

Educational and Professional Backgrounds of Current Provincial Leaders

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This article focuses on the educational and professional characteristics of the current provincial leaders. A quantitative analysis of the data on 325 provincial party secretaries, governors, and their deputies shows three important trends. First, educational credentials continue to be an important criterion in the selection of provincial leaders. Not only has the percentage of provincial leaders with college educations reached a zenith in the history of the People's Republic of China (PRC), but many of these leaders also hold advanced postgraduate degrees. Second, the professional distribution of provincial leaders has become increasingly diversified. Although leaders trained in engineering and the natural sciences continue to dominate provincial-level leadership, economists and those who majored in business management now form the largest professional group among provincial leaders in the younger cohort (age 54 and below). And third, leaders with educational experience overseas have emerged in almost every province-level administration in the country. Most of them studied in the West, especially in the United States. All these recent changes in the profiles of China's provincial leadership will have profound implications for the country's socioeconomic development in the years to come.

Education has long been perceived as the primary way to prepare political elites to take their place in Chinese society. Confucius asserted that the principal purpose of education was "to study to become an official" (*xueeryou zeshi*). Various Chinese regimes have paid a great deal of attention to legitimizing certain kinds of knowledge deemed authoritative and essential and to designating certain elites as carriers of that knowledge. Gentry-scholars, nationalist reformers, peasants-turned-warlords, and communist ideologues each claimed that their particular expertise was the most important one in the country during the time of their rule.¹ During the Cultural Revolution, the causes of violent social conflicts and elite power struggles could be attributed to differences in the participants' educational and professional backgrounds.²

Under Deng Xiaoping's rule in the early 1980s, the Chinese Communist Party (CCP) began to recruit new members from different social and occupational backgrounds into leadership positions, hoping to adapt to the changing environment by recruiting fresh talent and thereby obtaining new legitimacy. During the past decade, China has in fact been ruled by technocrats—who are mainly engineers-turned-politicians. The three "big bosses" in the so-called third generation leadership—Jiang Zemin, Li Peng, and Zhu Rongji—and three heavyweights in the fourth generation—President Hu Jintao, Premier Wen Jiabao, and Vice President Zeng Qinghong—are all engineers by training. Among the seven members of the 15th Politburo's Standing Committee, China's supreme decision-making body, six were engineers and one was an architect.³ This pattern

continued throughout the State Council and the ministerial and provincial governments.⁴ Even more remarkably, all nine men on the current Politburo's Standing Committee are engineers by training.

The elite transformation that has taken place in China in the post-Mao era is part of a wider and more fundamental political change—a move from revolution to reform in Chinese society. Turning away from the emphasis on class struggle and ideological indoctrination that characterized the previous decades, Deng and his technocratic protégés have stressed fast-paced economic and technological development at home and increased economic integration with the outside world.

Educational and professional characteristics of the Chinese ruling elite are, therefore, important indicators of the political and socioeconomic changes in the country. During the past two decades, educational background has played a crucial role in determining the social mobility of elites. Changes in educational and occupational preferences have frequently reflected new trends in social values and in the policy orientation of the country.⁵ An analysis of today's provincial leaders in China (who will likely become national decision-makers tomorrow) offers us a better understanding of the probable trajectory of China's political future.

This article focuses on the educational and professional characteristics of the current provincial leaders of China's 31 province-level administrations. Among the total of 412 provincial party secretaries, deputy party secretaries, governors, and vice governors, 325 (78.9 percent) have provided substantial information about their educational and professional backgrounds.⁶

A quantitative analysis of the data shows three important trends. First, educational credentials continue to be an important criterion, perhaps even a prerequisite, in the selection of provincial leaders. Not only has the percentage of provincial leaders with college educations reached a zenith in the history of the People's Republic of China, but many of these leaders also hold advanced postgraduate degrees. Second, although leaders trained in engineering and the natural sciences continue to dominate provincial-level leadership, the proportion of engineers has significantly declined. This phenomenon is particularly evident among provincial leaders in the younger cohort, in which economists and those who majored in economic management form the largest professional group. The professional distribution of provincial leaders has become increasingly diversified as a result of these changes. And third, leaders with educational experience overseas—as degreeholders or visiting scholars—have emerged in almost every province-level administration in the country. All these recent changes in the profiles of China's provincial leadership will have profound implications for the country's socioeconomic development in the years to come.

