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Evidence-Based Research on China

A Historical Imperative

Abstract: China has been undergoing a social transformation whose scope, rapidity, and significance in impact are unprecedented in human history. I present evidence pertaining to three most important social changes in China over the last 30–40 years: economic growth, increased educational attainment, and completion of a demographic transition. Many other important social changes have also taken place that merit the attention of social science researchers. Dramatic social changes in China present challenges as well as opportunities to social scientists today. We have a unique opportunity to document and preserve this portion of China’s social history. Thus, conducting evidence-based research on China is a historical imperative for present-day social scientists.

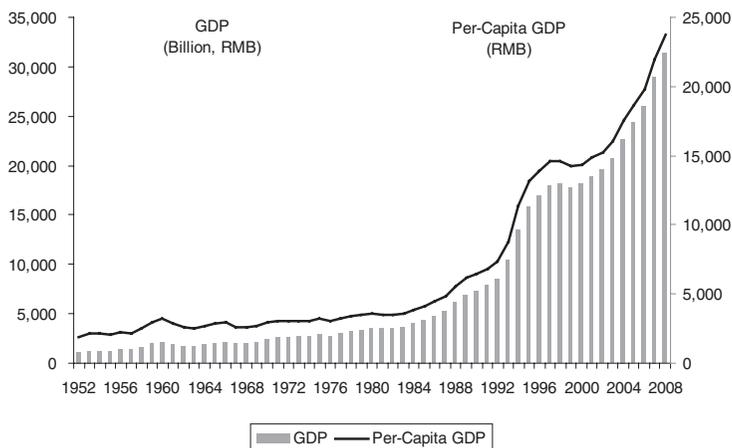
China has been undergoing a social transformation whose scope, rapidity, and significance in impact are unprecedented in human history. Not only has this transformation directly changed the lives of the 1.3 billion Chinese now living in China—the largest population in the world today—

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it has also affected numerous people living elsewhere, in developed as well as underdeveloped countries.¹ In my view, China's ongoing social transformation since the late twentieth century is no less consequential for the long-term course of world history than events commonly considered as historical watersheds, such as the Renaissance that began in fourteenth-century Italy, the Protestant Reformation in sixteenth-century Germany, or the Industrial Revolution in eighteenth-century Britain.

The rapid, large-scale, and irreversible social changes that have been occurring in China in recent decades are multifaceted. Hardly any aspect of Chinese life has remained unaffected. To illustrate the extent and rapidity of these changes, I can provide three concrete and highly important examples. First, Chinese economic output grew tremendously and continuously since the 1980s. Figure 1 shows the trends in total gross domestic product (GDP) and per-capita GDP between 1952 and 2010.² A sharp increase in the trends began after the initiation of the economic reform in 1978. The per-capita GDP increased, net of inflation, at an annualized growth rate of 6.7 percent per year between 1978 and 2008. Such massive, sustained, and rapid economic development overshadows what is often considered the golden industrialization phase in the United States between 1860 and 1930, when the annualized growth rate in per-capita GDP was only 1.5 percent per year, a mere fraction of what China recently experienced.³

