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**EDUCATION PATTERNS OF CHINESE MANAGERS**

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## Education Patterns of Chinese Managers

The following statement continues a series of monographs published at The Business School, The University of Michigan. Previously, publications have appeared under the following titles: "A Managerial Profile: the Woman Manager" (1985); "A Managerial Profile" (1984); "The Newly Promoted Executive: A Study in Corporate Leadership" (yearly, 1983-1987); "A Managerial Profile: The Asian Manager" (1987b); and "A Review of Managers in U.S. Industries" (1987a). The following statement is limited to Chinese managers' educational patterns which is second in a series of four--the others pertaining to their career paths, sociological patterns, and lifestyles--and is prefaced by almost identical background material as stated in the other three research statements.

All the above studies, including the 436 Chinese managers described in this statement, responded to similar questionnaires in order to permit both longitudinal and cross-comparisons. Accordingly, the final data base resulted in an N of 436 Chinese managers, 282 males and 150 females (4 did not indicate their sex), who were compared with 6,223 U.S. managers; 319 Asian<sup>1</sup> managers; and 8,720 U.S. top-level executives such as Chairmen, Presidents, and Vice-Presidents. Data summaries of the monographs have appeared in scholarly journals, professional association publications, and in newspapers and periodicals in the U.S. and in foreign countries.

Two goals underlie the research described in the following pages:

(1) to create an educational profile of the Chinese manager,

particularly those located in Beijing, and (2) to compare that educational profile with comparable Asian and U.S. managers.

If those two goals are met, the preeminent goal will result in better understanding of and communication between those managers who have significant business interchanges across national boundaries. Understanding both similarities and differences in education levels across all groups creates opportunities for improved commercial relationships and understanding between people. To achieve these goals, the following statement focuses on five background introductory statements followed by four topics concerning education as based on a completed management questionnaire.

## **BACKGROUND**

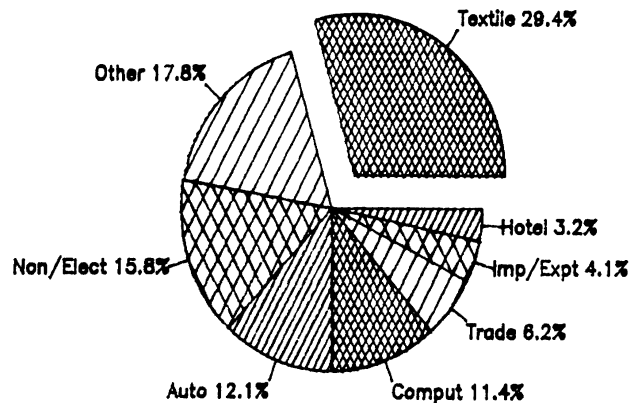
### **Industries Represented**

Over thirty-one manufacturing and non-manufacturing Chinese industries are represented in the sample. Because the focus was upon specific industries, the majority of responses came predominantly from seven which closely participated in the study: Textile Manufacturing (29.4 percent); Non-electrical Machinery (15.8 percent); Automotive Manufacturing (12.1 percent); Computer Technology Manufacturing (11.4 percent); Wholesale Trade (6.2 percent); Import/Export Services (4.1 percent); and Hotel Management (3.2 percent).

The remainder of the sample (17.8 percent)--often with few persons in the group--came from diverse categories such as the government, education, and the legal area.

Thus the data are more representative of manufacturing managers rather than non-manufacturing, somewhat influencing the conclusions

Chinese Industries Studied



drawn in later analyses. Simply for contrast, in 1952, 56.9 percent of the gross output value of China stemmed from agriculture and only 15.3 percent from heavy industry. By 1985 those data show an agricultural decline down to 34.3 percent of gross output value but an increase in heavy industry to 35 percent. (Statistical Yearbook [China Stat], 1987, p. 20)

An interesting fact is that in only the textile industry do women managers outnumber the men: 51.2 percent to the males' 48.8 percent. Overall, the one-third female managerial presence is quite parallel to U.S. and Asian managers where 20 percent of the managerial workforce were women (Hildebrandt, Miller, Edington, 1987a, 1987b), but slightly lower than the data cited in the Statistical Abstract of the United States [Stat Abst U.S.], (1987), which suggest females hold 42.7 percent of the managerial and professional positions. In Great Britain 20 percent of the managerial workforce is women. (Davidson & Cooper, 1987). Total Chinese women in the workforce in 1985 was 36.4 percent of the total labor force. (China Stat, 1987, p. 103)

If there is a bias toward sexual stereotypes and type of industry, it is that Chinese women are disproportionately represented in the textile field. On the other hand--and to the credit of China's insistence on the omission of sexual stereotypes across industry lines--women are represented in managerial positions in many industries.

### **Enterprise Size<sup>2</sup>**

It is not difficult to aver that the data represent larger industries, a precise two-thirds (66.6 percent) of the managers coming from firms in excess of 2,700 employees. In part this skewed information is due to accessibility; the larger firms being easier to contact for purposes of the study.

There is currently discussion on how to measure the size of Chinese enterprises. Some suggest that on the basis of employee numbers 3,000 and above is large; 500 to 3,000 medium; and below 500 a small enterprise. We had no way of knowing the gross operating revenue of the enterprises studied, so the classifications which follow are more labor rather than capital intensive. If classification were on the basis of gross operating revenue--a common measure for size in the U.S.--some Chinese feel a large company would gross in excess of 50 million yuan; a medium enterprise 5 to 50 million yuan; and a small one less than 5 million yuan. But no formal government statement for the moment is forthcoming.

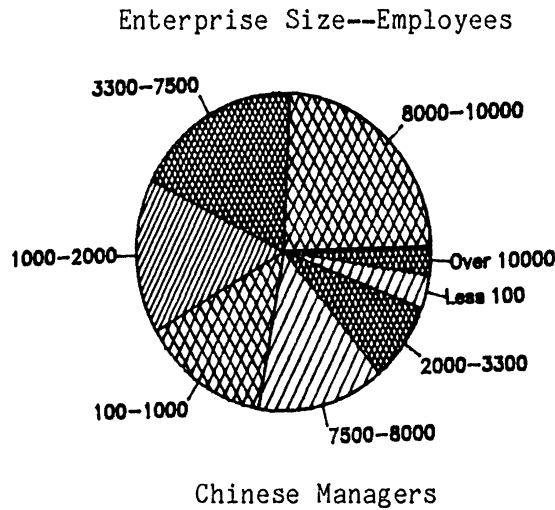
An exact number of firms by employee number is seen in the following table.

Table 1

Enterprise Size by Employee Number

<u>Employees</u>	<u>Percentage</u>
Less than 100	3.4
100-500	10.0
500-1,000	4.0
1,000-2,000	15.8
2,000-3,330	8.0
3,330-7,500	18.2
7,500-8,065	14.0
8,065-10,000	23.5
Over of 10,000	<u>2.9</u>
	100.0*

\*Rounding will sometimes result in percentages greater or less than 100%. In some instances a very precise number-of-employee figure was used by respondents, that common figure being given the managers by top management.

