China's Brain Drain to the United States

Views of Overseas Chinese Students and Scholars in the 1990s

David Zweig and Chen Changgui



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To our wives, Wu Kaifen and Joy P. Zweig, for their patience and support



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DAVID ZWEIG and CHEN CHANGGUI with the assistance of STANLEY ROSEN

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Most of all, we owe a great debt to the 273 people who shared their time, their views, and their hopes for a better China with us. It was a difficult decision for them to agree to talk with us. But without their trust and support, this study would have been impossible. We hope that we have not abused that trust in this study and in the manner and tone in which we have presented our findings. We all in our own ways hope that China will soon become the type of society that will be able to draw back its people of talent who went abroad to find a better life.

In the end, we alone are responsible for the content of this study. We spent many hours debating our different perceptions of what the brain drain is all about, what were its causes, and which government was most responsible for its emergence and growth. In the end, we came up with the best solution: use social science methodology to seek the truth, whatever it may be, and then report the findings in as unbiased a way as possible. That is what true collaborative social science is all about, and that is what true friendship across cultural chasms is all about.

Nevertheless, one final note of caution. Before Chen left the United States in October 1993, he wrote a preliminary draft in Chinese. Zweig borrowed readily from that draft, and from the many hours of discussion he and Chen had together, in composing the English manuscript; but in the end, Zweig wrote this manuscript, and primarily for a Western audience. Chen then made general comments on the English draft, which Zweig then revised. Chen did not see the final draft that was submitted. While Zweig understands the need to be sensitive to the Chinese context in which this manuscript will be read, he also recognizes that, at times, in certain instances, his own views may have come out too strongly, and that these views may not totally reflect Chen's own perspectives. Zweig hopes that friends in China will understand the process by which the manuscript was composed.

Summary of the Study

Beginning in 1979, the government of the People's Republic of China, hoping to catch up with Western science and technology, decided for the first time since 1949 to send large numbers of students and scholars to the West to study. While significant numbers of people returned before 1986, after 1987 the ratio of returnees to those leaving dropped significantly. After the June 4, 1989, Tiananmen incident and the U.S. government's decision to allow any mainland Chinese who was then in the United States to apply for permanent residency, the probability that people would return dropped even more precipitously.

Suddenly China found itself in the same situation as many developing countries: sending their "best and brightest" to the United States triggered a "brain drain," and with it the threat that the strategy of sending people abroad to catch up might backfire. But will these people return? If China gets richer and remains politically stable, will the brain drain reverse itself? Which Chinese are most likely to return? What are the current conditions of these students and scholars in the United States? Are they helping their country of origin by working closely with colleagues in China? What are the key issues leading them to stay abroad? What is the real cost of this brain drain? And what policies are most likely to help bring them back?

To answer these and other questions, between January and October 1993, Professors David Zweig and Chen Changgui, with the support of Professor Stanley Rosen and the financial support of the Ford Foundation, carried out 273 interviews with Chinese students, scholars, and other former residents of the People's Republic of China who are currently residing in the United States. The interviews had a wide geographical distribution within the United States, taking place in Boston, New York, Buffalo, Albuquerque, and several centers in California, including Los Angeles, San Diego, and San Francisco. The interviews involved one-on-one meetings that lasted an average of an hour and a quarter and followed a 105-question interview protocol that had been pretested in Toronto in fall 1992.

To make the sample as representative as possible we obtained lists, whenever possible, of Chinese students at a university, and then used a stratified random sample technique in an effort to ensure the randomness of our sample. For visiting scholars we relied mostly on personal contacts, but for people in the workforce, we used a "snowball" sampling technique, collecting lists of names from Chinese we knew, building one big list, and then choosing randomly from that list. To analyze the data we employed both bivariate and multivariate analysis.

While we cannot guarantee that our findings truly reflect the views of the entire population of Chinese students, scholars, and other mainlanders now in the workforce, we have been judicious in our efforts to gain an unbiased cross section of the population we set out to study. We hope that we have been able to reflect their views fairly and accurately.

Key Findings

Patterns of exit. A very high percentage of our sample were the children of intellectuals (52.2 percent) or of high- (5.9 percent) and middle-level cadres (18.5 percent), a finding that suggests that these groups have unequal access to channels out of China. A very large percentage of our sample came from Beijing (43.6 percent) and Shanghai (17.9 percent), suggesting that these two cities control the greatest number of exit channels.

