



A Comparative Survey of

DEMOCRACY, GOVERNANCE AND DEVELOPMENT

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Socioeconomic Changes and Modern Values in
China: 1993-2002

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Asian Barometer

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Socioeconomic Changes and Modern Values in China: 1993-2002

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ABSTRACT

In the last three decades Chinese society has seen social and economic transformations of gigantic scales. No studies, however, have systematically examined how this great drive toward modernity has changed people's values in China. An earlier article even found that urbanization, industrialization, and rising education are *not* bringing modern values to Chinese citizens. Examining two nationally representative datasets collected in 1993 and 2002, respectively, I found Chinese citizens benefiting from urbanization, rising levels of education, and employment in non-farm, knowledge-based industries display stronger modern values as loosely defined by the individual modernity and related paradigms. This study shows a clear relationship between socioeconomic development and value changes among Chinese citizens. With such value changes, pro-democratic citizens are emerging.

Under Review, *China Journal*

Socioeconomic Modernizations and Value Changes in China

China's emergence as a world economic house is a recent phenomenon. In the last thirty years it broke away from its ideological and institutional constraints imposed during the Maoist era, and gradually took the form of a "normal" developing society.¹ In this process, large-scale social changes have taken place. Generally speaking, these changes fit into the concepts and debates related to the so-called "modernization" or "human development" in social science. They are related to the various dimension of modernization or socioeconomic developments such as urbanization, spread of education, industrialization and post-industrialization. Between 1980 and the present, more and more people move to live in the cities, are receiving higher level of education, and leaving farming to work in manufacturing, managerial, and service jobs. These socioeconomic changes are still ongoing.²

According to past scholarships, such socioeconomic changes will lead to changes in people's values. The "individual modernity" paradigm, for example, argues that with industrialization, urbanization, and expansion of mass education, individuals will acquire certain values that are common across all "modern" societies.³ A "cultural shift" argument also believes that with sustained period of economic development, expanded immersion in urban lives, and affluence and material security will allow the growth of values different from those possessed by people living in underdeveloped economies and

¹ In many ways, China in the last 30 years broke away from the Maoist model and assumed more and more traits typical for any developing countries. For an socioeconomic argument, see Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: MIT Press, 2007).

² Urbanization, for example, will continue until close to 80 percent of Chinese live in urban areas. Public obtainment of education will continue to rise, to a level currently enjoyed by more advanced neighboring societies such as South Korea and Taiwan.

³ Alex Inkeles and David H. Smith, *Becoming Modern: Individual Change in Six Developing Countries* (Cambridge, MA: Harvard University Press, 1974).

societies.⁴ Furthermore, with a society's socioeconomic structure become post-industrialized, as the service and knowledge sectors claiming larger share, a new set of social values start to emerge, a process known as "postmodernization".⁵

Given socioeconomic changes of such big scales that have taken place in China,⁶ it is natural to assume concomitant value changes have also occurred in China since its early 1980s take-off. No nationwide survey data, however, have been employed to test the relevant theories of value changes, or to confirm that certain value changes are indeed taking places. To the extent something was indeed carried out, the finding was surprising. The forefather of the "individual modernity" paradigm, Inkeles and two colleagues surveyed a sample of 900 urban and rural residents in Tianjin and its suburb in 1990. They found the impacts of industrialization, urbanization, and education on Chinese people's modern values contradicted to the general "individual modernity" theory. Their data showed that those employed in industrial firms held *weaker* modern values comparing to rural farmers and workers of the township enterprises. Furthermore, among urban residents, more educated people also held weaker modern values than the less-educated.⁷

Using comprehensive survey data, in this paper I examine the so-called "modern values" as conceptualized by the "individual modernity" and "modernization" paradigms.

⁴ Ronald Inglehart, *Culture Shift in Advanced Industrial Society* (Princeton, NJ: Princeton University Press, 1990).

⁵ Daniel Bell, *The Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1976), Ronald Inglehart, *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies* (Princeton, NJ: Princeton University Press, 1997).

⁶ The people living in urban areas increased from roughly 15% of the whole population in the late 1970s to almost 35% around the year 2000, for example, more than doubling.

⁷ Alex Inkeles, C. Montgomery Broaded, and Zhongde Cao, "Causes and Consequences of Individual Modernity in China," *The China Journal*, no. 37 (1997). This finding has remained unchallenged since its publication in 1997. The authors seemed to have moved on to other topics and have not revisited their arguments. Another study grew out of that survey is C. Montgomery Broaded, Zhongde Cao, and Alex Inkeles, "Women, Men, and the Construction of Individual Modernity Scales in China," *Cross-Cultural Research* 28, no. 3 (1994). Attempts were made to contact correspondence author regarding the survey questionnaire and data, but with no success.

I study the value differences between rural and urban residents, and between people of different occupations and different levels of education in China. My study will present more representative data, with much larger sample sizes (3287 respondents in 1993 and 3752 in 2002) and covering the whole China.

I will first account for how the study of “individual modernity” and modern values has been applied in the China context. Next I present the “modern values” of Chinese citizens measured in 1993. The same task is then performed on a 2002 dataset. These two sections will give a clear picture of the changes in Chinese people’s values brought about by urbanization, industrialization, post-industrialization, and rising education levels. Regression analyses are then introduced to track down the relative importance of the different socioeconomic factors contributing to value differentiations. Lastly, I compare the responses in the 2002 survey with those in the 1993 one to present how urbanization, education, and generational replacement have resulted in the value changes at the societal level.

Modern Values, “Individual Modernity”, and China

The process of socioeconomic changes that often come with economic development, industrialization, urbanization, spread of education and information, and increased social complexities, is often referred to as modernization.⁸ Modernization and human development forcefully lead to changes in human values. Socioeconomic changes

⁸ The concept of “modernization” was most in fashion during the post-war era when Western scholars tried to understand economic development and social changes in the developing countries. For this cluster of scholarship, see for example, Myron Weiner, ed. *Modernization* (New York: Basic Books, 1966). In recent years this concept has lost a lot of currency, and scholars now approach economic, social and political changes using less wide-sweeping concepts.

such as economic development, industrialization, urbanization, spread of education and information, and increased social complexities result in a socioeconomic environment drastically different from the agrarian traditional society. Citizens socialized in such a modern environment assume very different values and attitudes comparing to people living in a traditional society.

Modernization seems to promote changes in values in several ways. First, modernization means economic development that brings material security and affluence to citizens. With material security and affluence, survival is taken for granted, and people are able to pursue psychological, social, and political needs. In terms of values, this means people emphasize material well-being less, but instead aspire to fulfill higher life needs, such as the ability to participate in decision making.⁹ A second way in which modernization brings value changes is through the structural changes in society, or social or functional differentiation . Urbanization, industrialization, and mass communication, for example, contribute to social and professional complexities, diversity and abundance of information, and human repeated interactions. Such a social environment leads to cognitive changes within individuals, who would more and more reject hierarchical power orientation, emphasize equal rights, inclusion, tolerance, and participation. Such impacts on individual's values and attitudes by a complex, pluralist, and dynamic social environment is difficult to measure, but such kind of social environment is drastically different from a rural society, in which simple social structures and social and economic life co-exist with simple cognitive structure of members of the society. Another example of complexity and differentiation in a modern social environment regards the role of mass communication: the penetration of modern media technologies (newspaper, television,

⁹ Ronald Inglehart, *The Silent Revolution: Changing Values and Political Styles among Western Publics* (Princeton, NJ: Princeton University Press, 1977).

and internet, for example) and institutions (prime time news program, talk shows, newspaper columns, etc.) bring massive amount of information to members of a society, shaping their attitudes and beliefs.