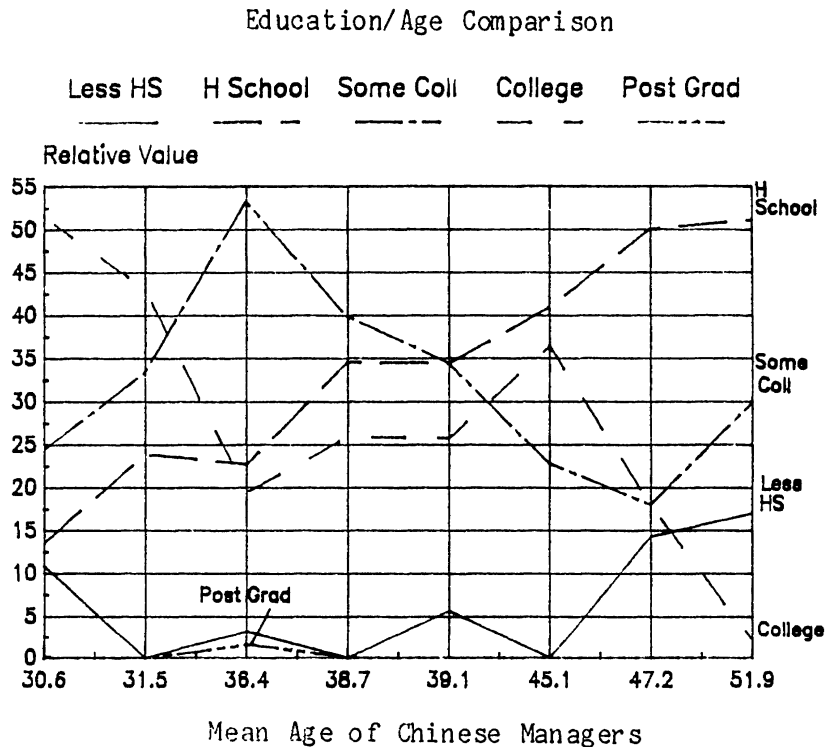


**Time Spent With Present Enterprise**

General Secretary Zhao Ziyang in speaking to the 13th National Congress of the Communist Party of China on October 25, 1987 made these statements:

Basically, the development of science and technology, the revitalization of the economy and indeed the progress of the whole society all depend on improving the quality of the work force and training large numbers of competent personnel. Education is of fundamental importance to the fulfillment of our great long-range mission. We must therefore continue to stress the strategic role of education and do a better job of tapping intellectual resources. As the economy develops, the state should increase year by year the funds allocated for education, while continuing to encourage people from all walks of life to raise money to set up new schools. We should stick to the principle that education must serve socialist modernization. [Zhao, 1987]

Educational data, correlated with the years spent with the present employer--in the manufacturing and non-manufacturing categories noted in question one--suggest that none of the managers with an enterprise in excess of 25 years had a post-graduate<sup>3</sup> degree. For example, in 1952 there were only 2,763 graduate students (China Stat, 1987, p. 629) compared with 87,331 enrolled in 1986. Moreover, within that same span of years, nearly a third (31.3 percent) had less than a high school





education. Predictably, with China's increased national emphasis on education, the younger managers--mean age 31.5, and employed in a company less than one year--obtained an undergraduate education (42.9 percent). Those young employees with an enterprise 1-5 years--mean age 30.6--have the highest undergraduate degree percentage, 51.4 percent.

In other words, younger managers are better educated than their older counterparts. For instance, only 20 percent of the managers with a company in excess of 15 years obtained an undergraduate degree.

Yet a lack of mobility characterizes the Chinese manager: just over a quarter (27.7 percent) of them spending in excess of 21 years with the same enterprise. Asian and U.S. managers in excess of 21 years with a company had respective percentages of 2.8 and 12.7, the Asians suggesting thereby even more mobility than the U.S. Of the 141 managers working in Beijing, 95 percent of them were born in Beijing; thus, only 5 percent of the managers came from outside the city, for three potential reasons noted in the following paragraphs. Only 1.7 percent of Chinese female managers working in Beijing came from outside the city, again attesting to the axiom that females particularly born in Beijing work in Beijing.

A brief statement of the communist worker's dependence (Walder, 1985) on the enterprise is in order, for several factors do and often did have an influence on the longer time in grade of the Chinese managers when compared with other managerial systems.

(1). Economically a state-owned factory in China is influenced via central government planning, suggesting that a high degree of control over the enterprise and the employee is centrally administered. Thus

for a manager to leave his or her place of work is possible but economically infeasible for in so doing the manager would lose seniority--if he went to a collective or private enterprise--and have to begin anew in his or her other position. If another state enterprise would accept them the seniority would carry over, but to be accepted is no minor task. Additionally, a housing move most likely would be involved, moving to the housing units of the new unit; this too would require approval. Finally, to give up many state supported benefits--if one wished to move to a collective enterprise--could result in loss, for instance, of death benefits, minor dependent benefits, and usually a decrease in old-age pensions. Worker welfare via the enterprise is not an easy perquisite to omit, particularly because some enterprises are total working and living environments. (Schermerhorn, 1987; Nelson and Reeder, 1985) Economic reasons become forceful motivations for remaining in the same unit, regardless of personal likes or dislikes.

(2). Politically the Party has a parallel structure to the central government's structure and role within Chinese enterprises. Workers' political attitudes are observed and evaluated in addition to one's work, in part illustrated in a statement by Committee Secretary Xing Chungzhi (Top Cadres, 1987) of Hebei Province:

We are not accusing these young cadres of being good for nothing or that all of them are bad, but there really exists a problem of upgrading their ideological and political quality. Education in the basic principles of Marxism-Leninism is a most fundamental education which must never be overlooked.

Such a political oversight group includes a second form of employee control, influencing promotions, raises, and in some instances denying approval of leaving an enterprise.

(3). A third reason for lack of mobility is migration policies. Workers, managers included, may more easily move from larger cities as Beijing, Shanghai, or Tinanjin to medium sized cities, to smaller cities, to towns, to the countryside. But to move in reverse order is difficult, those constraints being enacted in the 1950's in an attempt to control large migrations to the cities, where were located the industries and larger cooperatives. Indeed, neighborhood committees keep track of the number of persons within a home/apartment to ensure no additional friends or family members move into the area.

In short, individual mobility may be desired, but the impediments imposed via central planning, the Party, and migration policies are exterior constraints over which the manager has little control, forcing him or her to remain in the same position much longer than in western countries.

Adding the factor of age produces no surprises: the older aged managers have been with a firm longer. Managers in excess of 30 years had a mean age of 51.9; those with the same enterprise 26 to 30 years had a mean age of 47.2.

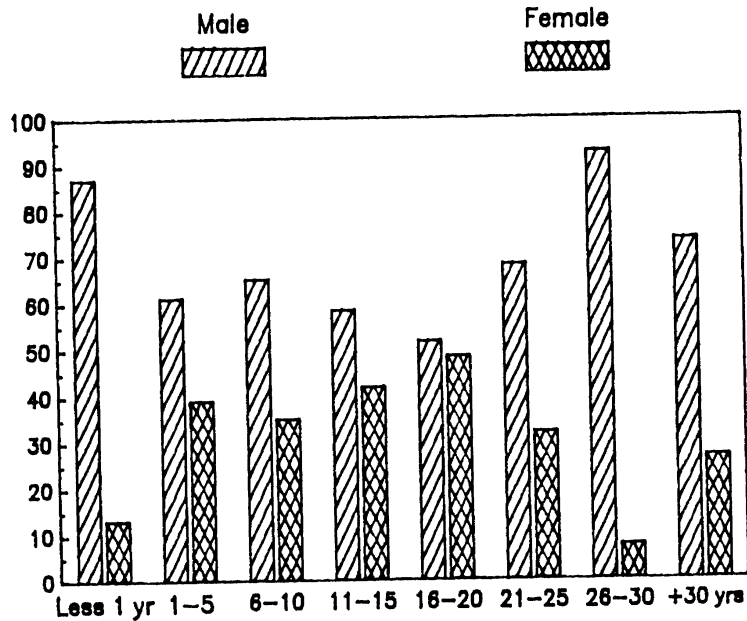
Table 2 lists the number of years with an employer along with the sex, mean ages, and education of the managers.