Intentions about returning upon leaving China (figure 5). A significant percentage of our population admitted that when they left China they either had planned not to return (7.5 percent) or were not certain that they would (i.e., were not necessarily planning to return; 40.9 percent). These views about returning were the best predictor of their current plans.

Economic conditions of our U.S. interviewees. We had hypothesized that if the economic conditions of Chinese students and scholars in the United States were relatively good, people would have less incentive to return. We found that the Chinese students and scholars we interviewed were doing quite well in the United States in terms of standard of living. Some 46.7 percent of the sample made more than US\$20,000/year (total household income). The mean household income was \$20-25,000 (this includes the many "households" that were a single person). Given that we carried out our study when the U.S. economy was emerging from recession, this finding suggests that economic deprivation here is unlikely to make people more interested in returning. Figure 2 illustrates the distribution of income levels among our sample.

Housing in the United States (figure 3). Housing for the sample is not as good as their incomes might indicate—suggesting that many people are saving money by economizing on housing expenses—with the majority of people living in one-bedroom apartments or housing of lesser quality. Nevertheless, 7.7 percent of the sample owned their own housing, and 22.6 percent had a two-bedroom apartment, a statistic that may explain why people with children do not want to go back to China.

Views about returning (see table 1 and figure 4). Of the 267 people who responded to this question, 8.3 percent said they were returning immediately to China, 24.4 percent said that they were definitely returning but did not know when, 19.9 percent were probably going to return and had maintained close ties with China, 19.9 percent were unsure whether they would return, 9.8 percent were probably going to return but had no real links with China, 10.2 percent were unlikely to return unless some major changes occurred in China, and 7.5 percent said they would definitely not return.

Reasons for not returning (tables 3 and 7). When we asked the interviewees to choose from a list of reasons why they might not return, the most common answer was "political instability" (30.3 percent). Other than "political freedom" (12.4 percent), important reasons included factors related to personal development, such as lack of career advancement opportunities (11.6 percent), poor work environment (8.4 percent), limited job mobility (6.0 percent), lack of modern equipment (5.6 percent), and a living standard that was too low (7.6 percent).

The effect of the sex of the respondent. Other than people's "intentions about returning" at the time they left China, the sex of the respondent is usually the best predictor of attitudes about returning among people with children. For a range of reasons—including that women view their possibilities for personal development in China much less optimistically than do men—women are much less likely than men to be planning to go back (25.4 percent of women indicated that they would stay in the United States, as opposed to 14.3 percent of men).

The role of children. Whether or not people had children affected their reasons for returning. The most significant reason that people with children did not want to return to China was the poor housing conditions in China; for people without children, the most important reasons for not returning were household family income in the United States and their comparison of their standard of living in the United States and China. The two groups also differed in the weight they assigned to political factors, those without children picking political factors as reasons for not returning more often than those who had children. We found a statistically significant relationship between people without children who chose

political instability or lack of political freedom as reasons for not returning and their attitudes about returning. For people with children, there was no clear relationship between concerns about political stability and views about returning, no doubt because many other concerns went into their calculations. However, when politics was measured in an alternative manner, it became clear that politics did affect the decision of people with children.

Family ties. While a significant number of parents did not want their children to return (41.5 percent), parental views had almost no effect at all on most people's decisions about returning. Conversely, whether or not the spouse had joined the interviewee in the United States had a major effect on people's views about returning.

Political versus economic factors. One of the key issues debated within the Chinese community is whether the political nature of the Chinese government or China's low level of economic development best explains the brain drain. We found that both economic and political factors affect people's decisions about returning. Despite the importance of economic reasons in our findings, various political concerns, particularly concerns about political instability, played a significant role in explaining who was planning to return and who was not. Other political concerns included suffering during the Cultural Revolution, people's views of the Tiananmen incident, or mistrust of government policies allowing people to come and go freely from China. Over 49 percent of the respondents were uncertain or did not trust that the Chinese government would keep its word about allowing people who returned to go out of China freely in the future.