A third process in which modernization brings value changes is found in the role of education. Mass education is a modern institution. In a traditional society, literacy is restricted to a very small group of the members of the society, and education hardly plays any role in a people's life outside such a small educated elite. Mass education becomes imperative as a society modernizes: literacy is required for human beings to become human capital for the modern economy. The complex information in economic, social, and political spheres must be stored and transmitted in written languages, requiring active members of society to have literacy as well as strong cognitive, analytic, and communication abilities. Mass education serves these purposes, and the literacy rate of a society normally rises from less than 10 percent in the agrarian stage to close to 100 percent in a fully modern stage. Mass education contributes to democratic value changes in two distinctive ways. The first is cognitive: education gives members of a society the ability to consume and process information, make rational judgments in social and political affairs. Education also brings modern values such as responsibility, agency, equality, rights, dignity to members of society. Another way in which education contributes to value changes is sociological: education as a social institution helps place members of a society at different social positions. People with higher level of education are placed in social positions that require them to be more actively observing and participating in public affairs, resulting in their stronger commitment to democratic values such as equal rights, accountable government, and protection of the weaker

members of the society. People working in modern service sector, the “professionals” or “knowledge workers”, tend to obtain more liberalist outlooks.¹⁰

The “individual modernity” paradigm, which grew out of the study of developing countries, argued that modern experiences, such as schooling and participation in modern economic activities, help produce values and attitudes regardless of cultural backgrounds of a given society. Some of these “modern” values or attitudes include:

Taking an active role as a citizen (1);

Aspiring to advance oneself economically (2);

Stressing individual responsibility (3);

Freedom from absolute submission to received authority in family (4); and

Granting of more autonomy and rights to those of lesser status and power, such minority groups and women (5).¹¹

Similar efforts in theorizing value changes are offered by other scholars. The attitudes listed here may, for example, echo to concepts proposed by other studies such as (1) “civicness” (participating in public and civic affairs); (2) self-efficacy and entrepreneurship; (3) agency, (4) autonomy, and (5) tolerance (toward and inclusion of minorities or disliked groups). Inglehart’s “Postmaterialism” paradigm argues that individuals socialized in improved economic security are likely to disregard material interests but emphasize freedom of expression and individual autonomy.¹² The “civic

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¹¹ Inkeles and Smith, *Becoming Modern: Individual Change in Six Developing Countries.*, p. 109, as cited in Inkeles, Brooded, and Cao, "Causes and Consequences of Individual Modernity in China.", p. 33. Also see Alex Inkeles, "The Modernization of Man," in *Modernization*, ed. Myron Weiner (New York: Basic Books, 1966).

¹² Inglehart, *Culture Shift in Advanced Industrial Society*, ———, *The Silent Revolution: Changing Values and Political Styles among Western Publics.*

culture” paradigm argues that with economic development and modernization, citizens discard parochial culture and acquire self-efficacy and participatory outlooks.¹³

The “individual modernity” paradigm, however, never made a big way into the China study field. Cultural psychologist Yang Guoshu (Yang Kuo-Shu) tried to apply this paradigm in the study of modernism in Taiwan. But after 30 years of study he arrived at the conclusion that Western definition of traditionalism vs. modernism should give way to indigenously developed concepts.¹⁴ Yang did form an important intellectual legacy that greatly defined sociological researches in Taiwan. This is most evidently manifested in the strong attempts by the Taiwan Social Change Survey (TWSCS) run by the Institute of Sociology and Center for Survey Research of the Academia Sinica. This Survey has continued to measure value changes in Taiwan for almost thirty years by now, resulting in a large amount of data made available for public usage.¹⁵

In Mainland China, in the 1980s and 1990s, the Institute of Sociology of the Chinese Academy of Social Science (CASS) carried out a number of studies of values, but none of them systematically tested the “individual modernity” paradigm.¹⁶ In 2001, a top survey researcher in China, Conglin Shen of the Institute of Sociology of CASS presided over a large-scale survey. Based on a conceptual framework informed by Inkeles

¹³ Gabriel Abraham Almond and Sidney Verba, *The Civic Culture: Political Attitudes and Democracy in Five Nations* (Princeton, NJ: Princeton University Press, 1963).

¹⁴ One major realization of Yang after more than twenty years of research on individual modernity of Chinese (conducted in Taiwan) was that modernity and traditionalism may not be the two ends of a continuum, but rather two different dimensions; and that modern values may not be universally identical, but rather harbors tremendous diversities, and that the right approach to understanding modern values of a society should be an indigenous cultural psychological approach. See, Kwang-Kuo Hwang, "Critique of the Methodology of Empirical Research on Individual Modernity in Taiwan," *Asian Journal of Social Psychology* 6 (2003), Uichol Kim, Kuo-Shu Yang, and Kwang-Kuo Hwang, eds., *Indigenous and Cultural Psychology: Understanding People in Context* (New York: Springer, 2006).

¹⁵ <http://www.ios.sinica.edu.tw/sc/en/home2.php>

¹⁶ See Yiyin Yang, "Shehui Xinli Linyu De Jiazhi guan Xuyao [Reviewing Studies of Values in Social Psychology]," *Zhongguo Shehui Kexue [Social Sciences in China]*, no. 2 (1998).

and K. S. Yang's researches, it contained an 84-item individual modernity scale.¹⁷ The survey reputedly drew a sample of 6000 respondents. This would have been a very valuable dataset, as Shen's CASS research team enjoyed sufficient of financial resources, rigorous sampling techniques, and high quality of fieldwork. Analyses of the data would have produced very informative findings regarding the emergence of modern values among the Chinese public. No publication, however, seemed to have grown out of that study, and the dataset has never been made available to other researchers.¹⁸ Other social surveys in China, such as the China General Social Survey started in 2003 by Yanjie Bian of Hong Kong Science and Technology University and Lulu Li of Renmin University, has focused more on issues such as social stratification, social networks, and quality of life, and much less on social values,¹⁹ while surveys conducted by political sciences have mostly focused on democratic attitudes, political participation, and other issues.

Nonetheless, the issue of traditionalism vis-à-vis modernism in Inkeles's "individual modernity" lineage was picked up by a survey presided by political scientist Tianjian Shi and several Taiwanese scholars in 1993. It was a study conducted on the three Chinese societies of Mainland China, Taiwan, and Hong Kong. This study was later significantly expanded to cover seven East Asian societies, becoming the Asian Barometer survey that started in 2001.²⁰ Although predominantly focusing on citizens' political behaviors and beliefs, these two surveys both included a small battery on modern vis-à-vis traditional values.

¹⁷ Chonglin Shen, "A Brief Introduction to the Survey on the Social Change in Urban and Rural China," in *Japanese General Social Survey Symposium 2003* (Osaka University of Commerce2003).

¹⁸ There were probably some Chinese-language papers or book published that are not available to this author.

¹⁹ Yanjie Bian and Lulu Li, "China's General Social Survey 2003 (Cgss2003): A Methodological Report," in *Japanese General Social Survey Colloquium 2005* (Osaka University of Commerce2005).

²⁰ Hence the 1993 three-society survey was the prototype of the Asian Barometer that started in 2001. The Asian Barometer would conduct a second wave between 2005 and 2007, and a third wave is now planned for 2011. See www.asianbarometer.org.

Hence, we now have two datasets that covered a time span of almost ten years (1993 for the first survey and 2002 for the China part of the Asian Barometer survey) that include the traditional-modern value battery. Although these items are fewer than those in the original “individual modernity” battery, also fewer than used in Inkeles et al.’s 1990 Tianjin survey, they nevertheless provided sufficient data to examine the patterns of value changes in China as caused by, urbanization, industrialization, and rising education. The sections that follow will examine these changes using the 1993 and 2002 data, respectively.

Research Design

The empirical part of this paper consists of the following steps. First, I show that in 1993, Chinese public’s value orientations displayed patterns consistent with general theories of modernism. For this, I present figures of factor scores that show cross-sectional value differences, as well as t-test statistics that confirm the significances of such differences. Urban residency, higher level of education obtainment, and modern occupations all have positive impact on the rise of modern values as defined by the “individual modernity” paradigm. In this regard, Inkeles and colleague’s findings based on their 1992 data collected in Tianjin City and its suburb are largely negated by my findings from a larger and more comprehensive dataset.

Second, using the 2002 dataset, I introduce regression analyses to show value changes in China as affected by urbanization, education, and modern occupations. I will show, for example, whether those working in service jobs represent stronger modernist outlooks than those working as manual labor and those working in farming. If differences exist between people of different income level, how much of them could be accounted for

by the different levels of education people have? Such questions can be partly addressed using a multi-stage regression analysis.

At the third stage, I present comparison of the survey results between the 1993 and 2002 samples. This will show that within this time span of roughly ten years, changes occurred to a few value dimensions, but remained stable in some others. As such, we are led to the conclusion that with the impact of socioeconomic modernization, some value changes take place but some values and beliefs remain roughly stable. The changes of value and the persistence of certain traditional values seems to be both at work as a society experiences socioeconomic developments. To the extent that value changes do take place, the comparison of the 1993 and 2002 datasets shows that this takes place through largely three paths: by the increases in the population's education attainment, by increase in the urban proportion among the population, and by the coming of age of new generations. Whether we call this process "modernization" or not, it is clear that such changes in people's living environment and life styles result in changes in people's basic values.