Table 2

Years with Enterprise, plus Age, Sex, Education

Years	Sex		Education				Age		
	Male %	Female %	Less than H.S.	H.S.	Some College	College degree	Post-Graduate	Mean	
Less than 1 yr.	5.3	87.0	13.0	--	23.8	33.3	42.9	--	31.5
1-5	30.4	61.1	38.9	10.8	13.5	34.3	51.4	--	30.6
6-10	14.5	65.1	34.9	3.2	22.6	53.2	19.4	1.6	36.4
11-15	8.3	58.3	41.7	5.7	34.3	34.3	25.7	--	39.1
16-20	13.6	51.7	48.3	--	34.5	39.7	25.9	--	38.7
21-25	10.1	68.2	31.8	--	40.9	22.7	36.4	--	45.1
26-30	6.5	92.6	7.4	14.3	50.0	17.9	17.9	--	47.2
Over 30	11.3	73.5	26.5	17.0	51.1	29.8	2.1	--	51.9

Years with Enterprise



Chinese Managers

### **Length of Time in Previous Position**

Lack of mobility for the Chinese manager is further supported when viewing the time spent in a previous position. However, opportunities for promotion will increase if at least one of General Secretary Zhao's economic reforms and his managerial criterion for reward can be implemented:

Select qualified managers through competition, and reward or penalize them mainly according to the economic performance of the enterprises, including the increase or decrease in their assets, so as to help a large number of capable and daring entrepreneurs to emerge in the course of keen competition for markets. (Zhao, 1987)

Review of the data suggests that the level of education makes little difference as to the rate of promotability within a company as both lesser educated persons with at least a high school education and those with an undergraduate degree spent similar amounts of time in their previous positions.

Vividly different than their Asian counterparts, 27.4 percent of Chinese managers spent 15 or more years in a previous position, 13.8 percent, 11 to 15 years; and 10.7 percent, 6 to 10 years, suggesting that promotions and movements laterally or vertically come slowly when compared with other Asians. Only 6.9 percent of the Asian managers, for instance, were in their previous position 15 or more years.

Long lengths of time spent in previous positions are a result of the current managerial system. It is difficult to leave a company; it is difficult to move from one position to another; it is difficult to change any pattern once the worker has a given role within an industry. Nelson and Reeder (1985) assert that at least 90 percent of the Chinese workforce remains at the same position, only personnel selected for

managerial roles assuming different jobs for training purposes. One manager according to Nelson and Reeder (1985, p. 21) stated, "We believe a worker should do one kind of work. Some work is complicated. He will do it better and have better suggestions than if he knows only a little about several different jobs."

Three major options for moving out of an enterprise are possible:

(1). An employee proves him or herself so competent that they are asked to move from their present workplace--usually defined as a physical location--to another workplace within the same enterprise under the same ministry. For instance, a textile manager of factory #1 ultimately responsible to the Ministry of Textile could be promoted to a higher position in textile factory #2 as determined by leaders at a higher level. In other words, a higher level authority most often makes the decision to promote an employee, the employee having little force in changing his or her position.

To move to another workplace in another enterprise under a different ministry is more difficult, regardless of managerial competence. A higher level authority must give approval of a change in position.

(2). Some managers selectively curry the favor of leaders, specifically the president and the Party secretary of the workunit, often through various forms of support. It is not unheard of for networks to flourish in some enterprises, promoting some employees who are looked upon favorably regardless of job competence. To incur disfavor from higher authority can have severe effects: perhaps slowing promotions, losing face, or even resulting in a job transfer (Chesanow, 1985).

(3). Employees below the age of 25 may want to apply for a college entrance examination hoping thereby to remove themselves from the enterprise position in which they currently work. If they pass the college entrance examination, the employees then attend college, at the end of which the government assigns them a new position--as based on several employee ranked choices--to an enterprise which is in need of their expertise.

Currently there is dissatisfaction among some students who pass their entrance examinations and obtain a higher education, especially in the U.S. China Youth News noted, "We are a country with a severe

shortage of qualified personnel. Yet in many places a large amount of talent is kept idle and wasted." (Gargan, 1987). For instance, some Chinese students worked hard to obtain an MBA degree and returned to China, but then were assigned managerial positions which did not make good use of their advanced business training. Indeed, currently within the U.S. there are over 30,000 Chinese students and visiting scholars, some of whom may delay their return for fear of not receiving a position commensurate with their advanced academic training. Recognizing the issue, top Chinese leaders including acting Prime Minister Li Peng, have given priority to investigating the problem. (Gargan, 1987).

Lack of job opportunities commensurate with academic training is also a criticism leveled by some current students of Chinese universities. Limited job opportunities and assignment of all but a few positions by the State (Ignatius, 1987) is causing increasing concern on college campuses. Increasingly, educated students, those who are potential managers and leaders by virtue of their education, seek more of a say in job allocation, an area affecting them directly.

Currently, Chinese readers are aware that changes are underway to permit educated students to select their own jobs after graduation. A recent meeting (January 1988) of the State Education Commission has implemented a new policy to begin in 1993 of supplying employers with information on higher educated students. On the other hand employers will supply the Commission with their employment needs. As a result, prospective students will be able to select a job based on those openings, and, after having passed an employment examination, will be able to sign an employment contract. Beijing's Quinghua University and

Shanghai's Jiaotong University will immediately try out the new system.  
(College Graduates to Choose Jobs, 1988)

Special incentives will be offered those students who elect to work in remote and backward areas of the country.

It also seems that institutions of higher education will be influenced through students selecting their own positions. For instance, if many enterprises request students trained in certain subjects and the institutions have not offered those subjects, those students may have a more difficult time locating a job. Hence, institutions may begin to alter their curriculums to meet the needs of the enterprise.

It is therefore difficult to move out of a unit; there is rigidity in the system which encourages, indeed supports employees remaining life-long with the enterprise recommended to him or her by the government. Hence, Chinese managers, in comparison to their U.S. and Asian counterparts, are limited in their ability to move out of the enterprise selected for them. However, radical changes in the current lifetime job security structure (Bronfenbrenner, 1984) will apparently be met with resistance because the "iron rice bowl" (life-long job security) concept is now strongly entrenched in the workers.