Higher Academic Degrees

Table 1 shows the changes over the past two decades in the percentage of provincial leaders who have gone to college. In 1982, only 20 percent of provincial leaders had attended college. The share increased to 59 percent in 1989, 96 percent in 1992, and 98 percent in 2003. The rapid increase in the number of provincial leaders with college educations has occurred within roughly one generation. This statistic is even more striking in light of the fact that the proportion of college graduates in the Chinese labor force in the 1980s was only 0.8 percent. Furthermore, the number of provincial leaders with advanced degrees has also risen dramatically over a short period of time. Among provincial chiefs (full party secretaries and full governors), for example, the number of those who hold postgraduate degrees increased from eight (12.9 percent) in 2001 to 18 (29 percent) in 2003 (see table 2). Make no mistake—these cadres were not selected to become provincial leaders solely based on their educational credentials. The disproportionate selection of China's leaders from a small pool of educated elites is highly political.

Table 3 divides those provincial leaders whose backgrounds are known into two cohort groups. The younger cohort has a higher percentage of members with postgraduate degrees. A total of 104 (some two-thirds) of provincial leaders who are age 54 or younger hold advanced degrees, including 27 with doctorates and 77 with master's degrees. In contrast, only four (2.4 percent) of the provincial leaders who are age 55 or older hold doctorates, and 34 (20.5 percent) hold master's degrees. Based on the available data, only five provincial leaders lack a college education. They are Guangdong Vice Governor Tang Bingquan (born in 1949), Anhui Vice Governor Zhang Ping (b. 1946), Tibet Vice Governor Luosang Danzen (b. 1953), Tibet Deputy Party Secretary Basang (b. 1937), and Tibet Vice Governor Wu Jilie (b. 1946).

Table 4 shows the 32 provincial leaders who hold Ph.D. degrees. Three of them—Li Keqiang (b. 1955), Xi Jinping (b. 1953), and Li Yuanchao (b. 1950)—serve as party secretaries in the three important provinces of Henan, Zhejiang, and Jiangsu, respectively. All three individuals were sent to the countryside during the Cultural Revolution and later attended some of China's most prestigious universities. Xi Jinping and Li Yuanchao are children of high-ranking officials, and Li Keqiang, former secretary of the Chinese Communist Youth League (CCYL), is often considered Hu Jintao's protégé. These three relatively young provincial chiefs are the rising stars in the country. Their educational credentials and political backgrounds have positioned them as leading candidates for seats on the next Politburo.

Most provincial leaders only recently received their doctoral degrees. Many actually studied on a part-time basis. Their academic disciplines varied. Li Yuanchao received his Ph.D. in law from the Central Party School (CPS). Many provincial leaders have received their master's degrees from the CPS as well, on either a part-time or full-time basis. Wang Lequan, the governor of Xinjiang and a new Politburo member, attended the CPS to study party affairs and economic management from 1983 to 1986. Among the 325 provincial leaders whose educational backgrounds are available, 108

(about one-third) attended the CPS, and 52 received their master's degrees from this party school. They include Zhejiang Governor Lu Zushan, Guangdong Governor Huang Huahua, Hubei Governor Luo Qingquan, Anhui Governor Wang Jinshan, and Hunan Governor Zhou Bohua.

According to official Chinese sources, nearly 3,000 provincial- and ministerial-level leaders attended training programs at the CPS, the State Administration Institute, or the National Defense University between 1997 and 2002.⁷ In Guangxi Province, for example, among the top 15 current leaders (party secretary, governor, and their deputies), 14 attended the CPS.⁸ On the 16th Central Committee of the CCP, at least 52 (15 percent) of the full and alternate Central Committee members had attended the CPS for degree programs or yearlong training.⁹ Their experience at the CPS not only enhanced these leaders' educational credentials, but also facilitated political socialization and networking.

It would be incorrect, however, to conclude that most leaders with college experience have gone only to party schools. Most have also studied at China's elite universities in undergraduate or graduate programs, or both. Many attended Qinghua University, Beijing University, the Harbin Institute of Technology, Fudan University, or Nanjing University. A total of 40 provincial leaders (12.3 percent) are from the famous class of 1978, the first class of students that entered college by successfully completing a national examination following the Cultural Revolution. Table 4 indicates that many of the Ph.D. holders among the provincial leadership attended China's top universities (e.g., Nankai University or Tongji University) or research institutes under the Chinese Academy of Sciences or the Chinese Academy of Social Sciences.

The percentage of advanced degreeholders in the provincial leadership is likely to increase further in the coming years. Approximately 120,000 students are currently enrolled in Ph.D. programs in China's universities and research institutes. By the end of 2001, about 78,000 doctorates and 616,000 master's degrees had been granted in China since the country reestablished the system of academic degrees in the early 1980s. According to official Chinese statistics, China is currently ranked third in the total number of annual Ph.D. grantees in a country (approximately 12,000), with the United States first (approximately 40,000) and Germany second (approximately 30,000).¹⁰ The gap will probably narrow in the near future, as China expects to grant 50,000 doctoral degrees in 2010.¹¹

Relative Decline of Technocrats and Increased Diversification of Academic Fields

Technocrats are defined as people who have *all* the following three traits: technical education, professional experience, and employment in official posts.¹² Most technocrats majored in engineering, and some majored in the natural sciences. Chinese technocrats' ascent to the national leadership can now be seen more clearly than ever by examining the composition of the current Politburo of the CCP and the current State

Council: all nine members of the Politburo Standing Committee and eight of the 10 State Council members are technocrats. An analysis of all 356 members of the current Central Committee, however, reveals that the proportion of technocrats has actually dropped from 52 percent on the 15th Central Committee to 46 percent on the 16th Central Committee.¹³ The relative decline of technocrats in the level of leadership just below the highest level is echoed in this study of current provincial leaders.