The Datasets

The dataset of 1993 was a "Social Mobility and Social Change Survey" (SMSCS), which was conducted in September that year. It successfully interviewed 3,287 respondents from 551 villages or urban neighborhood committees across China, including about 67 percent rural *hukou* and 33 percent urban *hukou* respondents. This resulted from 3,425 scheduled interviews, arriving at a response rate of 94.5 percent. Fieldwork was conducted in collaboration with the Social Survey Research Center of the People's

University of China. A stratified multistage area sampling procedure with probabilities proportional to size measures (PPS) was employed.²¹

The 2002 dataset came from the China portion of the East Asian Barometer (EAB), a survey of values, political behaviors, and attitudes of citizens across societies in East Asia.²² The 2002 mainland China field work was carried out between March and August 2002, and resulted in a national representative sample of 3,154 across China. A stratified multi-staged random sampling method was used. The survey scheduled interviews with 3,752 people, and 3,154 of the prospective respondents contacted by interviewers answered our questions, for a response rate of 84.1 percent. The response rate for urban areas is lower than that for the rural areas. For urban area, the response rate is 82.5 percent and the response rate for rural area is 86.5 percent.²³

Modernizing Impacts on Values, 1993

The questionnaire of the 1993 survey included a battery of 11 items measuring modern vis-à-vis traditional values. I first used factor analysis to identify the different dimensions of value from the data. Through several rounds of exploratory factor analysis,

²¹ The fieldwork of the survey was closed in June 1994. The Primary Sampling Units (PSUs) employed in the sample design were counties (*xian*) in rural areas and cities (*shi*) in urban areas. The dataset is now available at “*The China Archive*” website maintained by the Texas A & M University:

<http://chinaarchive.tamu.edu/portal/site/chinaarchive>. For more information of this survey, see technical notes in Tianjian Shi, "Cultural Values and Democracy in the People's Republic of China," *The China Quarterly*, no. 162 (2000), ———, "Cultural Values and Political Trust: A Comparison of the People's Republic of China and Taiwan," *Comparative Politics* 33, no. 4 (2001). It was part of a comparative study that included Mainland China, Hong Kong, and Taiwan. For other publications that grew out of this study, see, for example, Hsin-Chi Kuan and Siu-Kai Lau, "Traditional Orientations and Political Participation in Three Chinese Societies," *Journal of Contemporary China* 11, no. 31 (2002).

²² A major study has grown out of this survey: Yun-han Chu et al., eds., *How East Asians View Democracy* (New York: Columbia University Press, 2008). For more information of EAB, please see its website (named Asia Barometer now as India and a few South Asian societies are included) <http://www.asianbarometer.org/newenglish/introduction/>.

²³ The Primary Sampling Units (PSUs) employed in the sample design are counties (*xian*) in rural area and cities (*shi*) for urban areas. In direct municipality, districts (*qu*) are used as PSU. The dataset is available from Asian Barometer's website.

I dropped three items that did not go well with the potential value dimensions.²⁴ My factor analysis resulted in the following three dimensions (Table 1).

[Table 1 about here]

I label the constructs captured by these factors by examining the meaning of the survey questions that make up these factors. The first factor contains three questions asking people's values regarding certain aspects of family life and authority relations within one's family (V111d, b, and a). For this I label the first factor Family Values. It can also be noted as hierarchical authority orientation, as these questions all emphasize respecting parental and elder people's authorities. Labeled as "Family Values", it provides one dimension for us to understand value changes as affected by socioeconomic factors: a more "modern" orientation would tend to reject these statements, while a more "traditional" orientation would tend to agree with such statements.

Similarly, I label the second construct "Gender-Marriage Values", as the first of its questions (v111h) deals with gender equality and the second (v111j) deals with marriage. A more "modern" orientation would tend to reject these statements, as it would emphasize equality between a male and a female child, and would reject maintaining a broken marriage.

The third factor contains questions regarding how an individual deals with a social issue (conflict with another person, v111e), differentiates professional from family obligations (hiring a relative vis-à-vis a non-related candidate, v111i), and believing in the role of fate in one's life and career (v111g). I label this construct "Social-Professional

²⁴ Previous researches have documented that some questions used to measure individual modernity do not work well in different culture settings. See for example, Hwang, "Critique of the Methodology of Empirical Research on Individual Modernity in Taiwan."

Values”. A more “modern” orientation, as argued by the “individual modernity” paradigm, would lean toward rejecting these three statements.

To compare the strengths or levels of modern values among different groups of people, I calculated three means scores as suggested by these three factors. For example, “Family Values” is the average score of V111d, b, and a, “Gender-Marriage Values” is the average score of V111h and V111j, and “Social-Professional Values” is that of V111e, i, and g. The measurements hence range from 1 to 4, and are recoded so that higher score refers to higher level of individual modernity (i.e. stronger modern values).

Socioeconomic Impacts on Values, 1993

The key findings of Inkeles and colleagues from their 1992 data are: 1) urban residents in China showed weaker modernity scores comparing to rural residents, 2) education’s impact on modernity level was marginal, and 3) professional or occupational backgrounds contradicted expected differences in individual modernity--that is, the individual modernity score of factory workers was lower than the farmers, for example. Now using the three individual modernity scores derived from the 1993 data, we can re-test their findings.

Rural-Urban Difference

Figure 1 shows the differences in the three scores between rural and urban residents. The urban-rural differences are clear-cut. Urban residents hold stronger modern values, in all three dimensions--family values, gender-marriage values, and social-professional values. Given the average score ranges from 1 to 4, a score larger than 2.0 would mean the person rejects the traditional way of thinking in these dimension. The

Figures shows that in all three dimensions, the average Chinese in both rural and urban areas appears to reject the traditional attitude, scoring a lowest 2.2 (rural residents' social-professional values) and a highest 2.8 (urban residents' gender-marriage values).

[Figure 1 about here]

Whether these cross-sectional differences are significant can be examined with T-tests. Table 2 presents the t-test results for the three value dimensions between rural and urban respondents. While the group means of the values range from 2.20 to 2.81, the between-group mean differences range from 0.24 to 0.51. T-tests of either "equal variances assumed" or "equal variances not assumed" in all three cases suggest the mean differences are highly significant (significant level lower than 0.001). This is to say, in the early 1990s, urban Chinese clearly held stronger modern value orientations than their rural compatriots.

Impacts of Education

To examine whether people with different levels of education demonstrate different value orientations, I coded the sample's educational background into five categories:

- (1) lower than elementary (no formal education or incomplete elementary education)
- (2) elementary (complete elementary education)
- (3) lower middle (junior middle school education)
- (4) upper middle (senior middle school education)
- (5) college and above²⁵

Figure 2 shows that the strength of modern values increases with the level of education.

[Figure 2 about here]

²⁵ Including those who received their education from evening colleges, a category that was instrumental in expanding the access of college education to a large portion of people in the 1980s.

In all three dimensions (Family, Gender-Marriage, Social-Professional) those with less than full elementary education or lower have the lowest level of modernity scores, while those with college education or above have the highest. The least educated seem especially traditional in terms of social-professional values. Remembering this dimension includes questions regarding how one sees the importance of fate in one's life, and whether one should give preferences to family members and relatives comparing to strangers, it becomes unsurprising that the less educated score low in this measurement. That is, less educated people tend more likely to believe that one's fate in life is determined by fate, and would be more likely to give preferences to family members or relatives even if another candidate is more competent.

To look at the significances of the differences made by education, I conducted t-tests the mean differences of all three value dimensions between each neighboring pairs of education levels. That is, I t-tested the mean difference (1) between the "lower than elementary" (education) and the "elementary" groups, (2) between the "elementary" and the "lower middle" groups, (3) between the "lower middle" and the "upper middle" groups, and (4) between the "upper middle" and the "college and above" groups. This resulted in a total of $4 \times 3 = 12$ t-tests. To save space, I report only the (1) and the (4) sets of t-tests here in Table 3.