Nevertheless, there are winds of change blowing through Chinese enterprises. (Adoption of Labor, January 4, 1988) One variation is the contract concept whereby employees/managers contract on their own with an enterprise--say for as long as three years--for an agreed upon sum of money and other benefits. At the end of their contract they may be asked to remain or are released to search out another enterprise,

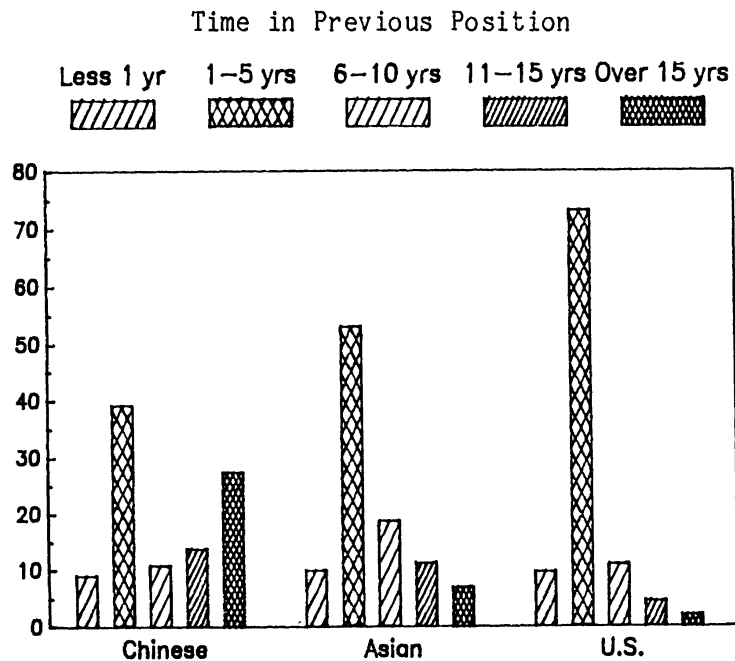


including possibly joint venture firms who because of the gradual liberalization of the labor market, may recruit competent people if housing and other perquisites are available. (How PRC Joint, January 18, 1988) Such changing of employer locations, while giving employees an opportunity to change positions also jeopardizes their life-long work concept and could result in a group of migrant workers/managers. Some argue that 3 percent of the contract workers are looking for new jobs, seeking new contract opportunities on the expiration of their previous contract. (Chip Off the Old Bowl, 1987).

Comparative data for time spent in a previous position appears in the following table.

Table 3  
Time in Previous Position

Time	Chinese	Asian	U.S.
Less than 1 yr.	9.0%	9.9%	9.6%
1-5 yrs.	39.1	52.9	73.0
6-10 yrs.	10.7	18.6	10.9
11-15 yrs.	13.8	11.2	4.5
Over 15 yrs.	27.4	6.9	2.0



## **The Enterprise, Party, and Government**

We have suggested that a close linkage exists between the Party and the government in Chinese enterprises; thus, in turn, both could influence the career path of the managers within that structure. Tracking Chinese managers' careers and education perceptions within that system requires a brief discussion of the Chinese Communist Party (CCP) and the governmental structure in order to round out the pattern in which Chinese managers work and live.

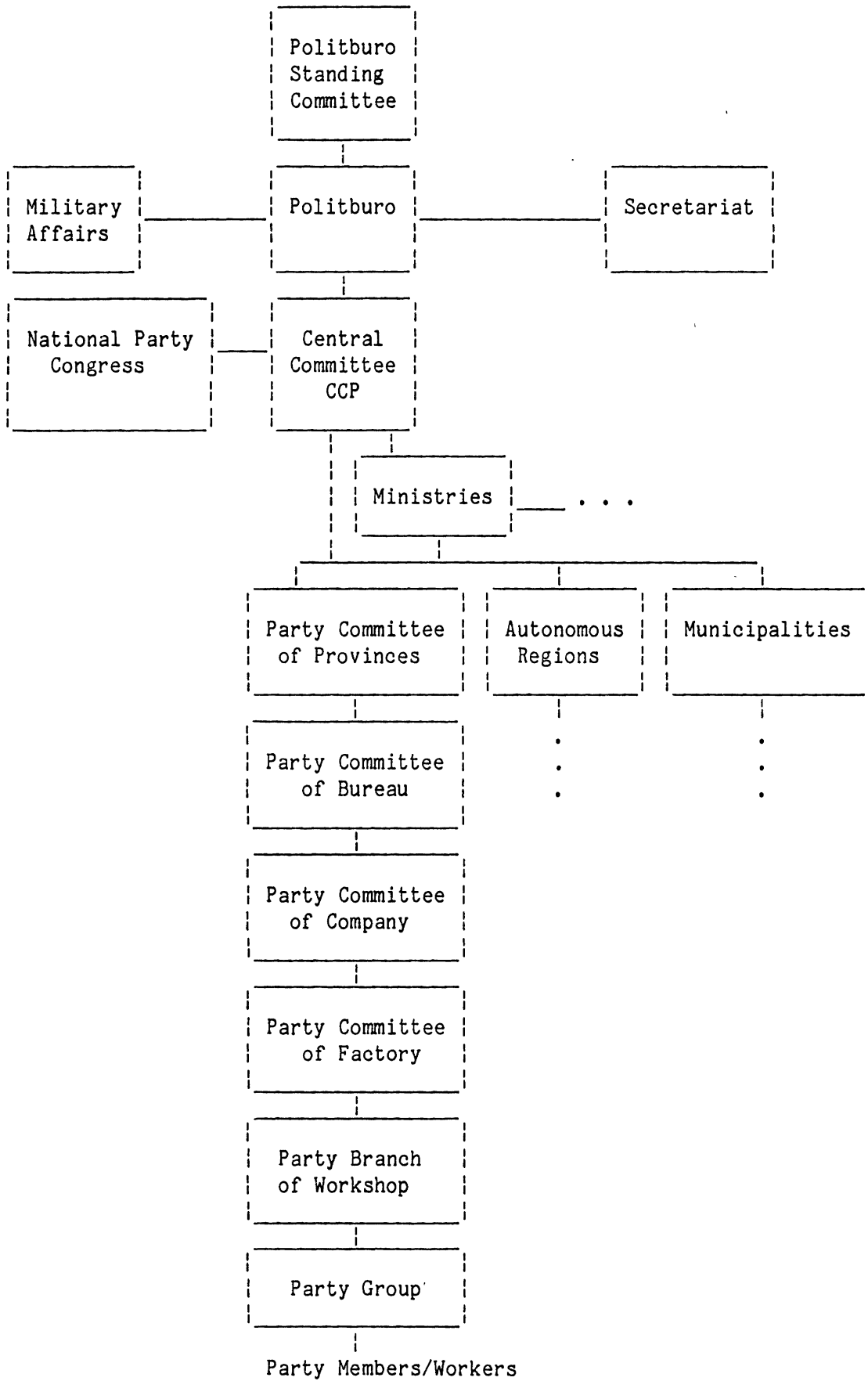
### Chinese Communist Party

To understand the CCP and its influence in business, the following simplified diagram suggests a structure parallel to the government.

General Secretary Zhao heads a standing committee of the Politburo which in turn is responsible to the Central Committee of the CCP. Central Committee doctrines are disseminated to the Ministries, the Bureaus, the Provinces, the Autonomous Regions, the Municipalities, the Companies, the Factories, the Workshops, and the Party Groups. On each level are located CCP members, each working to ensure adherence to and seeking support for the communist principles laid out by the top echelon Politburo Standing Committee.