Table 5 shows that the representation of technocrats among provincial party secretaries first jumped from zero in 1982 to 25 percent in 1987, and then to 74 percent in 1997. However, this percentage has significantly declined in the last few years. A similar pattern is evident among provincial governors (see table 5).

Table 6 compares the academic fields of current provincial chiefs with those of their predecessors in 2001. Within two years, the number of provincial chiefs who had majored in engineering dropped from 39 (62.9 percent) to 23 (37.1 percent). Meanwhile, the representation of provincial chiefs who had majored in three other major academic fields—economics, the social sciences, and the humanities—increased dramatically.

The trend of provincial leaders having specialized in more diversified academic disciplines is even more striking among the younger cohort.¹⁴ Table 7 shows the distribution of academic majors among the 274 provincial leaders for whom age and academic discipline information are available. While leaders who majored in engineering accounted for the largest portion in the older group (33.9 percent), a total of 50 provincial leaders (34.7 percent) in the younger group majored in economics and finance. The leaders of the older cohort are more likely to have obtained their educational training from the Central Party School than are their counterparts in the younger cohort. Only one leader (0.8 percent) in the older cohort majored in law. In contrast, 10 leaders (6.9 percent) in the younger cohort received their degrees in law.

The trend of a growing number of provincial leaders trained in the social sciences, including law, is an important development because social scientists have been despised and frequently marginalized throughout the history of the PRC. Jiang Zemin's publicized visit in 2002 to the People's University, famous for philosophy, economics, and the social sciences, suggested that experts in social subjects might play a greater role in the government. During his visit to the school, Jiang said that in the future, "Chinese social scientists should be valued as highly as natural scientists."¹⁵

Today, top politicians often express the need to strengthen the country's legal system. Jiang's work report to the 2002 16th Party Congress specified that the nation should establish a new Chinese-style legal system by 2010. More recently, new party General Secretary Hu Jintao has stressed the rule of law in several widely publicized speeches. During the past decade, the number of lawyers in China has risen dramatically. In the early 1980s, there were only 3,000 lawyers to serve China's billion people. In contrast, China has roughly 150,000 lawyers today. The number of applicants for master's degrees in law increased from about 18,000 in 2001 to about 27,000 in 2002.¹⁶ A law degree has become a valuable credential for party leadership. It remains to be seen

whether the growing presence of social scientists and lawyers means that they are destined to play a more crucial role in shaping the parameters of political discourse in the country.

Emergence of “Returnees from Study Overseas” in the Provincial Leadership

Many Chinese individuals who studied abroad after Deng’s Open Door Policy for International Educational Exchange was issued a quarter century ago have recently emerged as a significant elite group in the country. A new term, “returnees from study overseas” (*haiguipai* in Chinese), has been coined to label this rising elite group. Since the late 1990s, the Chinese authorities have made a concerted effort to recruit members of this group to serve in leadership posts.

According to the most recent official data provided by China’s Ministry of Education, between 1978—when China sent the first group of 50 students and scholars to study in the United States—and 2002 approximately 580,000 Chinese studied abroad, primarily in the United States, Japan, Britain, France, Germany, Canada, Australia, and Russia.¹⁷ Among these students and scholars, 430,000 have remained overseas, including 270,000 who are currently attending school. The other 150,000 have returned to China. From 1992 to 1998, the return rate of “returnees from study overseas” increased by 13 percent each year.¹⁸ In 2002 alone, a total of 18,000 students and scholars returned to China.¹⁹

In addition, during the past five years, approximately 140,000 cadres at various levels of the Chinese leadership have gone abroad for short-term training or visits.²⁰ For example, under the auspices of the Chinese government and an American insurance company, the Kennedy School of Government at Harvard University and the Public Administration School at Qinghua University have jointly offered a 10-week-long training program for 60 bureau- or division-level Chinese officials each year between 2002 and 2006. The 60 participants in the first class have already completed their studies.²¹ Similarly, 25 officials of the Dalian municipal government and CEOs of major firms in the city spent 10 weeks at the University of California participating in a midcareer training program in 2003.²²

The new wave of returnees has broadened the recruitment channels of Chinese political elites. In 1999, Zeng Qinghong, then the head of the CCP Organization Department, claimed that “returnees from study overseas”—including both degreeholders and yearlong visiting scholars—should be seen as a major source for political recruitment.²³ Zeng also specified that some outstanding returnees be immediately appointed to leading bureau-level posts (*juchang*).²⁴ These *haiguipai* may be promoted to even higher posts after serving as bureau heads for a few years.