[Table 3 about here]

The upper panel of Table 3 shows the mean differences between those with less than elementary education and those *with* a complete elementary education are statistically significant, across all three value dimensions (at <0.001 level). The lower panel of Table 3 presents the t-tests between those with a college education and those with only upper middle school education. Two of the mean differences are significant at

0.05 level (Family Values and Social-Professional Values), while the third is not significant (significance >0.1). All t-tests not reported in the table showed significance level lower than 0.001. That is, the differences in all three value dimensions between those with elementary education and those with lower middle school education, and between those with lower middle school education and those with upper middle school education, are all t-tested to be significant.

Occupational Differences

The 1993 survey recorded the respondent's occupational information in two ways. One question (V125) recorded the respondent's "type of employment". The resultant distribution is as the following:

- Contractual Employee (*hetong gong*), with 110 reporting (3.3% of the whole sample)
- Temporary Employee (*linshi gong*), with 120 reporting (3.7%)
- State Employee (*guojia zhengshi zhigong*, including government officials-cadres), with 719 reporting (21.9%)
- TVE (Township and Village Enterprise) Employees, with 81 reporting (2.5%)

These accounted for 31.4% of the sample. 2015 respondents reported "Not Applicable", accounting for 61.3% of the whole sample. These are apparently those not employed in any manufacturing or service industries, hence I coded them as Rural Farmers.²⁶ After this coding, the strength of modern values by employment types is presented in Figure 3.

[Figure 3 about here]

Rural farmers demonstrated the lowest individual modernity score, while people employed in the state sector and people in "contractual employment" status demonstrated

²⁶ 6.2% of the sample reported their employment type as "Others", which are not included in this analysis due to lack further information to classify them. 39 respondents reported their employment type as Private Enterprise Employees (*siying qiye gugong*). I excluded this category from analyses because it accounted for only 1.2% of the whole sample. Such is too small a proportion for statistical analysis.

the highest. TVE employees and temporary employees in urban firms or other *danweis* are in the middle. This finding again rectifies the abnormalities presented by Inkeles and colleagues' earlier findings.²⁷ For Family Values, the respondents fall into two groups: contract employees and SOE employees demonstrated stronger modernity score than the rural farmers, TVE employees, and temporary employees. For Social-Professional Values, TVE employees and temporary employees showed similar levels of modernity scores, while rural farmers showed much lower and SOE and contract employees show much higher scores.

For these intergroup differences, I conducted four sets of t-test for all three value dimensions. It turns out the value differences between rural farmers and TVE employees, and those between temporary employees and contract employees are significant at 0.05 level or 0.001 level. Hence it shows that in the early 1990s, in terms of individual modernity scores, Chinese citizens felt into three groups: the rural farmers were the lowest, TVE employees and temporary employees in the cities were in the middle, and contract employees and SOE employees were the highest. This falls in line with general arguments of the modernization theory, that is, individual modernity increases as people move out of rural farming into manufacturing. Between state sector and the TVE, which is half-rural and half-industrial, workforce in the state sector acquired higher individual modernity scores.

Deng Xiaoping's "Opening Up" and Labour Mobility in the 1980s

The reason that "contractual employees" demonstrated some high individual modernity scores was probably due to that starting from the early 1980s and through the

²⁷ Their data showed that rural industry employees (TVE employees) harbor stronger individual modernity values than employees in the state firms, from example.

early 1990s, many of the most enterprising people left their state jobs and moved in the newly emerged sectors, which hired people using contracts, then a rather new institutions in China's human resource practices. The extreme example would be those moving to take up newly available jobs in the joint-ventures or foreign firms that were just being set up in China's coastal cities, many of which opened to foreign capitals in 1984. If this is the case, it vindicates the point that economic reform and opening-up policies introduced by Deng Xiaoping in the early 1980s resulted in higher labour mobility and a more efficient labour market.

To examine this, the above coding of occupational groups is insufficient, as it lumps many urban jobs together. Specifically, for contract employees, we do not know whether they are contracted with state firms, collective firms, or foreign firms. Fortunately, another question in the survey asked what kind of *danwei* (work unit) the respondent worked in. The resulted responses are:

- Party and Government Agency (*dangzhengjiguan*), with 37 reporting (1.1% of the sample)
- Public Services (*guojia shiyedanwei*), with 189 reporting (5.7%)
- State Industry (*guoying qiye*), with 503 reporting (15.3%)
- Collective Industry (*jiti qiye*), with 183 reporting (5.6%)
- Private Firms (*siying qiye*), with 21 reporting (0.6%)
- Joint-Ventures/Foreign Firms (*sanzi qiye*), with 14 reporting (0.4%)
- Private Enterprise (*geti gongshangye*), with 61 reporting (1.9%)

The variable recorded 2227 cases as "Not Applicable" to any of the above categories. These included both rural farmers and CVE employees. I went on to compare modernity scores using this occupational categorization. It appears that modernity level increases from rural occupations to private and collective *danweis* and to state and government jobs. In all three dimensions (family, gender-marriage, and social-professional), the highest modernity level is found among the employees in the foreign or joint-venture firms. Hence it appears that when foreign capital first came into China

following Deng Xiaoping's reform and opening-up policy, many talented and enterprising members of China's urban workforce left the state and collective sector to become employees of foreign firms.

Multivariate Analyses

In contrast to Inlekes et al.'s findings, my 1993 data show that urban residents show higher modernity level than rural residents, as did more educated than less-schooled, and did employees in the urban state sector than those in the collective and rural firms. T-tests confirmed the significance of these differences (there are cases in which the t-scores were not significant, but those did not negate the overall finding). To further this inquiry, next I will introduce multivariate regression using the 2002 Asian Barometer dataset from China.

Between these two surveys (1993-2002), socioeconomic modernization advanced significantly in China. A long wave of economic transition and growth expanded throughout the 1990s, accompanied by large increase in urbanization, education obtainment, and industrialization and post-industrialization. According to official data, from 1993 to 2002 urban residents increased from 18 to 39 percent of the whole population. In terms of education, number of secondary school students per 1000 persons increased from around 45 in 1993 to 73 in 2002, and number of college students per 1000 persons increased from 2.1 to 7, a more than three-fold increase. In terms of industrialization and post-industrialization, in 1992 labor force in the agriculture, industry, and services changed from respectively, 56, 22, and 21 percent to 50, 21, and 29

percent—a clear decrease in the proportion of agricultural labor and a big expansion in employment in the service sector.²⁸

In terms of value orientations, it also looks like big changes took place in China. For example, regarding to the statement “if there is a quarrel, we should ask an elder to resolve the dispute,” 17 percent of the respondents of the 1993 survey said they disagreed or strongly disagreed, while in the 2002 survey, 28 percent said so—almost an 60% increase. Regarding to the statement “wealth and poverty, success and failure are all determined by fate,” 68 percent of the respondents of the 1993 survey said they disagreed or strongly disagreed, while in the 2002 survey, 76 percent said so— an increase of 10 percentage points. Whether such changes are random or systemic, and whether they are statistically significant, can be tested with regression analyses below.

Modern Values in the 2002: Dependent Variables

The 2002 survey included a battery of measuring the “traditionalism-modernity” dimension of value changes.²⁹ Using exploratory factor analyses, I arrived at the following three variables measuring a respondent’s value orientation. All three variables use average scores, ranging from 1-4.

1) Family Values: an average score of an individual’s responses to

- When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother
- Even if parents' demands are unreasonable, children still should do what they ask

2) Social Values: an average score of an individual’s responses to

²⁸ All the figures are from *China Statistical Yearbook*, 2003 and 2007.

²⁹ For other papers that examined the “traditionalism-modernism” dimension of this survey, see, for example, Yun-han Chu, Yu-tzung Chang, and Ming-hua Huang, "Modernization, Institutionalism, Traditionalism, and the Development of Democratic Orientation in Rural China," *Asian Barometer Survey Working Paper Series*, no. 22 (2004), Andrew J. Nathan and Tse-hsin Chen, "Traditional Social Values, Democratic Values, and Political Participation.," *Asian Barometer Survey Working Paper Series*, no. 23 (2004).

- When one has a conflict with a neighbor, the best way to deal with it is to accommodate the other person.
- If there is a quarrel, we should ask an elder to resolve the dispute.
- A person should not insist on his own opinion if his co-workers disagree with him.

3) Professional Values: an average score of an individual's responses to

- Wealth and poverty, success and failure are all determined by fate.
- When hiring someone, even if a stranger is more qualified, the opportunity should still be given to relatives and friends.
- A man will lose face if he works under a female supervisor.