Consequently, some CCP party secretaries are present in factories to act as oversight persons ensuring acceptance of political and ideological principles of the party. Few do manual labor, few engage in direct production activities, labor over a machine, or operate advanced technological devices. They instead are within factories for four core purposes:

Chinese Communist Party



- (1). To communicate higher level instructions and documents summarizing doctrines of the party, disseminating these throughout the organization, at all levels, to all workers.
- (2). To organize discussion cells wherein communist doctrines may be reviewed and communicated. An example would be that General Secretary Zhao's October 1987 speech could be reviewed and analyzed by factory members of the CCP and non-members.
- (3). To act as an oversight group, determining that the principles of the CCP are implemented and adhered to with minimum diversions. Some Chinese suggest that exactitude to communist principles is a requirement within any factory if that factory is to be truly communist. Adherence to four cardinal principles must also occur, as they are the political and ideological touchstones which a CCP member uses as a yardstick: (1) Keeping to the socialist road; (2) Upholding the people's democratic leadership; (3) Accepting leadership of the communist party; and (4) Accepting Marxism-Leninism and Mao Zedong thought.
- (4). To enlist new members of the factory into the CCP, and if the potential members are accepted, thereby enlarge the party base in the factory.

One can quickly see that this ideological path places individuals whose sole purpose within units is not to oversee production, rather obtain adherence to and support for communist principles. When 133 enterprises were asked (Han and Ma, 1981; Xiao, 1981) which factors contributed to the "good" performance of their enterprise, nonintervention of the Party committee in administrative matters was a positive factor. Thus Party intervention and its separation from enterprise functioning was an early theme, later carried forward by General Secretary Zhao (Zhao, 1987) in October 1987 along with six other points concerning needed reforms:

- (1). Separating Party and government
- (2). Delegating powers to lower levels
- (3). Reforming government organs

- (4). Reforming the personnel system relating to cadres
- (5). Establishing a system of consultation and dialogue
- (6). Improving a number of systems relating to socialist democracy
- (7). Strengthening the socialist legal system.

(Zhao, 1987)

Therefore, the government is aware of the current influence of Party secretaries and overlapping responsibilities. On the other hand, workers whose sole effort is directed at political/ideological persuasion recognize the importance of that position and are reluctant to give it up. In the current study 4.7 percent of the managers began their careers in the political/ideological category; that position represents a major divergence from Asian and U.S. managerial groups. More significantly, over one quarter (27.3 percent) of the Chinese managers later suggest that the political/ideology area is one of the fastest routes to positions of importance within an enterprise, a promotional track unheard of in the west, yet one which even young managers consider a significant avenue for their promotion. Lindsay and Dempsey (1985) include a revealing statement by a student:

Political education is an indispensable part of our motivating strategy. Because our country is poor, we have to educate people to cherish novel ideas as one of the motivating forces in their work while making every effort possible to improve people's livelihood.

We Communists believe that there is something else besides the satisfaction of people's basic needs, which can also motivate people to show what they really can do. So, we should never forget, while trying to satisfy the basic needs of the people, our political education of the people. We educate our people with Communist spirit, mobilize them with the spirit of self-reliance, and arouse their enthusiasm with patriotism.

### Central Government Operation

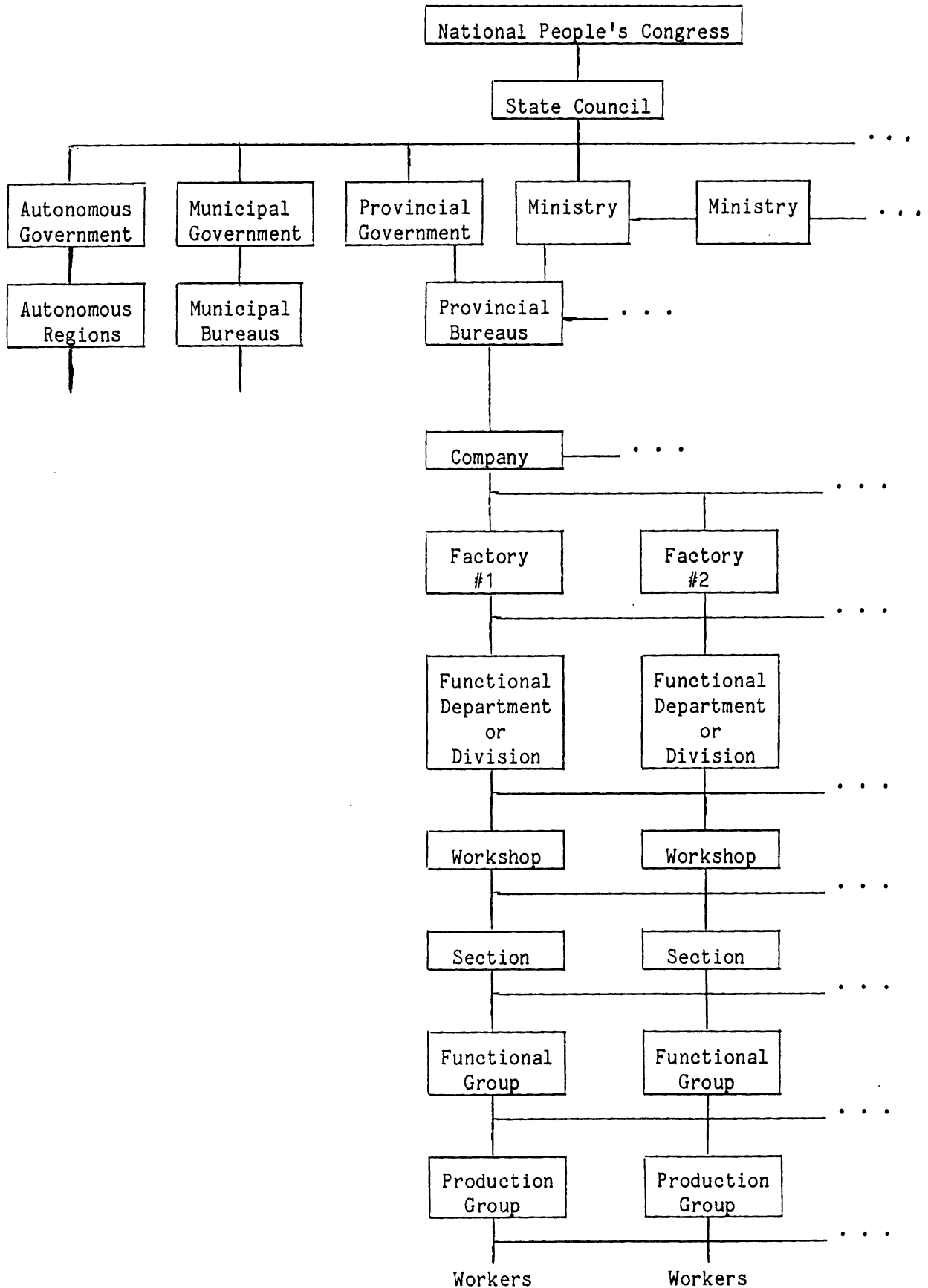
In order to see the interrelationships between the CCP and government operations, and the bureaucracy occasioned thereby, the following chart briefly lays out the structure.