Most of these returnees serve in leadership posts in the fields of education, academic research, finance, and foreign affairs. Several returnees from Western

countries now serve on the State Council, including State Councillor Chen Zhili, who was a visiting scholar at Pennsylvania State University for two years; State Councillor Hua Jianmin, who received short-term training in the United States; Education Minister Zhou Ji, who received a Ph.D. in engineering from the State University of New York; Trade Minister Lu Fuyuan, who worked at Montreal University as a visiting scholar for a year; the chair of the China Banking Regulatory Commission, Liu Mingkang, who obtained an MBA from London University; and Science and Technology Minister Xu Guanhua, who conducted research on digital images at the University of Stockholm for two years. Two newly appointed vice ministers of foreign affairs, Zhang Yesui and Zhou Wenzhong, both studied at the London School of Economics earlier in their careers.

Previous studies, however, suggest that returnees not only have distinct educational backgrounds, but also differ in some other important ways from those leaders who were educated in China.²⁵ Returnees are likely to advance their careers through certain sectors such as university administration, academia, foreign affairs, banking, and finance. In China's universities and research institutes, for example, 51 percent of college-level senior administrators are returnees, and a full 94 percent of the leaders of research departments and teams at the Chinese Academy of Sciences are returnees.²⁶ This trend contrasts with the main career path of the current top leaders—a majority of whom advanced their careers step-by-step from county, city, and especially provincial levels of administration.²⁷ Thus, whether or not returnees are able to serve at the provincial level of leadership is likely to affect their chances of advancing to top leadership positions in the future.

This study shows that “returnees from study overseas” have recently emerged as part of China's provincial leadership. Table 8 lists 20 provincial leaders with educational experience overseas. With the exception of Zhang Dejiang, Guangdong party secretary and a new Politburo member who studied in North Korea, all the provincial leaders who studied abroad went to Western or other developed countries. Their academic fields range from public administration to the natural sciences. While most were visiting scholars in foreign educational and research institutions, five leaders received their doctoral degrees abroad. All five doctorate holders completed their degrees in the 1980s. In contrast, almost all visiting scholars pursued their foreign studies in the 1990s. This discrepancy may suggest that those who were visiting scholars were already on the political fast track during their time studying abroad, but that returnees with doctoral degrees may need more time to be tested by the CCP Organization Department.

One trend that has contributed to the emergence of returnees in the provincial leadership is the practice of many provincial administrations, which have recently sent young and promising leaders in their provinces to study abroad as degree candidates or as visiting scholars. Every year since 1999, for example, the Guangdong provincial government has selected about 60 young, bureau-level cadres and sent them to study for a year in the United States or Canada. By mid-2002, about 177 bureau-level leaders had taken advantage of such study-abroad programs sponsored by the Guangdong provincial government. Some such returnees currently serve as provincial mayors or vice mayors.²⁸

In Fujian, the provincial government selected 60 cadres under age 45 and sent them to England to receive MBA degrees.²⁹ Since 1997, the Chongqing municipal government has appointed 65 returnees with doctoral degrees to leadership posts, including 21 as division-level leaders.³⁰ Similarly, in 2001 alone, the Liaoning provincial government opened 42 posts at the bureau/division level of leadership exclusively for returnees.³¹

The list of returnees in the provincial leadership displayed in table 8 is incomplete, since some province-level administrations do not disclose educational and professional information on their provincial leaders. All province-level administrations, however, are under pressure from the central authorities to appoint returnees to leadership posts. Some provinces seem to do better at this task than others. In Jiangsu Province, for example, among the total of eight current vice governors, six are returnees (see table 8). In general, however, the presence of returnees in the provincial leadership is insubstantial. Most of those who do hold positions serve as vice governors or deputy party secretaries, not as provincial chiefs.

It remains to be seen whether the number of returnees in the Chinese provincial leadership will significantly increase in the coming years, how China-educated elites (especially those who advance their careers in poor, inland regions) and foreign-trained elites (most of whom work in coastal cities) will interact with each other, and whether the career paths of these two groups will further diverge in the future.