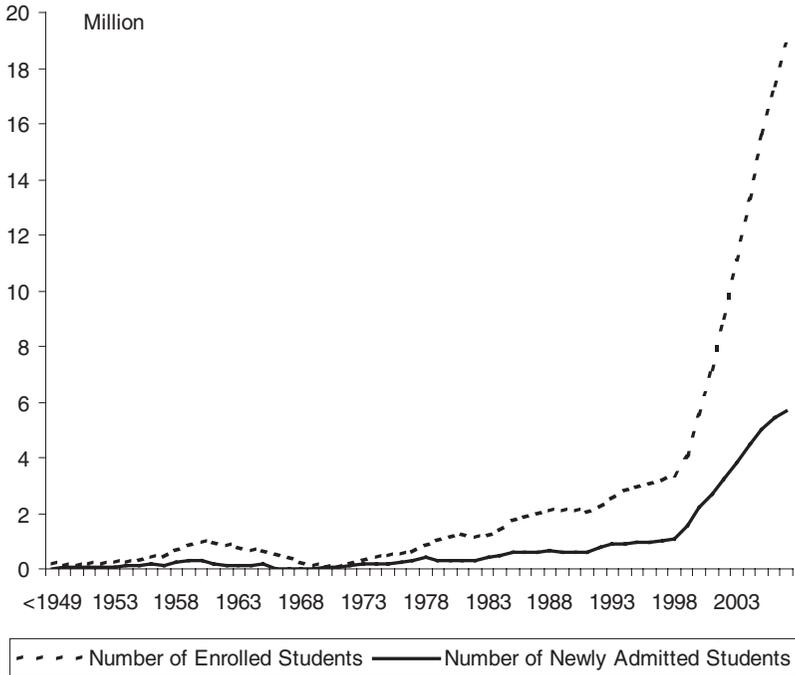
Second, China has become a much more educated nation. Improvement in recent years has been most dramatic at the postsecondary level. Figure 2 shows trends in the numbers of enrolled and newly admitted college students.⁴ While the figure shows a gradual increase in college enrollments over time—except for a downturn associated with the Cultural Revolution (1966–1976)—the sharpest takeoff began in the late 1990s. The rapid increase in the number of young Chinese receiving higher education is both a result and a cause of China's tremendous economic growth in recent decades.⁵ In 1982, only 0.8 percent of Chinese ages twenty-five to twenty-nine had attained postsecondary education. By 2005, this number had increased fifteen-fold to 12 percent.⁶ There are good indications that a much greater percentage of Chinese born in recent years will attain postsecondary education.⁷ This is an extraordinary educational expansion that may soon enable China to overtake the United States in the percentage of a cohort completing college education. By comparison, educational expansion in the United States took about 100 years between 1900 and 2000—a whole century known as both the “Human Capital Century” and the “American Century.”⁸

Figure 1. Trends in GDP and Per-Capita GDP, 1952–2008 (in 2008 RMB)

Source: National Bureau of Statistics (2010a, 2010b).

Note: Adjustment has been done for the data of 2005–2008, on the basis of the 2d Economic Census.

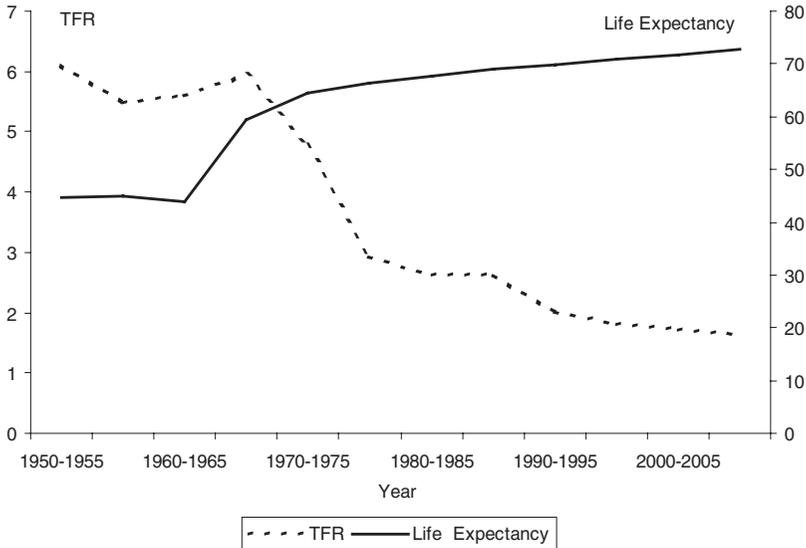
Third, China has clearly completed its demographic transition, from a high-fertility, high-mortality regime to a low-fertility, low-mortality regime. A demographic transition, experienced by all advanced societies, has important economic and social consequences, as it favors investment in human capital, which leads to economic growth.⁹ In Figure 3, I show Chinese long-term trends in total fertility rate (TFR) and life expectancy.¹⁰ TFR and life expectancy are composite measures of fertility and mortality within a synthetic cohort approach, the latter being a reverse measure.¹¹ We can easily observe a sharp decline in fertility since the late 1970s as well as a steady improvement in life expectancy since the 1950s. By 1990–1995, China had already completed its demographic transition, with TFR at 2.0, the replacement level, and life expectancy at seventy, comparable to levels in developed countries around 1970 but way ahead of other underdeveloped countries.¹² The decline in fertility was particularly drastic during the years 1965–1970 and 1990–1995, with TFR dropping by two-thirds in about twenty-five years, from 6 to the replacement level of 2. Of course, this rapid reduction in fertility resulted in large part from the government's strong and heavy-handed family-planning program.¹³ Given the very large population size of China, currently at 1.3 billion, the completion of a demographic transition in