Independent Variables

To find out the modernizing effects on these values, the regression models include the socioeconomic variables such as urban residency, level of education, and job types that range from rural farming to manufacturing and services.

I also include four dummy variables to identify generational differences: each respondent in the sample is coded either 1 or 0 if she or he was born between 1950 and 1959, between 1960 and 1969, between 1970 and 1979, and between 1980 and 1989. When all these five dummy variables are included in the regression model, the beta of each generation is the difference between the value measurement of that generation and the pre-1950 generation (i.e. those born before the People's Republic was founded in late 1949). The 50-59 group is the first generation born after the new China was founded, they went through Cultural Revolution when they were in formative years (they aged between 7 and 16 and the Cultural Revolution began in 1966, and 17 and 26 when it ended 10 years later.

The 70-79 group started to benefited from the economic opening and growth when still in youth years: when the economic opening started in late 1978, the oldest of this group were only eight years old. The post-1980 generation, however, are the group benefited most from the rapid economic development and social modernization of the last

thirty years. Starting from the early 1980s, China's economy started to grow at about 10 percent each year, throughout the formative years of this post-reform generation.

Regression results will show whether such different life experiences will have different impact on people's values.

Regression Models by Blocks

I introduced independent variables into the regression model by blocks:

The first block included gender and professional backgrounds, most importantly to see whether working in the manufacturing and service sector means higher individual modernity values.

The second block included urban residency and income categories, to see whether significant differences exist between urban and rural residents, and between people of different income levels.

In the third block, I included the length of formal education of each respondent, to see how much difference each additional year of schooling makes on an average person's individual modernity values

Lastly, I included a group of generation dummy variables, to see whether those born in the 1950s, the 1960s, the 1970s, and the 1980s demonstrate any special characters in terms of value orientations.

Results

The regression results are presented in Table 4. For each of the three value dimensions, a series of regression models were produced, according to the multi-block plan. The first model shows that male are slightly less modern when it comes to family

values. This probably because male are more subject to male-centrism when it comes to family relations (such as feeling wife should obey mother-in-law), hence appear slightly more traditional. No gender difference, however, is found in the other two dimensions.

The more important finding from Model 1 is that comparing to rural farmers, those work in the industrial and service sectors show significantly higher individual modernity scores. In all three value dimensions, those working as manual workers and those in ordinary service jobs (such as office clerks) show higher individual modernity scores, while those in professional (lawyers, doctors, etc.) and managerial (managers in companies and leading officials in government offices) jobs show the highest score. This is a clear indication of the positive role of industrialization and post-industrialization in bringing value changes toward the more modern direction.

[Table 4 about here]

The differences resulted from occupational differentiations, however, disappear once we include the urban residency and income level. Both variables show significant impacts on people's values, with urban residents showing higher individual modernity scores than rural residents, and people in higher income categories showing stronger modern orientations than those with less economic means.

The Central Role of Education

From Model 3 to Model 4, the inclusion of the education variable led to big changes to the results. Education is measured as the number of years of schooling one received, which was recorded during the interview. The significant role of the education variable can be seen in:

1) Each additional year of education obtainment means a large and positive difference in an individual's value orientation toward the modernist direction: The Bs for the three value dimensions as contributed to one additional year of education are .036, .029, and .028, respectively.

2) The inclusion of the education variable led to dramatic decrease in the impacts on value differences previously attributed to the Urban variables in Model 3. As a result, the Bs of the Urban variable were reduced by more than a half in all three dimensions: from .158 to .040, from .167 to .072, and from .166 to .024. These reductions are so big that in the case of Family Values, the difference made by urban residency changed from being significant at 0.001 level (***) to not significant at all (no *).

3) Similarly, the inclusion of the education variable led to decrease in the impacts previously attributed to Income in Model 3. In the case of Family Values, the income-induced difference declined from .019 (significant at 0.01 level) to .001 (no significant)—a 95% drop!

Besides these regression results, the important role of education in shaping people's outlooks can be shown in a much simpler way. In our 2002 dataset, regarding to the statement: "When hiring someone, even if a stranger is more qualified, the opportunity should still be given to relatives and friends", among the people lower than elementary education, 48 percent disagreed or strongly disagreed. The same figure is 87 percent for those with college or above education. Regarding the statement: "Wealth and poverty, success and failure are all determined by fate", the rejection rate is 97% for those with college or above education, and only 53% for those with lower than elementary education.

The central role of education in accounting for change in people's values and behaviors, as vindicated by these regression results, traces back to some very strong scholarship in the past. Educational sociologists, political sociologists, and political psychologists all pointed out that education help define people's value through two paths. On the one hand, the education experience fundamentally shapes an individual's outlooks and behaviors according to a generally defined modern, urban, and civic vision. On the other hand, education helps place individuals into more modern, urban, and socially and politically engaging positions in the society. More educated individuals take up jobs and have a life in the more knowledge intensive, dynamic, and complex environments, hence acquire values and behaviors more in line with what sociologists and political sciences defined as modernist or civic ones.³⁰

A 1980-Watershed?

The last block brought in the dummy variables for each cohort of Chinese. Interestingly, comparing to the cohorts born before 1950, those born between 1950 and 1980 somehow show lower levels of modernist values (that is, after controlling education and other variables). Such differences are actually significant in one dimension, Professional Values. Several explanations may be offered. First, those born before 1950 were largely socialized in the early years of the New China (1949-1966), before the catastrophic Cultural Revolution set in. China in the mid- to late-1950s actually enjoyed a

³⁰The best empirical study by political sociologists to track down these two paths can be probably found in Norman H. Nie, Jane Junn, and Kenneth Stehlik-Barry, *Education and Democratic Citizenship in America* (Chicago: University of Chicago Press, 1996). I have tried to examine this in the East Asian context in Chapter 6 of Zhengxu Wang, *Democratization in Confucian East Asia: Citizen Politics in China, Japan, Singapore, South Korea, Taiwan, and Vietnam* (Youngstown, NY: Cambria Press, 2008).

period of rapid industrialization and stable social environment. Hence this “New China Generation” show stronger modernist values in our data. A contrasting explanation would be those born in the 1950s and 1960s grew up during the chaotic era of the Cultural Revolution, hence suffer a serious loss in acquiring more urban, modernist outlooks. Hence it may be that the “New China Generation” benefited from the relatively bright and forward-looking 1950s, or it may be that the Cultural Revolution years have led to a lost generation or two. Or, both factors might be at work.

Starting from the 1970s cohort, things appear to be changing. The 1970s cohort show begins to show positive difference comparing to the “New China Generation” in the first two value dimensions, although it still shows negative gap in the third (-.063, and significant at 0.01 level—two asterisks **).

But the largest leap comes with the post-1980 cohort. This I call the post-reform cohort, as they were born after China started its economic reform and opening-up shift in the late 1970s (December 1978, to be specific, when Deng Xiaoping finally set China onto a new path after the Maoist period). Clearly, comparing to earlier cohorts, post-reform Chinese’s lives were shaped by much faster industrialization, urbanization, improvement of education, and spread of modern information. Hence the post-reform cohort is likely to acquire stronger modern values than the pre-reform cohorts. Besides the regression results here, a quick figure can illustrate the scale of this generational shift. Regarding the statement “Wealth and poverty, success and failure are all determined by fate”, while 64% of the pre-1950 cohort disagreed or strongly disagreed, the rejection rate is 94% for those born after 1980.

The post-1980 changes in China’s socioeconomic environment has a big impact on the values and attitudes of those Chinese grew up in this era, bigger than could be

explained by the education, urban residency, and other socioeconomic factors *alone*. This can be clearly seen from the regression outputs: even after controlling these socioeconomic variables, the post-reform (post-1980) cohort still shows modern values that are significantly stronger than all other generations.³¹

Discussions and Conclusions

Whether socio-economic changes brought about by economic development will lead to value changes in China has been the main focus of this paper. The general debate in social sciences tends to argue that such changes will take place, and they will take place in patterns comparable to those found in other settings. In developing societies from Turkey to India to Mexico, for example, earlier scholarship pointed to patterns of value change that took place when a society moves from rural to urban, from farming to industry, and from low literacy to wide spread of education.³² The cultural and institutional contexts of individual societies may differ, and such differences will help shape the specific ways in which value changes take place. In this regard, value changes

³¹ The post-reform Chinese appears to represent a significant shift in their orientations regarding traditional cultural norms, toward political authorities, and social relations. For results from AsiaBarometer presided by Prof Inoguchi of Japan, see Zhengxu Wang, "Postmodern Values in Seven Confucian Societies: Political Consequences of Changing World Views," *Japanese Journal of Political Science* 8, no. 3 (2007). For a general theorization of generational change as a result of industrialization and prolonged economic growth, see, among many others, Inglehart, *The Silent Revolution: Changing Values and Political Styles among Western Publics*.

