Central Committee members holding college degrees increased from a little over half to nearly 99 percent.

The Sixteenth Congress of the CCP, which met in November 2002, made provincial leaders the most prominent group in the Politburo, representing 42 percent of its membership. By contrast, the military represented only 8 percent of the Politburo, and central-party institutions accounted for 25 percent. The balance of the Politburo membership came from Shanghai political circles or from institutions other than provincial leaderships or central-government institutions. Given the dominant role of provincial leaders in the shaping of national policy, it makes little sense to dwell on the possibility of a conflict between the national and provincial leaders, especially when many of the central leaders came from provincial posts.

Other analysts argue that leaders of the CCP and the State Council are out of touch with public opinion. However, the weight of evidence contradicts that view. Since the late 1980s, local and provincial governments have been using polling techniques to determine public opinion on an array of economic and social issues. Academic critics of government policies abound, and interactions between these critics and top government leaders are numerous. The range of problems raised by respondents to surveys mirrors the complaints of academic critics and foreign analysts, including widespread corruption, increasing inequality, persistent unemployment, burdensome taxes, and unpaid pensions. Nevertheless, the polls also reveal majority support for the central government and overwhelming belief that the courts, the press, and government institutions will be responsive to their grievances.

Popular confidence in the government reflects the widespread belief among the Chinese that their living conditions have improved (67 percent better, 12 percent worse, 20 percent no change). The level of confidence about whether living conditions will continue to improve is similar. According to another poll, optimism about the future is slightly higher in rural areas (75 percent) than in the cities (68 percent). Hence, it is not surprising that political reform is quite limited, although there is an expectation that the government will gradually improve legal and governmental institutions. This generally favorable view of government is a result of not only the pragmatic responses of leaders at all levels of government to grievances, but also the frequent intervention of the central government with local officials when they are too slow to respond to complaints. It also reflects the rapid increases in income experienced by the great majority of households for more than a quarter of a century.

This combination of widely shared economic advances and governmental attention to public opinion, especially with respect to grievances, is a formula for continued political stability. One indication of the stability of the regime and the self-confidence of its leaders is its successful bid for the 2008 Olympic Games. Another is its encouragement of Chinese students to enroll in American and European universities. The gradual loosening of constraints on expression in China is likely to continue over the next several decades. Whether or not these developments lead to a multiparty system of the American type remains to be seen. However, the government's responsiveness to popular concerns indicates that political stability is likely to remain at the level required for continued long-term economic growth.

In the case of India, it is not only necessary to explain why I am so optimistic about its economic future, but also why I am more optimistic about Chinese economic growth than Indian economic growth. Although India's per-capita income has been growing at quite high rates by global standards – about 6 percent per annum (7 percent since 1996) – its growth rate has been a third less than the Chinese rate. Constraints on Indian economic growth are still substantial.

Although India has an excellent system of higher education, which is capable of supplying the engineers, chemists, statisticians, and other professionals needed to run a modern economy, India lags substantially behind China, South Korea, and other ASEAN countries in current educational achievement. Over 40 percent of the population is still illiterate, and gross secondary-school enrollment rates in 2002 were less than half of those of China. Enrollment in institutions of higher education has grown by 5 percent per year between 1980 and 2002. But this expansion rate is only half of that experienced by China over the same period.

Another problem for India is the low rate of growth of labor productivity in agriculture, which is about half that of China. Since about two-thirds of India's labor force is in agriculture, this problem hinders the growth of the overall economy in two ways. It slows down the rate of transfer of labor from agriculture to industry and services, where output per worker is much higher. Second, the culture of rural areas is less conducive to education than that of the urban areas. Hence, the high-school dropout rate in India's rural areas is quite high, especially when compared with China's.

The prospects for growth in India face political threats from three sources: unresolved religious tensions, especially between Hindus and Muslims; unresolved ethnic disputes; and unresolved pressures created by the caste system.

Sharp religious tensions prevail between the Hindu majority and the large minority of Muslims. These tensions periodically erupt into violent clashes, such as the 2002 riots in the state of Gujarat, which produced some two thousand deaths. Terrorist attacks are also related to disputes over Kashmir. In 2001, Kashmiri terrorists attacked the Indian parliament in New Delhi, killing a dozen people. In 2006, terrorists planted explosives on a train in West Bengal, killing five and injuring scores more.

The Indian caste system, which divides the population into a hereditary hierarchy that determines economic and social opportunities, has relaxed somewhat as a result of government policies. The government has also sought to offset the discrimination against lower castes with educational subsidies. However, the caste system remains rigid in rural areas and is propped up by parties that seek to represent themselves as the champions of the lower castes.

Nevertheless, India has so far contained the social, religious, and ethnic clashes that threaten to undermine the conditions for its economic growth. Moreover, the commitment of the leaders of both major parties to ease these divisions suggests that conditions for rapid economic growth will continue during the next generation.

Thus far I have dealt with political questions primarily as they bear on the potential for economic growth. However, Tables 1 and 2 indicate that the richer countries that were the chief bastions of liberal democracy during the second half of the twentieth century – the EU15, the United States, and Japan – will decline in relative importance by 2040. In 2000, these groups represented 51 percent of global GDP, but by 2040 their combined share is projected to decline to 21 percent. Most worrisome is the projected decline in the EU15 from 21 percent to just 5 percent of the global share of GDP. Given Western Europe's role during the past several centuries as the cradle of liberal democracy – exporting it to the New World, Oceania, and other continents – who will take up the slack during the next generation?

My answer is Asia. Liberal democracy is thriving in India and has become rooted in four of the SE6 (Taiwan, South Korea, Indonesia, and Singapore), although it is more fragile in Thailand and Malaysia. The United States is an influential Pacific power that is helping to promote liberal democracy throughout Asia and Oceania. On this account, the nations representing 45 percent of global GDP in 2040 – the United States, the EU15, India, Japan, and the SE6 – will be promoters of liberal democracy, in the six categories singled out by Tables 1 and 2.

However, Tables 1 and 2 were designed to point to economic trends, not trends in liberal democracy. Some of the most notable promoters of liberal democracy fall into the category I call 'Rest of the World.' Tables focused on trends in liberal democracy must include countries that are not yet global economic powerhouses, such as South Africa, Australia, New Zealand, Chile, Mexico, and Canada, among others.