Figure 2. Higher Education Expansion in China, 1949–2007

Source: *China Education Yearbook* Editorial Board (1984, 1986–1988, 1989–2008).

China means not only that many millions of Chinese lives have been saved, but also that a much larger number of potentially new Chinese have remained unborn. As a result of this demographic transition, China currently enjoys a “demographic bonus,” an age structure conducive to economic growth, with a small proportion of persons who are either too young or too old to work. However, population aging is likely to be a serious problem facing China in the near future.¹⁴

I consider changes in these three domains—economic growth, increased educational attainment, and completion of a demographic transition—the most important social changes in China over the last thirty to forty years. Of course, many other important social changes have also taken place that merit the attention of social science researchers. Notable additional changes include increasing social inequality, a rising divorce rate, the emergence and acceptance of premarital cohabitation, and massive migration patterns.¹⁵

Figure 3. Trends in Life Expectancy and TFR, 1950–2010

Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). *World Population Prospects: The 2010 Revision*, CD-ROM Edition.

We social scientists of the current generation are fortunate in being able to witness firsthand these social changes in China and to have opportunities to observe, document, analyze, and understand them as they occur. Of course, China is not changing in isolation, but increasingly within the context of global changes. Internet technology, inexpensive transportation, and an integrated global economy that crosses national boundaries have made China more and more an integral part of the world.¹⁶ Indeed, social changes in China are particularly interesting precisely because they have been occurring in tandem with globalization and thus both reflect social changes in the world as a whole and exhibit unusual characteristics due to China's unique political system, history, culture, and social structure.

While some social scientists may embrace certain theories as universally valid and believe that social research can be context-free, many of us have come to regard such grand theories as being of limited value, and to believe that the best social research tends to be context-specific. If social theories are best constructed within a social context, and social research is best conducted within a specific social context, the large-scale rapid

social changes in contemporary China that I previously documented are especially worth studying: they are unique to present-day China and as such are neither repetitions of social changes that have occurred elsewhere nor repeatable in China's own future. These changes can be understood as social phenomena only within the context of contemporary China, with its current political, economic, cultural, and social environments, and nowhere else. What is needed, therefore, are innovative frameworks, both theoretical and methodological, designed specifically for studying social phenomena in contemporary China. Blindly transporting U.S.-led Western social science to China is not only naive but doomed to fail.

Some readers might rightfully challenge this bold claim and ask, "In what ways is China significantly different from a Western country, such as the United States?" To fully support my claim would take much more space than this article allows, though I hope to do so in my future work. For now, let me highlight a few areas in which I think China *does* differ from a Western country such as the United States, in degree if not in kind:

(1) The government's role is very strong in China. Not only is this true at the national level, it is also true at all administrative levels, down to the community and work unit. I offer three reasons for this. First, the government declares its central role to be providing for the well-being of all its people and on this ideological basis lays authoritative claims to all key resources, including land, financial institutions, communication, transportation, education, energy, natural resources, and health.¹⁷ Second, the huge size of the state bureaucracy and control system enacted by it over many spheres, some of which are economic, have enabled the government's strong role. Finally, the tremendous growth of the Chinese economy in this overall environment in the recent past may have reinforced an image among many Chinese, including many Chinese officials, that a strong Chinese state indeed benefits Chinese people.