Conclusion

In a broader sense, this analysis of the educational and professional profiles of current provincial leaders reveals some interesting paradoxes. The demand for more influence on governance by various social groups in the country has increased in recent years, but the political elites continue to be disproportionately selected from the small pool of college graduates, including those with advanced educational degrees. Although the attainment of higher education has become almost a prerequisite in the recruitment of provincial leaders, their academic disciplines have become increasingly diversified. Economists, lawyers, and social scientists have been integrated into the predominantly technocratic leadership, particularly at the provincial level. We China watchers must pay more attention to the emerging tensions in relations between the elites and the masses and to the new political associations of future national and provincial leaders in order to fully understand the dynamic changes occurring in the Chinese leadership.

Notes

¹ Ho Ping-ti, *The Ladder of Success in Imperial China: Aspects of Social Mobility, 1368–1911* (New York: Columbia University Press, 1962), and Robert North and Ithiel Pool, *Kuomintang and Chinese Communist Elites* (Stanford, Calif.: Stanford University Press, 1952).

² Hong Yung Lee, *The Politics of the Chinese Cultural Revolution: A Case Study* (Berkeley, Calif.: University of California Press, 1978); Susan L. Shirk, "Educational Reform and Political Backlash: Recent Changes in Chinese Educational Policy," *Comparative Education Review* 23, no. 2 (June 1979): 185; Julia Kwong, *Cultural Revolution in China's Schools, May 1966–April 1969* (Stanford, Calif.: Hoover Institution Press, 1988); and Anita Chen, "Dispelling Misconceptions about the Red Guard Movement: The Necessity of Re-Examining Cultural Revolution Factionalism and Periodization," *Journal of Contemporary China* 1 (September 1992): 62–85.

³ Li Ruihuan started his professional career as a carpenter and later graduated from the Beijing Part-time Civil Engineering Institute. Although Li did not attend an elite engineering school, as did many of his colleagues on the Standing Committee of the Politburo, he did work as an architect in Beijing for many years.

⁴ Cheng Li, *China's Leaders: The New Generation* (Lanham, Md.: Rowman & Littlefield, 2001).

⁵ For a detailed discussion of the correlation between educational background and social mobility in the 1980s and 1990s, see Liu Jingming, "A Study of the Relationships of Education and the White-Collar Stratum," *Social Sciences in China*, spring 2002, 100–108.

⁶ For more information on this database of China's current provincial leaders, see Cheng Li, "Analysis of Current Provincial Leaders," *China Leadership Monitor* 7 (summer 2003).

⁷ See <http://www.chinesenewsnet.com>, September 24, 2002.

⁸ See <http://www.gxi.gov.cn>, December 7, 2001.

⁹ Cheng Li and Lynn White, "The Sixteenth Central Committee of the Chinese Communist Party: Hu Gets What?" *Asian Survey* 43, no. 4 (July/August 2003).

¹⁰ See <http://www.xinhuanet.com>, October 10, 2002.

¹¹ Ibid.

¹² For a discussion of the definition of technocrats, see Cheng Li and Lynn White, "Elite Transformation and Modern Change in Mainland China and Taiwan: Empirical Data and the Theory of Technocracy," *China Quarterly* 121 (March 1990): 1–35.

¹³ Li and White, "The Sixteenth Central Committee."

¹⁴ This analysis echoes my previous study of the educational and occupational backgrounds of the emerging fifth generation of leaders. See Cheng Li, "The Emergence of the Fifth Generation in the Provincial Leadership," *China Leadership Monitor* 6 (spring 2003).

¹⁵ See <http://www.sina.com>, April 24, 2002.

¹⁶ *Shijie ribao* (World Journal), January 13, 2002, sec. A, p. 8.

¹⁷ See <http://www.sina.com>, June 19, 2003.

¹⁸ *China Daily*, February 4, 1999, 1.

¹⁹ See <http://www.sina.com>, June 19, 2003.

²⁰ *Shijie ribao*, September 24, 2002, sec. A, p. 7.

²¹ *Shijie ribao*, July 16, 2003, sec. A, p. 8.

²² See <http://www.chinatalents.gov.cn>, June 2, 2003.

²³ See <http://www.chinesenewsnet.com>, September 25, 2000.

²⁴ Ibid.

²⁵ Li, "The Emergence of the Fifth Generation." Also see <http://www.muzy.com>, July 27, 2003.

²⁶ See <http://www.sina.com.cn>, June 19, 2003.

²⁷ Li and White, "The Sixteenth Central Committee."

²⁸ See <http://www.cscse.edu.cn>, August 1, 2002.

²⁹ Ibid.

³⁰ See <http://www.cscse.edu.cn>, June 2, 2003.

³¹ Ibid.