³² Besides Inkeles work, see also the line of scholarship started by Gabriel Almond and Sidney Verba, *Civic Culture: Political Attitudes and Democracy in Five Nations* (Princeton, NJ: Princeton University Press, 1963). For a much broader perspective, see Ronald Inglehart and Christian Welzel, *Modernization, Cultural Change, and Democracy: The Human Development Sequence* (Cambridge, UK: Cambridge University Press, 2005).

may occur in path-dependent ways.³³ This is why empirical research continues to identify the “persistence of the tradition” or “Asian Values” when trying to apply a general paradigm to specific cases. That is also why scholars like Yang Kuo-Shu argue that the meaning of “modernity” needs to be developed endogenously.³⁴ Such specificities, however, do not negate the overall idea of value changes as a consequences of economic development, industrialization, and urbanization.

To be sure, huge differences exist between the cultural and institutional conditions of China and those of other developing countries. China is a deeply Confucian society with thousands of years of persisting cultural beliefs and norms, and when its first modern government started to industrialize its economy, it did so following a Soviet-style planned economy model. The highly rigid political economic system imposed serious constraints on people’s choices and behaviors, while the educational system also tried to shape people’s thoughts in a way deemed “correct” by the Party. Due to these and other complications, it was indeed highly critical to examine whether value changes would take place in ways commonly found in other developing societies when China embarked its post-1980 economic reform.

When Inkeles and his colleagues, based on data collected in 1992 in northern China’s Tianjin City and the countryside nearby, found that urbanization, rising education, and participation in non-farm jobs, did *not* help making Chinese citizens more modern, they attributed their unexpected findings to several factors. The first is the unique socialist ways of economic organization in China: working environment in state firms discourages workers from developing modern values, for example. The second is the

³³ Ronald Inglehart and Wayen E. Baker, "Modernization, Culture Change, and the Persistence of Traditional Values," *American Sociological Review* 65 (2000).

³⁴ Kim, Yang, and Hwang, eds., *Indigenous and Cultural Psychology: Understanding People in Context*.

Maoist distortion of education in its role of facilitating social mobility and Maoist design of education as for indoctrination instead of fostering creativities. The third is the transitional nature of China's political economy at that time: as a result of economic transition in the mid-1980s to early 1990s, the more dynamic and enterprising individuals (hence more modern if measured by the "individual modernity" survey) are self-selected into the more dynamic economic sectors: private and collective firms, for example.

By examining two nationally representative datasets (1993 and 2002), I found no anomalies in Chinese citizens' values. Instead, the patterns of Chinese citizens' value changes are fully explainable by the general modernization or individual modernity theories: those benefiting from urbanization, rising levels of education, and the expansion of non-farm, knowledge-based industries display stronger modern values. This is so in every value dimension: family, marriage, and social and professional lives.

Meanwhile, it appears that at that time the state sector still employed the more modernist-oriented section of the labor force comparing to the collective and TVE firms. In fact, through the 1980s, the collective sector was still largely made up of the old firms created during the Maoist period, hence their employees were largely less educated, less dynamic, and less competent comparing those in the state firms. The TVEs at that time employed workers recently left farming behind. In terms of individual modernity scores as defined by Inkeles's earlier work, these newly half-industrialized peasants certainly were not on a par with state employees who have long been living in urban areas. In fact, it was the joint-ventured and foreign firms in those years that attracted the most talented and dynamic personnel away from the state and collective sectors. Hence, my data showed that those employed in the foreign sector demonstrated the highest individual modernity values.

But in any case, even if the distortions from Maoist period on the value patterns of Chinese citizens were still having a lingering effect by around 1992, when Inkeles and colleagues collected their data, by 2002, such effects must have completely disappeared. The 2002 data displays a perfectly normal picture in China: those live in an urban environment, with more education, and work in more knowledge-intensive jobs, clearly harbor stronger modern values. Furthermore, it appears those brought up in the late 1970s and the 1980s show clearly stronger modernist outlooks, indicating that the long-term trends of value change in China might follow a “generational shift” pattern that has characterized the 1970s and 1980s in the industrial societies.

The urban-rural difference can largely explain away the differences found between non-farm employees and peasants, as the changes from Model 1 to Model 2 in the regression analyses show. In turn, large portions of the differences brought by urban residency and income rise can be accounted for by the rise in education level: those more educated are more likely to live in urban areas and earn higher income, and vice versa.

What does this mean to politics? Chinese citizens with stronger modern values are clearly more supportive of democratic norms. They are more willing to support minority rights, to require leaders to follow established procedures, and to request leaders to respect popular sovereignty and political accountability.³⁵ Political scientists have shown

³⁵ Chu Yun-han, the political scientist who directs the Asian Barometer Survey, earlier used the 2002 data to examine the emerging democratic orientations. He used a different operationalization of “democratic values”, but arrived in more or less the same message: modernization in Taiwan, Mainland China, and Hong Kong are producing pro-democratic values among Chinese populations. See Yu-tzung Chang and Yun-han Chu, “Traditionalism, Political Learning and Conceptions of Democracy in East Asia,” *Asian Barometer Survey Working Paper Series*, no. 39 (2007), Yun-han Chu, “Modernization, Institutionalism, Traditionalism and the Development of Democratic Orientation in Rural China,” in *2nd World Forum of China Studies* (Shanghai Academy of Social Sciences, Shanghai 2006), Yun-han Chu, Yutzung Chang, and Frank Tsai, “Confucianism and Democratic Values in Three Chinese Societies,” *Issues & Studies* 41, no. 1 (2006).

socioeconomic modernization constantly increase the likelihood of democratic change.³⁶

This process has taken places within the East Asian context as well.³⁷ To the doubters who believe economic developments are only enhancing the Chinese authoritarian regime, not emancipating the people,³⁸ this paper provides the evidences to the contrary.

Evidences presented here show that changes in people's hearts and minds are already underway, clearly a good sign for political changes.

³⁶ Tatu Vanhanen, *Prospects of Democracy: A Study of 172 Countries* (London; New York: Routledge, 1997), Carles Boix and Susan C. Stokes, "Endogenous Democratization," *World Politics* 55, no. 3 (2003), Henry S. Rowen, "When Will the Chinese People Be Free?," *Journal of Democracy* 18, no. 3 (2007), Inglehart and Welzel, *Modernization, Cultural Change, and Democracy: The Human Development Sequence*.

³⁷ Wang, *Democratization in Confucian East Asia: Citizen Politics in China, Japan, Singapore, South Korea, Taiwan, and Vietnam*.

³⁸ For this line of argument, see, for example, Bruce Bueno de Mesquita and George W. Downs, "Development and Democracy," *Foreign Affairs* 84, no. 5 (2005).

Table 1: Three dimensions of individual modernity, measured 1993-1994

Modern-Traditional Value Dimensions	Factor Loadings
<u>Family Values</u>	
A “modern” outlook tends to disagree with these statements:	
V111d. When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother.	.744
V111b. Even if parents' demands are unreasonable, children still should do what they ask.	.737
V111a. If there is a quarrel, we should ask an elder to resolve the dispute.*	.541
<u>Gender-Marriage Values</u>	
A “modern” outlook tends to disagree with these statements:	
V111h. If one can only have one child, a son is better than a daughter.	.758
V111j. A couple should maintain the marriage even if they do not love each other anymore.	.608
<u>Social-Professional Values</u>	
A “modern” outlook tends to disagree with these statements:	
V111e. When there is a conflict, the best way to deal with it is to accommodate the other person.	.733
V111i. When hiring someone, even if a stranger is more qualified, the opportunity should still be given to relatives and friends.	.681
V111g. Wealth and poverty, success and failure are all determined by fate.	.602

* Also loads to the “Social Values” factor

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iterations.