Theoretically the National People's Congress is the ultimate governmental authority on the national or central government level. That authority, in turn, extends down to the 21 provinces, 5 autonomous regions, and the 3 municipal governments of Beijing, Shanghai, and Tianjin being treated as a Municipality. Day-to-day operations of the central government are handled through the State Council and the numerous Ministries, such as the Ministry of Textile Industry, Ministry of Light Industry, or the Ministry of Petroleum Industry, plus other commissions, committees, and bureaus. (Saich, 1981, p. 128) Thus, for example, some of the managers in this study are under the control of the Ministry of Textile.

At the next level--the autonomous regions, municipalities, and provincial governments--there is an almost parallel structure to that of the central government. (Jan, 1966; Richman, 1969) Day-to-day operations are handled by respective governments who in turn oversee many bureaus, comparable to the responsibilities of the Ministries. Beyond the Province, for instance, are somewhat parallel structures for the county and city.

Ultimately comes the company, i.e., it in a sense is the corporation in charge of similar types of factories producing similar products, and in a real sense relate to the various governmental levels described above. Take one example, that of the R&D (Research and

Central Government Organization



Development) function. At the Ministry of Textile level there are four institutes with 1,078 workers in this function alone; in the Ministry of Machine Building there are 61 institutes and 41,749 workers (China Stat, 1987, p. 662). In fact, as of 1986 there were 744 R&D agencies with a total of 336,062 workers under control of the State Council.

Within the factories are the functional departments or divisions-- e.g., production, sales, planning--and beneath them in decreasing size and more specialization are the workshops, sections, functional groups, production groups, and finally the workers. Most middle managers in this study came from the factory through the workshop level, or at the level we would call upper middle-management.

Even in this over-simplified presentation of the government's planning role in Chinese enterprises, it does not take long to see the stifling bureaucracy and diminished decision-making power of the managers as China makes progress in modernizing its management system. (Walder, 1985; Wang, 1986; Engle, 1986; Laaksonen, 1984; and Jones, 1984). Concern about the current bureaucracy was one of General Secretary Zhao's themes, "Chief among these [some problems in the current structure] defects are overconcentration of power, a serious degree of bureaucratism, and feudal influences that are far from eliminated." (Zhao 1987).

Managers thus face several authorities: the communist party of China which is present at all levels, and the central government planning through its ministries, bureaus, and commissions. It is this very overlapping, this party-government pluralism which produces managerial confusion that General Secretary Zhao wishes to change: "But



one long-standing problem has not yet been completely solved: the lack of distinction between the functions of the Party and those of the government and the substitution of the Party for the government." (Zhao, 1987) General Secretary Zhao's seven points reviewed previously in the discussion of the CCP are intended to remove some of the deficiencies engendered by the current structure.

To sum up, the preceding provided only a glimpse of the Party structure and the government's role in an enterprise. How the Chinese managers' educational background fits into that pattern is to what we will now turn.

#### EDUCATION LEVEL

Four sections make up this background discussion of the education attainments of Chinese managers. In a word, they are far less educated than counterparts from Asia and the U.S. Five reasons are primary.

First, China today does not have in relation to its size--in contrast to the United States--many institutions of higher education. In 1980 only 675 institutions for higher education were present, increasing to 902 in 1984, and by 1985 had reached 1,016. (China Stat, p. 13). The current government's emphasis on education and training should, over time, increase the number of schools and institutes devoted to higher education. Indeed, the fact that half of China's governing body now have a college education (Butterfield, 1987) compared to previous leaders' peasant background with little education, suggests a massive commitment to both undergraduate and post-graduate education. (Limerick, Davis, Fitzroy, 1985)

Second, China for years was and according to some still is an agrarian economy. Over 800 million of the people still live in the countryside (Wu, January 18-24, 1988) and regardless of a nine-year compulsory education system few of the rural students are admitted to universities. A further breakdown suggests that the labor force is still predominantly agricultural, 69 percent in 1980, with industry 19 percent, and services 12 percent. (World Development, 1984, p. 258) Hence, not as much formal education for a rural economy was needed. That attitude is changing, however.

Accepting this last premise, along with former leaders' minimal interest in education, suggests that in the past there was little support for higher education. Western education was not needed in a dominantly agrarian economy, in a country which formerly looked internally rather than externally. In the past new management ideas, new theories, new ways of entering an international market were of minimal use.

Indeed, some early leaders felt that as a result of the several wars in which China engaged those war leaders could capably lead in such areas as the economy and industry. The pragmatic training of the battlefield was sufficient enough to lead an industry, thus, why establish educational institutions?

Third, during the period of the Cultural Revolution (1966 to 1976) most universities were closed; faculty were asked--perhaps demanded would be a better word--to leave their professorial positions and work in the countryside. Now is not the time to review the agonies of that professorial class, but the stories of servitude are a recitation of

unpleasant experiences for the educated class, often in menial positions under the guidance of former students. Heart-warming stories were told to the American author of some students who returned, later, to professors and apologized profusely for their behavior. Some colleges did open after 1970, but many students attending were selected by their working unit, without benefit of an entrance examination.

Fourth, many qualified students could not attend class during the Cultural Revolution. If education did occur outside of the university, it occurred privately, often within the homes of those who waited for better times. Self-study replaced classroom learning. Access to books was for many their only contact with the world of learning.

Fifth,—except between 1977-1980—a lesser educated Chinese manager had to face the reality of a maximum age for taking a college entrance examination. Age 25 was the latest year in which a high school graduate, or anyone so interested, could take such an exam. Thus thousands of persons, shut out of college during the Cultural Revolution, possibly unable to study during that period, had the added burden of becoming older and often ill-equipped to pass an entrance examination for college.

In summary, our findings confirm what General Secretary Zhao alludes to in his October 1987 address, that there is a need to improve the educational level of Chinese managers. Today the attitude toward education has changed, particularly visible as management seminars, programs, and institutes take steps to improve the managerial expertise of the Chinese manager.

## 2. Level of Education

### Undergraduate

Thus it is obvious why so few managers are college educated, only 27.6 percent--Warner (1985) suggests two-thirds have few qualifications beyond middle school--receiving the equivalent of an undergraduate degree, many with engineering backgrounds. (Burstein, 1983; Butterfield, 1987) Contrastingly, and without the burden of being denied education or an imposed age limit, 65.4 percent of the Asian managers and 79.8 percent of the U.S. managers received an undergraduate degree. Such a startling difference suggests the great need for and General Secretary Zhao's interest in improving the education level of not only managers but the entire nation. As early as 1984 he offered these prescient remarks at the Sixth National Peoples' Congress, then as Premier:

[all] cadres engaged in economic work [should] conscientiously learn economic management and modern science and technology...[In addition] all enterprises and institutions should train their employees in a planned way. To obtain practical results the content and requirements of such training should vary with the posts and ages of employees. From now on, in recruiting workers and staff members, the enterprises must provide pre-job training for candidates and enlist those who have done well in examination. This is to ensure the quality of workers and staff, labour-discipline, production-safety and good condition of equipment in factories and mines." (Warner, 1985, p. 75)

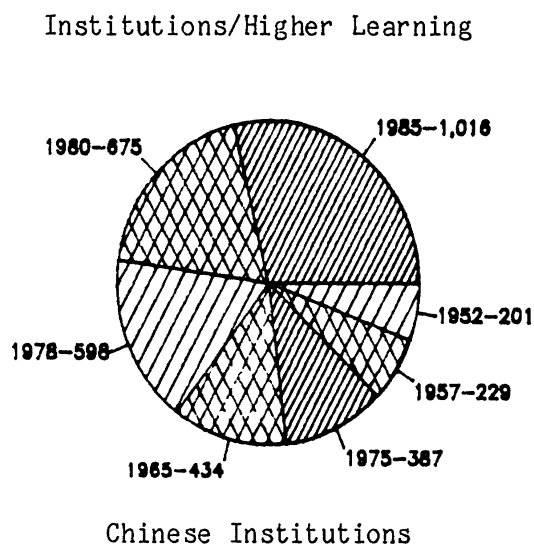
### Post-Graduate

At the post-graduate level only .7 percent in the Chinese manager sample possessed an advanced degree. Three reasons are apparent:

(1). With the colleges closed during the Cultural Revolution there were few opportunities for advanced degree work. Post-graduate students, in some instances, joined their professors in rural areas. Anecdotal evidence suggests that some professors and their students

convened secretly to continue learning, but this was accomplished without academic credit which in turn did not change the post-graduate requirements in a formal classroom.