Table 1
Percentage of Provincial Leaders Who Have a College Education

Year	Percentage
1982	20
1989	59
1992	96
1998	95
2003	98

Notes and sources: “Provincial leaders” refers to governors, deputy governors, secretaries, and vice secretaries of provincial party committees. The 1982 data are based on Ch’en Yung-sheng, “Reform of Mainland China’s Cadre System,” *Issues and Studies* 21, no. 12 (December 1985): 102. The 1989 data are based on Liao Gailong and Fan Yuan, comp., *Zhongguo renming da cidian* (Who’s who in China), vol. 3 (Shanghai: Shanghai Dictionary Publishing House, 1989). The total number of elites in this study is 264. The data were accumulated and tabulated by the author. The 1992 and 1998 data refer to governors and deputy governors only; *Renmin ribao* (overseas edition), June 29, 1993, 1, and *Renmin ribao*, August 3, 1998. The 2003 data, which are based on the author’s database, include the 325 secretaries, deputy secretaries, governors, and vice governors whose educational backgrounds are available.

Table 2
Changes in Educational Levels of Provincial Chiefs
(2001 and 2003)

Educational level	Provincial chiefs (2001)		Provincial chiefs (2003)	
	No.	%	No.	%
Postgraduate (Ph.D./M.A./M.S./MBA)	8	12.9	18	29.0
Four-year college	46	74.2	36	58.1
Two/three-year college	7	11.3	8	12.9
Unknown	1	1.6		
Total	62	100.0	62	100.0

Sources: Shen Xueming et al., comp., *Zhonggong di shiwujie zhongyang weiyuanhui zhongyang zhongyang jilü jiancha weiyuanhui weiyuan minglu* (Who's who among the members of the 15th Central Committee of the Chinese Communist Party and the 15th Central Discipline Inspection Commission) (Beijing: Zhonggong wenxian chubanshe, 1999), and the author's database on current provincial leaders.

Table 3
Educational Levels of Current Provincial Leaders
by Age Group

Educational level	Age 55 and older (born 1948 or before) <i>N = 166</i>		Age 54 and younger (born 1949 or after) <i>N = 156</i>	
	No.	%	No.	%
Ph.D.	4	2.4	27	17.3
M.A./M.S./MBA	34	20.5	77	49.4
Four-year college	98	59.0	42	26.9
Two-year college	27	16.3	8	5.1
High school/technical school	1	0.6	2	1.3
Junior high school	2	1.2	0	0
Total	166	100.0	156	100.0

Table 4
Provincial Leaders Who Hold Doctoral Degrees

Name	Born	Native province	Current position	School	Year of degree	Academic field
Li Keqiang	1955	Anhui	Party secretary, Henan	Beijing University (part-time)	1995	Economics
Xi Jinping	1953	Beijing	Party secretary, Zhejiang	Qinghua University (part-time)	2002	Law
Li Yuanchao	1950	Jiangsu	Party secretary, Jiangsu	Central Party School (part-time)	1995	Law
Wang Fuyu	1952	Henan	Deputy party secretary, Hainan	South China Institute of Science & Technology	1999	Engineering
Xing Yuanmin	1949	Shandong	Deputy party secretary, Tianjin	Nankai University (part-time)	Unknown	Philosophy
Liu Donghui	1948	Heilongjiang	Deputy party secretary, Heilongjiang	Unknown	Unknown	Unknown
Yang Anjiang	1945	Hunan	Deputy party secretary, Beijing	Tongji University (part-time)	Unknown	Engineering
Ma Qingsheng	1944	Anhui	Deputy party secretary, Guangxi	John Ennis University (England)	1983	Biology
Xia Baolong	1952	Tianjin	Executive vice mayor, Tianjin	Beijing University (part-time)	1999	Political economy
Chen Deming	1949	Shanghai	Executive vice governor, Shaanxi	Unknown	Unknown	Unknown
Gang Lin	1963	Hunan	Vice governor, Hunan	Central China University of Agronomy	1993	Agronomy
Zhang Taolin	1961	Jiangsu	Vice governor, Jiangsu	Bohn University (Germany)	1989	Agronomy
Huang Wei	1961	Jiangsu	Vice governor, Jiangsu	Southeast University	1995	Engineering
Jiang Zelin	1959	Anhui	Vice governor, Hainan	Chinese Academy of Social Sciences	1994	Economics
Xie Xuezhi	1957	Liaoning	Vice governor, Tibet	People's University	1991	Economics
Ke Zunping	1956	Shaanxi	Vice governor, Sichuan	Southwestern University	1987	Computer science
Huang Xiaoxiang	1956	Chongqing	Vice governor, Sichuan	Chinese Academy of Social Sciences	1994	Political economy
Wu Heng	1956	Hubei	Vice governor, Guangxi	Chinese Academy of Sciences	1989	Geology
Liang Bing	1956	Shanxi	Vice governor, Shanxi	Unknown	Unknown	Unknown
Jiang Zuojun	1955	Anhui	Vice governor, Anhui	Nanjing Medical School	1989	Medicine
Lu Xi	1955	Liaoning	Vice governor, Liaoning	Unknown	Unknown	Unknown
Zhang Weiguo	1953	Jiangsu	Vice governor, Jiangsu	Tongji University (part-time)	2001	Engineering and management
Niu Renliang	1953	Shanxi	Vice governor, Shanxi	Chinese Academy of Social Sciences	1991	Political economy
Zhang Shaoqin	1953	Shanxi	Vice governor, Shanxi	Auburn University (USA)	1989	Material science
Li Lihui	1952	Fujian	Vice governor, Hainan	Beijing University	1999	Finance