Links to China. We believed that despite a low return rate, we could argue that the extent of loss due to the brain drain was less if significant numbers of people maintained contact with their units in China. Half our sample (50.9 percent) was sending money back to family members or giving other forms of financial support, while another 18.7 percent was helping family members come to the United States. A significant number of people (21.4 percent) were sending back research data to their home units, while another 18.4 percent were helping other people in their units come overseas. Also, 24.7 percent of long-term sojourners had regular contact (three or more times a year) with their home units. Yet many people (37.7 percent) now had no contact or had never had contact with their home units, while another 29.1 percent had contact only once a year, which may simply have been a New Year's card. These findings suggest that the cost of the brain drain is quite high, although these scholars are a conduit for the transfer of information back to China.

Ability to change visas. Despite the increase in the number of J-1 student visas issued in the late 1980s as a way to force young university lecturers to return to China after completing their studies, a significant number of people on J-1 visiting scholar visas (29/51) and on J-1 student visas (30/66) had been able to shift their visa status as a result of President Bush's executive order of April 1990. Yet even people on J-1 visiting scholar visas who came after April 1990 have been able to change their status because the Chinese embassy has not been opposing such requests.

Reasons for returning (tables 2 and 6). The most common reasons given for returning were "higher social status in China" (26.0 percent), "better career opportunities in China" (20.5 percent), and "patriotism" (17.3 percent). The things people disliked the most about the United States—the "pace of life too fast" (31.1 percent), crime and personal insecurity (29.2 percent), and lack of job stability (17.2 percent)—could also be reasons people might return.

The role of U.S. government policy. While the number of people returning to China had dropped significantly by the late 1980s, the U.S. government's decision to give permanent residence status to all PRC citizens who were in the United States before April 1990 had a major effect on peoples' views about returning. Among our sample, those people with children who were in the United States before April 1990 were much less likely to be planning to return than those who came after April 1990. In all our multivariate analyses, this was a significant factor. Although we asked only about intentions, and therefore cannot say whether or not this policy will have an effect on behavior, those who came to the United States after April 1990 are much more likely to believe that they will be returning to China.

The effect of "political culture." We had hypothesized that people left and would not return because of what we saw as the "political culture" of the danwei (work unit) system in China, which imposes enormous difficulties or constraints on people's lives. We had to reject that hypothesis when people told us that they had relatively good ties with their direct boss and with the co-workers in their work units in China. Women, however, felt more constrained than men by their units, and people did feel constrained by the lack of job mobility and limited opportunities for advancement, which are part of the work unit system in China.

Our multivariate analysis (tables 8-11). Using multivariate analysis, we found a significant difference between the views of people with and without children (see tables 8-11). As mentioned above, people with children were most influenced by housing in the United States, somewhat

by politics, while people without children cared most about incomes and living standards, as well as some political factors. Our multivariate analysis also confirmed some of the findings mentioned above.

Strategies for bringing people home. It will not be easy to persuade people to return. Many people do not trust the government's promise that they will be allowed to leave again if they go back. Also, while studies of the brain drain suggest that it is important for work units in the home country to keep contact with people overseas, our data suggest that there is no relationship between links with one's home unit and one's willingness to return. Also, because people fear political instability most, we must question those who assert that political change is a prerequisite for bringing people home, as the transition from an authoritarian regime to a democratic one is likely to trigger a level of instability that will keep most people away.1 While there is no "quick fix" or one strategy that will reverse the brain drain, an activist government strategy that creates a positive climate for returned scholars and is implemented by a strong leader (in a Park Chung-hee model) or ministry is a necessary step. However, China's institutionalized mistrust of overseas scholars undermines its ability to attract returnees in a way that neither Korea nor Taiwan has had to confront.

Conclusion. Almost 33 percent of our sample are either returning or say that they will definitely return. This finding demonstrates a strong concern for China's future among a large number of Chinese studying in America. Given the importance attributed to economic factors and the fear of political instability, significant numbers of Chinese may return if China successfully weathers Deng Xiaoping's succession and if the economy continues to reform and grow. However, many people in our second category, "definitely will return but don't know when," may be thinking of returning only in the more distant future. The experience of Taiwan and Korea may be relevant in that people studying abroad did not return to those countries until the economies improved significantly and that even then, it took proactive governments to give people strong incentives to uproot themselves from their comfortable living conditions in the United States. Maintaining growth, reform, and stability in China, a country of a billion people, will be no easy task.

¹ Zweig would assert that if a stable democracy could be established, more people might return; and he also believes that the current authoritarian strategy may breed its own pattern of instability.