Table 2 Urban-Rural T-Test Results

	Group	N	Mean	T-test method	T	Degree of Freedom	Sig (2-tailed)	Mean Differences	Std. Error Difference
Family Values	Rural	2,504	2.35	Equal variances assumed	-14.276	3,184	0.000	-0.24	0.01671
	Urban	682	2.59	Equal variances not assumed	-14.100	1,063	0.000	-0.24	0.01692
Gender-Marriage Values	Rural	2,588	2.48	Equal variances assumed	-10.086	3,292	0.000	-0.32	0.03193
	Urban	705	2.81	Equal variances not assumed	-10.863	1,248	0.000	-0.32	0.02964
Social-Professional Values	Rural	2,588	2.20	Equal variances assumed	-11.972	3,292	0.000	-0.51	0.04231
	Urban	705	2.70	Equal variances not assumed	-15.438	1,784	0.000	-0.51	0.03281

Data: 1993 Social Changes and Social Mobility Survey

Table 3, Selected T-test results for between different education levels

	Group	N	Mean	T-test method	T	Degree of Freedom	Significance (2-tailed)	Mean Differences	Standard Error Difference
Family Values	Lower than elementary	980	2.26	Equal variances assumed	-4.132	1,863	0.000	-0.07369	0.01784
	Elementary	885	2.34	Equal variances not assumed	-4.143	1,858	0.000	-0.07369	0.01779
Gender-Marriage Values	Lower than elementary	1,053	2.2530	Equal variances assumed	-7.934	1,951	0.000	-0.29184	0.03678
	Elementary	900	2.54	Equal variances not assumed	-8.113	1,917	0.000	-0.29184	0.03597
Social-Professional Values	Lower than elementary	1,053	1.74	Equal variances assumed	-11.886	1,951	0.000	-0.61184	0.05148
	Elementary	900	2.35	Equal variances not assumed	-12.325	1,768	0.000	-0.61184	0.04964
Family Values	upper middle	440	2.59	Equal variances assumed	-2.195	521	0.029	-0.09770	0.04451
	college & above	83	2.69	Equal variances not assumed	-2.288	118	0.024	-0.09770	0.04270
Gender-Marriage Values	upper middle	454	2.86	Equal variances assumed	-0.225	537	0.822	-0.01554	0.06905
	college & above	86	2.87	Equal variances not assumed	-0.207	110	0.837	-0.01554	0.07523
Social-Professional Values	upper middle	454	2.76	Equal variances assumed	-2.110	537	0.035	-0.12869	0.06099
	college & above	86	2.89	Equal variances not assumed	-2.748	164	0.007	-0.12869	0.04683

Table 4. Regressions on Three Value Dimensions

Dependent Variables→	Family Values		Social Values		Professional Values		
	Model 1	B	SE	B	SE	B	SE
(Constant)		2.537	(.014)***	2.472	(.011)***	2.742	(.011)***
Male		-.044	(.018)*	-.004	(.014)	.017	(.014)
Managerial/Professional		.223	(.054)***	.189	(.042)***	.265	(.042)***
Ordinary Service Job		.192	(.026)***	.222	(.020)***	.203	(.020)***
Manual worker		.124	(.026)***	.090	(.020)***	.138	(.020)***
	Model 2	B	SE	B	SE	B	SE
(Constant)		2.455	(.024)***	2.338	(.019)***	2.593	(.019)***
Male		-.043	(.018)*	-.004	(.013)	.016	(.013)
Managerial/Professional		.067	(.060)	.006	(.046)	.077	(.045) ^a
Ordinary Service Job		.034	(.036)	.036	(.028)	.013	(.028)
Manual worker		-.023	(.036)	-.076	(.028)**	-.030	(.028)
Urban		.158	(.030)***	.167	(.023)***	.166	(.023)***
Income		.019	(.006)**	.034	(.005)***	.039	(.005)***
	Model 3	B	SE	B	SE	B	SE
(Constant)		2.335	(.025)***	2.240	(.019)***	2.498	(.019)***
Male		-.077	(.017)***	-.031	(.013)*	-.009	(.013)
Managerial/Professional		.018	(.058)	-.033	(.044)	.040	(.044)
Ordinary Service Job		-.057	(.036)	-.038	(.027)	-.058	(.027)*
Manual worker		-.003	(.035)	-.061	(.027)*	-.015	(.027)
Urban		.040	(.030)	.072	(.023)**	.076	(.023)**
Income		.001	(.006)	.020	(.005)***	.024	(.005)***
Years of Formal Education		.036	(.002)***	.029	(.002)***	.028	(.002)***
	Model 4	B	SE	B	SE	B	SE
(Constant)		2.344	(.027)***	2.244	(.021)***	2.536	(.021)***
Male		-.075	(.017)***	-.029	(.013)*	-.011	(.013)
Managerial/Professional		.046	(.058)	-.005	(.044)	.045	(.044)
Ordinary Service Job		-.033	(.036)	-.013	(.028)	-.040	(.027)
Manual worker		.017	(.035)	-.042	(.027)	.006	(.027)
Urban		.037	(.030)	.069	(.023)**	.061	(.023)**
Income		.002	(.006)	.021	(.005)***	.026	(.005)***
Years of Formal Education		.033	(.003)***	.027	(.002)***	.029	(.002)***
1950-1959 cohort		-.046	(.027) ^a	-.028	(.021)	-.092	(.021)***
1960-1969 cohort		-.028	(.026)	-.020	(.020)	-.080	(.020)***
1970-1979 cohort		.021	(.026)	.021	(.020)	-.063	(.020)**
1980-1989 cohort		.107	(.036)**	.111	(.027)***	.047	(.027)*
R-Square		.112		.162		.169	
N		3034		3024		3007	

* $\alpha < .05$ ** $\alpha < .01$, *** $\alpha < .001$, ^a, $\alpha < .1$

Data source: Asian Barometer, 2002, China.

Table 5 Percentage Changes between 1993 and 2002

Survey Statement	Percentage of Disagreeing		
	1993	2002	Scale of Change 1993-2002
If there is a quarrel, we should ask an elder to resolve the dispute.	17	28	+11
Even if parents' demands are unreasonable, children still should do what they ask.	64	66	+2
When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother.	42	46	+4
Wealth and poverty, success and failure are all determined by fate.	68	76	+8
When hiring someone, even if a stranger is more qualified, the opportunity should still be given to relatives and friends.	79	74	-5

Table 6, Value Differences by Rural and Urban Residencies, 1993-2002

	Rural Residents	Urban Residents	National Total
If there is a quarrel, we should ask an elder to resolve the dispute (disagree).	1993:		
	(78.5% of the sample)	(21.4% of the sample)	
	12%	34%	17%
	2002:		
(62.7% of the sample)	(32.3% of the sample)		
	20%	41%	28%
When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother (disagree).	Rural Residents	Urban Residents	National Total
	1993:		
	(78.5% of the sample)	(21.4% of the sample)	
	38%	58%	42%
2002:			
(62.7% of the sample)	(32.3% of the sample)		
	41%	56%	46%
Wealth and poverty, success and failure are all determined by fate (disagree).	Rural Residents	Urban Residents	National Total
	1993:		
	(78.5% of the sample)	(21.4% of the sample)	
	64%	83%	68%
2002:			
(62.7% of the sample)	(32.3% of the sample)		
	69%	86%	76%

Table 7, Value Differences among People of Different Education Levels, 1993-2002

Education Levels→	Incomplete Elementary or Lower	Elementary	Lower Middle	Upper Middle	College and Above	Total
If there is a quarrel, we should ask an elder to resolve the dispute (disagree).	1993: (32% of the sample) 8%	(27% of the sample) 9%	(24% of the sample) 21%	(14% of the sample) 38%	(3% of the sample) 53%	17%
	2002: (30% of the sample) 9%	(18% of the sample) 20%	(28% of the sample) 33%	(17% of the sample) 43%	(8% of the sample) 60%	28%
When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother (disagree).	1993: (32% of the sample) 32%	(27% of the sample) 37%	(24% of the sample) 52%	(14% of the sample) 56%	(3% of the sample) 65%	42%
	2002: (30% of the sample) 30%	(18% of the sample) 44%	(28% of the sample) 52%	(17% of the sample) 59%	(8% of the sample) 65%	46%
Wealth and poverty, success and failure are all determined by fate (disagree).	1993: (32% of the sample) 46%	(27% of the sample) 66%	(24% of the sample) 83%	(14% of the sample) 88%	(3% of the sample) 82%	68%
	2002: (30% of the sample) 54%	(18% of the sample) 72%	(28% of the sample) 84%	(17% of the sample) 90%	(8% of the sample) 97%	76%