Liu Ketian	1951	Hebei	Vice governor, Liaoning	Liaoning University	Unknown	Economics
Song Hai	1951	Hebei	Vice governor, Guangdong	Nankai University (part-time)	2001	Political economy
Gao Hucheng	1951	Shanxi	Vice governor, Guangxi	Paris Number 7 University (France)	1985	Sociology
Li Ronggen	1950	Guangdong	Vice governor, Guangdong	Nankai University (part-time)	1989	Politics
Xie Xiaojun	1950	Chongqing	Vice mayor, Chongqing	Beijing Normal University	1989	Biology
Yan Junqi	1946	Jiangsu	Vice mayor, Shanghai	Denmark	1988	Engineering
Fan Boyuan	?	Unknown	Vice mayor, Beijing	Unknown	Unknown	Engineering

Table 5
Representation of Technocrats
among Provincial Chiefs, 1982–2003

Year	Provincial party secretaries		Governors	
	No.	%	No.	%
1982	0	0	0	0
1987	7	25	8	33
1997	23	74	24	77
2002	13	42	16	52
2003	13	42	13	42

Sources: Hong Yung Lee, *From Revolutionary Cadres to Party Technocrats: The Changing Cadre System in Socialist China* (Berkeley, Calif.: University of California Press, 1991), 268; Kenneth Lieberthal, *Governing China: From Revolution through Reform* (New York: W.W. Norton, 1995), 236; Cheng Li and Lynn White, "The Fifteenth Central Committee of the Chinese Communist Party: Full-Fledged Technocratic Leadership with Partial Control by Jiang Zemin," *Asian Survey* 38, no. 3 (March 1998): 251; <http://www.xinhuanet.com>, December 31, 2002; and the author's database for current provincial leaders.

Table 6
Changes in Academic Majors of Provincial Chiefs
(2001 and 2003)

Academic majors	Provincial chiefs (2001)		Provincial chiefs (2003)	
	No.	%	No.	%
Engineering and science				
Engineering	39	62.9	23	37.1
Meteorology				
Agronomy				
Biology				
Physics	3	4.8	2	3.2
Chemistry				
Mathematics			2	3.2
Architecture			1	1.6
Medical science				
<i>Subtotal</i>	<i>42</i>	<i>67.7</i>	<i>28</i>	<i>45.1</i>
Economics and management				
Economics and finance	4	6.5	9	14.5
Management				
Accounting and statistics			1	1.6
Foreign trade				
<i>Subtotal</i>	<i>4</i>	<i>6.5</i>	<i>10</i>	<i>16.1</i>
Social sciences and law				
Politics			3	4.8
Sociology				
Party history and party affairs	2	3.2	4	6.5
Journalism	1	1.6	1	1.6
Law			1	1.6
<i>Subtotal</i>	<i>3</i>	<i>4.8</i>	<i>9</i>	<i>14.5</i>
Humanities				
History			4	6.5
Philosophy			1	1.6
Education			1	1.6
Chinese language and literature	3	4.8	4	6.5
Foreign language			1	1.6
<i>Subtotal</i>	<i>3</i>	<i>4.8</i>	<i>11</i>	<i>17.8</i>
Military education				
Unknown	<i>10</i>	<i>16.1</i>	<i>4</i>	<i>6.5</i>
Total	62	99.9	62	100.0

Notes and sources: Shen Xueming et al., comp., *Zhonggong di shiwujie zhongyang weiyuanhui zhongyang zhongyang jili jiancha weiyuanhui weiyuan minglu* (Who's who among the members of the 15th Central Committee of the Chinese Communist Party and the 15th Central Discipline Inspection Commission) (Beijing: Zhonggong wenxian chubanshe, 1999), and the author's database on current provincial leaders. For those whose undergraduate and graduate majors are different, only the major at the higher level is counted. Percentages do not sum to 100 because of rounding.