(2) Related to the above, the business sector and the government have formed a common alliance so that they share mutual interests. This is particularly pronounced at the local level. In the words of Jean C. Oi, "Local governments in China [are] fully fledged *economic* actors, not just administrative-service providers as they are in other countries."¹⁸ One important reason for this alliance is that local governments have vested interests in promoting local

economic interests so that they can provide welfare and public services to their populations.

(3) A long Chinese tradition of layered paternalism is well entrenched not only in families, kinship ties, and social networks, but also in work organizations and government agencies. By “paternalism” in this case I mean a hierarchical structure in which a person in a superior position not only exercises authority over his/her subordinates, but also commits to caring for their well-being. In the Confucian tradition, an ideal bureaucrat is a moral authority who can serve as the “father and the mother” of the people being governed. By “layered” I mean that this paternalistic administrative structure is multi-leveled and nested so that a middle-level administrator is likely to be caught between loyalty toward his/her superiors and responsibility toward his/her subordinates.¹⁹ This structure is maintained by an elaborate merit-based promotion system that has lasted from the Han period to the present. In light of this, the importance of *danwei* in affecting life chances in today’s China can be interpreted not just as a legacy from the communist era, but as a manifestation of this ancient, layered paternalism tradition.²⁰

(4) For the reasons given above, it is naive to think that the Chinese economy is necessarily moving toward a free-market (e.g., American) capitalistic model. In a free-market economy, economic actors, “rational agents,” are largely uncoordinated with each other, each freely pursuing his or her own personal interests. Thus, the law of supply and demand governs the relations among these independent agents through economic transactions. In China, such relations are heavily influenced by the government administratively through its monopolistic power over key resources and a social structure that emphasizes layered paternalism. As a result, much of China’s social inequality, which is high in terms of scale, results not from individuals’ attributes relating to their productivity, such as education and occupation, but from social boundaries that separate people into distinct categories, such as region, rural-urban divide, *danwei*, and social networks.²¹

If I have persuaded you that social changes in China are unique, so that they should be studied in their own right, does this mean that China’s exceptionalism is just an intellectual curiosity for social scientists that

has no broader implications? Definitely not, in my view. China has not only produced unique social changes that are worth studying in their own right, but, in doing so, has also created the potential to change the course of world history. For the last three centuries or so, the West has been leading the world, its ascendant path having commonly been described almost synonymously with words such as “modernization,” “development,” and “progress.” The two foundational pillars of the West are (1) democracy as the only legitimate political system and (2) the free market as the only viable economic system.

For the first time in the past three centuries, China is now presenting a serious challenge to the West as the only model for economic development. China does not have a democratic political system. Nor does it have a truly free market economic system. But its economy has been developing rapidly and steadily for more than thirty years. In contrast, Western economies, such as that in the United States, have been stagnating and faltering in recent years. Is it possible that China’s model is also a viable, perhaps even superior, path to development?

I have no answer to this question. Nor do I have an opinion on the issue. To me, this and many other questions are so interesting, so pressing, and so fundamental that they deserve our attention. To study them as social science inquiries, we must suspend our preconceptions about China, often grounded in projections of experiences from other countries or in mere theoretical speculations. The plain truth is that we social scientists, especially those living outside of China, know little about what is going on there, despite our research efforts. To understand China, we must understand it within its own context: its history, culture, politics, and economy. To understand China, we must approach our subject with an attitude of humility and base our research on empirical evidence rather than purely on imagination.