(2). There were and are comparatively few post-graduate schools in China. In 1962 (China Stat, p. 629) only 173 institutions offered post-graduate training (under rubrics as Institutions of higher learning; Chinese Academy of Sciences; Chinese Academy of Social Sciences; Ministries and Commissions; and Scientific research institutes of provinces, autonomous regions, and municipalities). That figure had increased to 740 institutions by 1985, of which 388 were labeled Institutions of Higher Learning.



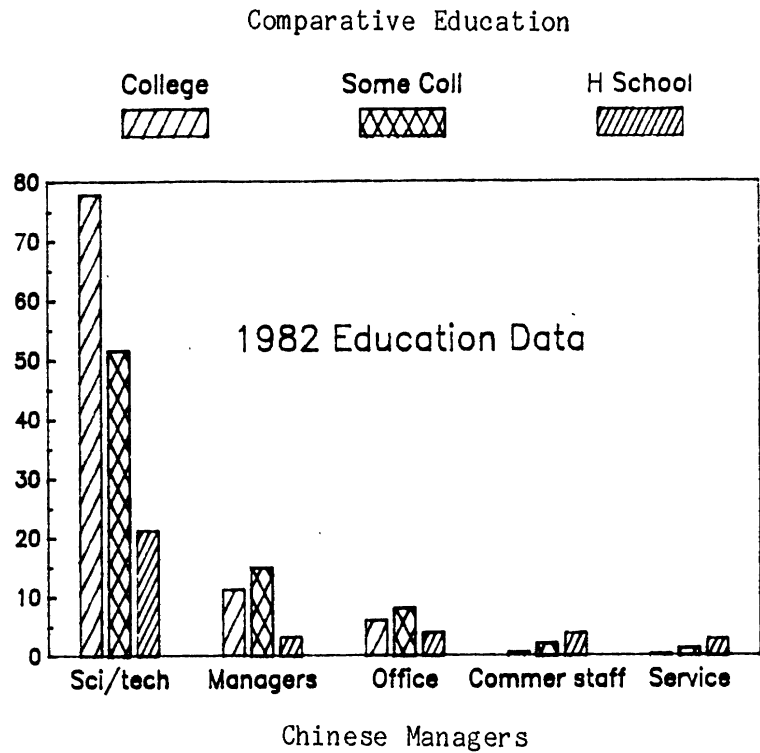
(3). It follows that with comparatively few post-graduate schools there will be fewer students: 2,763 enrolled in 1952 and 87,331 in 1985--compared with the 1,114,000 post-graduate enrollment in the U.S. in 1984 (Stat Abst, 1986)--suggesting that few Chinese post-graduate students would occupy managerial positions. In the current

study only three managers indicated they had received an advanced degree. No precise figures are available for post-graduate courses of study, but using the undergraduate percentages suggests that 147,543 students in 1986 (China Stat, p. 630) studied economics and finance, traditional business subjects in China. Those persons holding a post-graduate degree are primarily in the schools and colleges, there teaching new students who in turn will educate other Chinese post-graduate students.

The large number of post-graduate Chinese studying abroad (c.30,000 in the U.S. in 1987) along with a large number of Visiting Scholars, suggests that today the Chinese government strongly supports educating persons who will return to Chinese universities in professorial and most likely not managerial positions.

Information from the 3rd national census for China (Statistical Data, 1986) offers some interesting comparisons. Taking a look at only the category of "Managers of enterprises, institutions and related working units," managers of those diverse units held only 8 percent of the total college degrees as compared with 29.8 percent for teachers and professors; 28.2 percent for engineers; 10.5 percent for doctors and health technicians; and 4.1 percent for staffs in administrative affairs. In fact the category of professionals held 77.8 percent of the total college degrees; the category of managers held 11.2 percent. In sum, at the moment most college educated persons in China are not in the managerial category, suggesting less awareness of modern managerial techniques, of production innovations, of personnel administration, of international trade policies, information one would learn about in

business management classes. A linear study of degree earners and managers will determine whether the degree percentages will change.

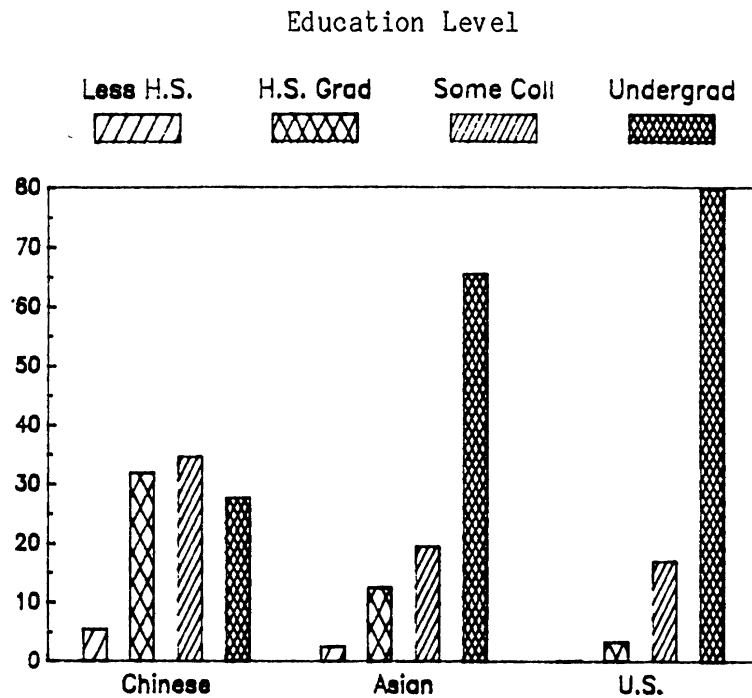


Comparative statistics for the Chinese, Asian, and U.S. managers' education level are in seen in Table 4.

Table 4

Education Level

<u>Level of Education</u>	<u>Chinese</u>	<u>Asian</u>	<u>U.S.</u>
Less than H.S.	5.4%	2.5%	0.1%
H.S. Graduate	31.8	12.4	3.2
Some College	34.6	19.4	16.9
Undergraduate Degree	27.6	65.4	79.8
Post-Graduate Degree	.7	25.0	30.0



### 3. Recommended Courses of Study

Even though the data are negative concerning the lack of a higher education for Chinese managers, they are forthright when responding to this question: "For the student who plans to follow an undergraduate degree with post-graduate/professional study, what course of study would you recommend for an undergraduate major and for post-graduate work as the best preparation for a management career?"