Table 7
Distribution of Academic Majors of Provincial Leaders
by Age

Academic majors	Age 55 and above (born 1948 or before) <i>N = 130</i>		Age 54 and below (born 1949 or after) <i>N = 144</i>	
	No.	%	No.	%
Engineering and science				
Engineering	44	33.9	21	14.6
Geology	2	1.5	2	1.4
Agronomy	6	4.6	2	1.4
Biology	1	0.8	2	1.4
Physics	3	2.3		
Chemistry	2	1.5	2	1.4
Mathematics	3	2.3	1	0.7
Architecture	1	0.8		
Medical science	1	0.8	4	2.8
<i>Subtotal</i>	<i>63</i>	<i>48.5</i>	<i>34</i>	<i>23.7</i>
Economics and management				
Economics and finance	8	6.2	50	34.7
Management	3	2.3	10	6.9
Accounting and statistics	3	2.3		
Foreign trade				
<i>Subtotal</i>	<i>14</i>	<i>10.8</i>	<i>60</i>	<i>41.6</i>
Social sciences and law				
Politics	9	6.9	9	6.3
Sociology			1	0.7
Party history and party affairs	20	15.4	12	8.3
Journalism	1	0.8	1	0.7
Law	1	0.8	10	6.9
<i>Subtotal</i>	<i>31</i>	<i>23.9</i>	<i>33</i>	<i>22.9</i>
Humanities				
History	5	3.8	4	2.8
Philosophy	5	3.8	3	2.1
Education	1	0.8		
Chinese language and literature	8	6.2	6	4.2
Foreign language	2	1.5	4	2.8
<i>Subtotal</i>	<i>21</i>	<i>16.1</i>	<i>17</i>	<i>11.9</i>
Military education	<i>1</i>	<i>0.8</i>		
Total	130	100.1	144	100.1

Notes: For those whose undergraduate and graduate majors are different, only the major at the higher level is counted. Percentages do not sum to 100 because of rounding.

Table 8
Provincial Leaders with Educational Experience Overseas

Name	Born	Native province	Current position	Country	Foreign school/firm	Years	Degree/visiting scholar (VS)	Academic field
Chen Liangyu	1946	Zhejiang	Party secretary, Shanghai	England	Birmingham University	1992	VS	Public administration
Zhang Dejiang	1946	Liaoning	Party secretary, Guangdong	North Korea	Kim Il Sung Comprehensive University	1978–80	B.A.	Korean language
Li Hongzhong	1956	Shandong	Vice governor, Guangdong; acting mayor, Shenzhen	USA	Harvard University (Kennedy School)	1996–97	VS	Public administration
Zhang Taolin	1961	Jiangsu	Vice governor, Jiangsu	Germany; USA	Bohn University; Jison Liebiesch University; University of Iowa	1986–89	Ph.D. (Germany); VS (USA)	Agronomy
Cai Limin	1955	Hebei	Vice governor, Hebei	Singapore	Singapore Institute of Science & Technology	1995–96	VS	Public administration
Zhou Yupeng	1947	Jiangsu	Vice mayor, Shanghai	USA	New York University	1995	VS	Economics
Yan Junqi	1946	Jiangsu	Vice mayor, Shanghai	Denmark	Unknown	1983–88	Ph.D.	Engineering
Gang Lin	1963	Hunan	Vice governor, Hunan	England; Canada	Nottingham University; Canada Agricultural Ministry	1997–99	VS (postdoctoral fellowship)	Agronomy
Ma Qingsheng	1944	Anhui	Deputy party secretary, Guangxi	England	John Ennis University	1980–83	Ph.D.	Biology
Xie Xiaojun	1950	Chongqing	Vice mayor, Chongqing	England; USA	Sterling University; Miami University	1994	VS	Biology
Gao Hucheng	1951	Shanxi	Vice governor, Guangxi	France	Paris Number 7 University	1982–85	Ph.D.	Sociology
Zhang Weiguo	1953	Jiangsu	Vice governor, Jiangsu	USA	Unknown	1998	VS	Engineering and management
He Quan	1952	Jiangsu	Vice governor, Jiangsu	Australia	Australian National University	1997–2000	Joint degree with Nanjing University	Economics
Huang Wei	1961	Jiangsu	Vice governor, Jiangsu	USA	University of California, Berkeley	1993–94	VS (postdoctoral fellowship)	Engineering
Li Quanlin	1947	Jiangsu	Vice governor, Jiangsu	USA	University of Maryland	1995	VS	Economic management
Huang Lixin	1962	Jiangsu	Vice governor, Jiangsu	USA	Unknown	1998	VS	Public administration

Zhang Shaoqin	1953	Shanxi	Vice governor, Shanxi	USA	Auburn University	1985–89	Ph.D.	Material science
Jiang Zuojun	1955	Anhui	Vice governor, Anhui	USA	State University of New York, Buffalo	1993–94	VS	Medicine
Li Ronggen	1950	Guangdong	Vice governor, Guangdong	Germany	Unknown	1993	VS	Public administration
Teng Weiping	1952	Zhejiang	Vice governor, Liaoning	England; Canada	Cambridge University; Toronto University	1988–90; 1994–95	VS	Medicine