I hasten to add my observation that, like many other social entities in China, social science there is also changing rapidly. Over time, opinion-based, ideologically laden, and speculative discussions are gradually losing favor among Chinese social scientists as their research becomes more and more empirically based. This trend is not surprising. All three sectors—the public, the government, and the academic community—welcome high-quality, empirically based research, because such social research serves their interest. Like the rest of us, Chinese people do not fully understand what is going on in their country and thus have a practical need and a natural desire to understand those changes that affect them

most directly. Policymakers in China would also like to have more accurate information—that is, evidence—about China before they make policy decisions, which could then be more rationally based. Finally, China is a large and important country in the world. In all major areas, from the arts, sports, and finance, to natural science, technology, and world peace, China now is making significant contributions as a world player. We can also expect China to make increasingly significant contributions to social science in the future. Those contributions that are empirically based will be well appreciated by the social science community worldwide.

Dramatic social changes in China present challenges as well as opportunities to social scientists today. If we should fail to understand them, our knowledge about the social world would be terribly incomplete. It remains an open question whether contemporary social scientists will ever fully understand what has been happening in China today. At the least, however, we should not miss a golden opportunity to collect empirical information so that future generations of social scientists may be able to surpass our current understanding of today's China. We have a unique opportunity to document and preserve this portion of China's social history. Thus, conducting evidence-based research on China is a historical imperative for present-day social scientists.

Notes

1. The global impact of China's rise is discussed in two well-publicized books by journalists Kynge (2006) and Jacques (2010). As an example, Firebaugh (2003) has claimed that the economic boom in China is the main factor in narrowing world inequality between countries.

2. The data in Figure 1 are in 2008 RMB, adjusted for inflation. The data were calculated using data from the National Bureau of Statistics of China (2010a, 2010b).

3. Calculated based on data provided by Measuring Worth (2011).

4. The data are taken from China Education Yearbook Editorial Board (1984; 1986–1988; 1989–2008).

5. For a review of the role of education in China's economic growth, see Heckman (2005).

6. The 1982 number is based on data from the National Bureau of Statistics (1982). The 2005 number is based on data from the National Bureau of Statistics (2007).

7. Transition rates from each level of education to a higher level have been high in recent years. See Wu and Zhang (2010, table 1).

8. U.S. numbers are taken from Fischer and Hout (2006). See Goldin and Katz (2008) for characterizing the twentieth century as both the "Human Capital Century" and the "American Century."

9. See Lee (2003) for an explanation regarding the significance of demographic transitions.
10. The data are taken from United Nations (2011).
11. In a synthetic approach, we measure the cumulative outcome over the life course that would be experienced by a person who would follow age-specific profiles observed during a given period. The total fertility rate is the number of children a hypothetical woman would have if she followed the age-specific fertility rates for a given period. Life expectancy is the total life duration a hypothetical person would have if he/she followed the age-specific mortality rates for a given period.
12. Lee (2003, figure 1).
13. Peng (2011).
14. Peng (2011) provides an excellent discussion of China's current "demographic bonus" and the aging problems that are likely to occur there in the near future.
15. See Han (2004) and Xie (2010) for a discussion of inequality trends, Wang (2001) on divorce trends, Institute of Social Science Survey (2011) on cohabitation, and Liang (2001) and Peng (2011) on migration.
16. See Friedman (2005) for a vivid discussion of the new globalization trend and China's integral role in it.
17. For the historical roots of this Confucian ideology, see Xie and Brown (2011).
18. Oi (1995, 1137).
19. Xie and Brown (2011).
20. Xie, Lai, and Wu (2009), Wu (2009), Xie and Wu (2008), and Xie (2010). For the pre-reform era, see Walder (1986).
21. Bian (2002), Wang (2008), Wu and Treiman (2004), Xie (2010), Xie and Hannum (1996), and Xie and Wu (2008).

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