Birth cohorts-->	1930s	1940s	1950s	1960s	1970s	1980s	Total
If there is a quarrel, we should ask an elder to resolve the dispute (disagree).	1993 (20% of the sample)	(13% of the sample)	(20% of the sample)	(27% of the sample)	(21% of the sample)	(0% of the sample)	17%
	12%	14%	15%	20%	21%		
	2002 (12% of the sample)	(11% of the sample)	(18% of the sample)	(24% of the sample)	(27% of the sample)	(9% of the sample)	
	18%	20%	22%	26%	33%	44%	
When a mother-in-law and a daughter-in-law come into conflict, even if the mother-in-law is in the wrong, the husband should still persuade his wife to obey his mother (disagree).	1993 (20% of the sample)	(13% of the sample)	(20% of the sample)	(27% of the sample)	(21% of the sample)	(0% of the sample)	42%
	33%	41%	42%	44%	51%		
	2002 (12% of the sample)	(11% of the sample)	(18% of the sample)	(24% of the sample)	(27% of the sample)	(9% of the sample)	
	40%	44%	42%	46%	51%	55%	
Wealth and poverty, success and failure are all determined by fate (disagree).	1993 (20% of the sample)	(13% of the sample)	(20% of the sample)	(27% of the sample)	(21% of the sample)	(0% of the sample)	68%
	56%	67%	69%	69%	76%		
	2002 (12% of the sample)	(11% of the sample)	(18% of the sample)	(24% of the sample)	(27% of the sample)	(9% of the sample)	
	64%	71%	71%	75%	79%	94%	

Figure 1: Value Differences between Rural and Urban Residents, 1993

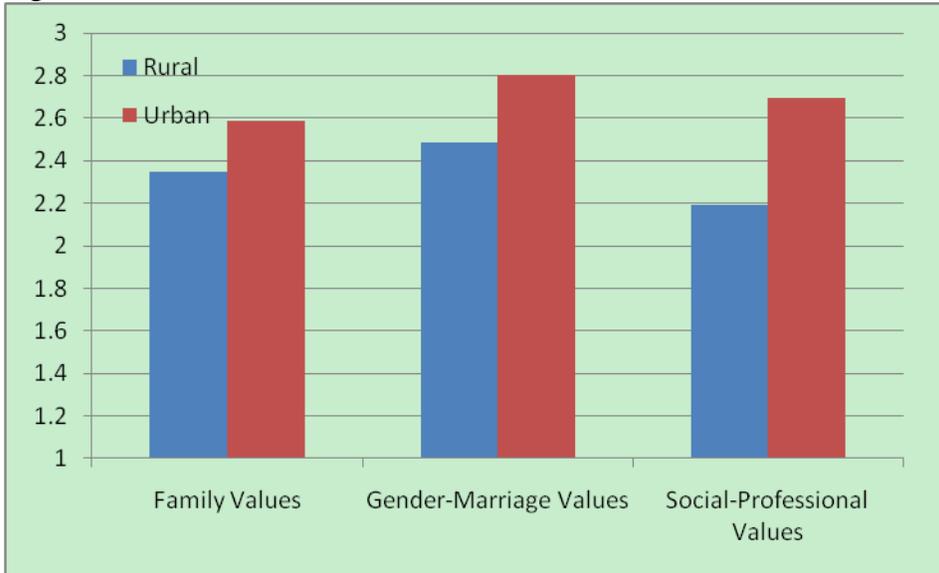


Figure 2 Value Differences among People of Different Education Levels, 1993

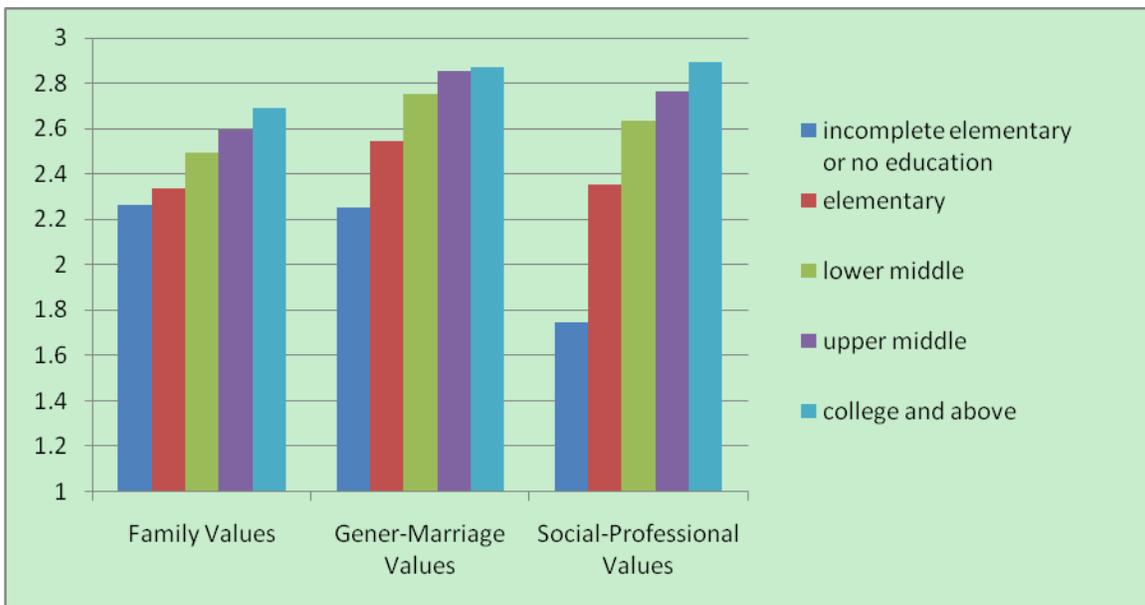
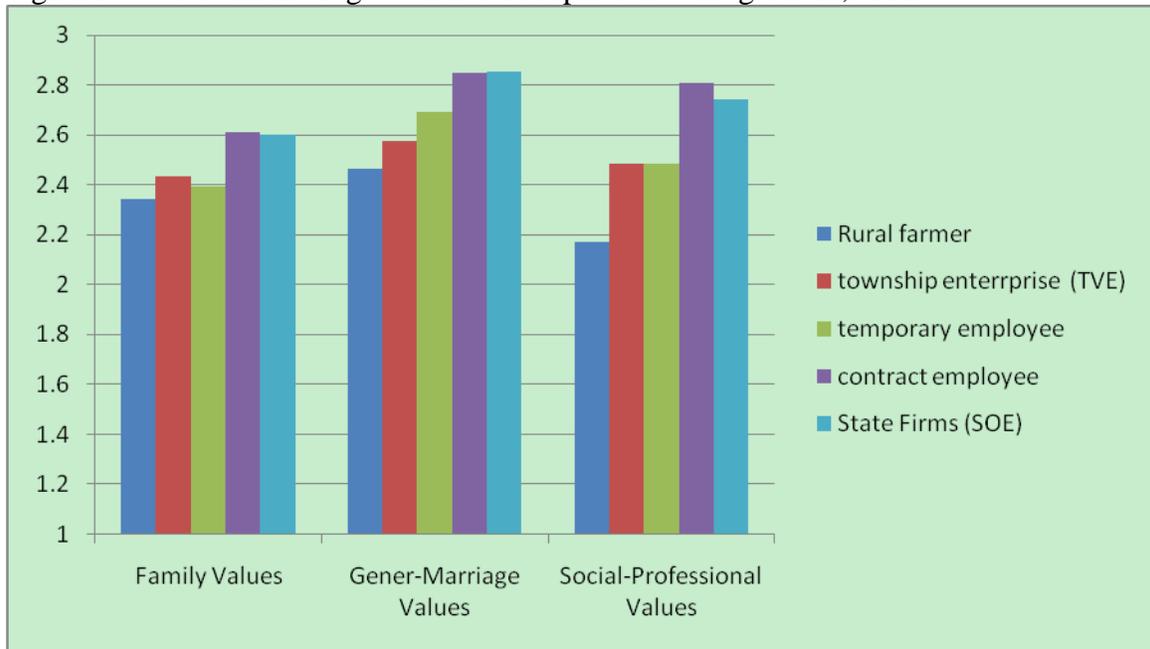


Figure 3 Differences among Different Occupational Backgrounds, 1993



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