At the undergraduate level nearly two-thirds recommend Business Administration (60.4 percent), particularly courses in Management Administration (15.6 percent) then followed by Marketing/Sales (6.5 percent) and other courses (14.9 percent). Such a high percentage--higher than either the Asian or U.S. managers--illustrates a concern for first improving overall managerial skills, then turning to the area which markets and sells the product. They give lesser but at least some support for Accounting, Personnel Relations, and International Business.

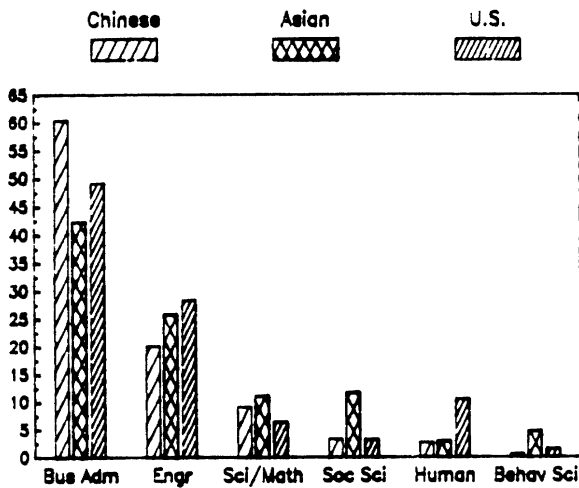


High agreement between Chinese, Asian, and U.S. managers occurs at the post-graduate level: all overwhelmingly support post-graduate work in Business Administration, with second position going to Science and Mathematics.

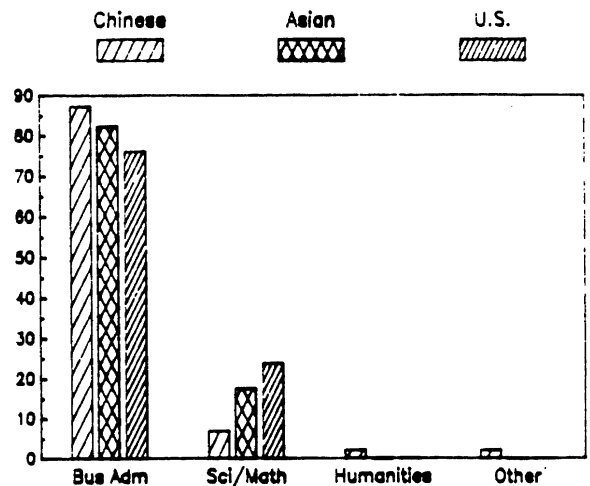
Table 5  
Recommended Fields of Study

Recommended Fields of Study	Undergraduate			Post-Graduate		
	Chinese	Asian	U.S.	Chinese	Asian	U.S.
Business Administration	60.4%	42.3%	49.2%	87.3%	82.4%	76.1%
Engineering	20.1	25.8	28.4	--	--	--
Science and Math	9.1	11.1	6.4	6.8	17.5	23.8
Social Science	3.3	11.7	3.2	1.0	--	--
Humanities	2.6	2.9	10.5	2.0	--	--
Behavioral Science	.6	4.7	1.5	--	--	--
Law	--	--	0.2	1.0	--	--
Other	3.9	1.1	0.6	2.0	--	--

Recommended Undergraduate Study



Recommended Post-Graduate Study



#### 4. Courses as Preparation

The presumption, as with the identical question asked of Asian and U.S. managers and executives, is that on reflection Chinese managers should be able to rank those courses which helped prepare them for their current managerial position. Some interesting parallels occur, and differences.

(1). Asian and U.S. managers rank Oral Communication as "most important" on a scale of 1-highest to 5-lowest, with means of 1.27 and 1.24 respectively. U.S. executives are about equal in their support, verified in many studies (Murphy, Hildebrandt, 1988) which offer support for Communication as preparation for manager/executive competence. Chinese managers, as a group, position Oral Business Communication dead last. Why?

Earlier it was suggested that formal communication (a firm emphasis on the written and formal channels) was the preferred mode of communicating a message through the many hierarchical levels, both Party and government. But that appears not to be the main reason. Little argumentation, debate occurs within the present managerial system. In place of counter-arguments, central planning—at a much higher level within the structure, perhaps as high as the Ministry and Bureau level-- has already recommended the direction for the enterprises. By the time a directive reaches the operations level within a factory there is general acceptance and less need for debating the merits of the decision. Assertiveness through oral communication is less needed. Many managers appear to serve primarily as conduits of information. (Fischer, 1986) Likewise, in a formal communication pattern emphasizing

consensus, the hierarchy and ranking of the persons in the group predetermines who will speak and who will be influential. Managers may speak, but each knows his or her ranking in the hierarchy and the substantive weight their comments will or will not carry.

Such a passive and accepting attitude is culturally and politically fashioned. For instance, lecturing in a Chinese classroom is unlike the west where students willingly challenge, debate with their teacher. Not so in China. There students record, listen, accept quite silently the ideas and words of their instructor. Few would think of challenging the precepts for the day. It is not much different at university faculty meetings. There, a young scholar says, "we don't discuss...there is a speaker. I have only to bring my ears." (China's Campus Life, p. A-48)

From childhood (Solomon, 1971, p. 49) there is imbued in the child protocols, "a strong sense of social status and authority thus develops around interpersonal communications, of who may speak first, who must listen, or who is left speechless." As mentioned above, that sense of rank order also pervades enterprise committees where many speak but not all are heard. Thus the classroom, and ultimately the role of oral communication at the managerial level, in great measure mirrors the cultural training received at home and in the larger society.

Hence a cultural heritage of not being too outspoken, avoiding public confrontation, or knowing one's place in the hierarchy, may influence the low priority given oral communication as an important managerial preparation tool. In time it will be interesting to trace the variations in and deviations from this initial statement on oral communication.

Such an accepting attitude is also part of the political process-- at least at the lower levels of an enterprise--of accepting, of listening, of following centrally planned principles of the Party and the government. Hence, if most planning and debate on an issue has occurred earlier, there is less need for a major emphasis on oral communication.

Furthermore, our experience in Chinese meetings parallels the observations noted by Lindsay and Dempsey (1985) where giving feedback, challenging others, questioning of others, and interruptions were mild or non-existent as compared with U.S. managerial meetings. If there was oral discussion, it was ritualistic: each person offered his or her opinions in the form of set speeches rather than in confrontation through debate. The end of the "discussion" occurred when the senior member of the group offered his opinion on the matter. Non-verbal reactions as head nodding or short oral approvals then occurred by some members of the group.

Similar arguments may be made for Written Communication. If a centrally planned system is in operation and a manager simply implements that policy, there is also less need to develop written communication skills. However, the fact that Chinese managers rank it higher than Oral Communication suggests a recognition that a major mode within all channels is the written word, either for sending material along or having a permanent document to verify actions taken or to be taken.

(2). Both males and females rank Finance and Marketing first and second in course importance. Electing Finance first is not surprising as Chinese managers increasingly are being given opportunities to make

economic decisions. And as China looks outward and has contact with more foreign nations, some sense the need for selling products worldwide which at one time were produced for local consumption. That attitude demands competence in Marketing, today being offered in Chinese management seminars.

(3). Insularity along with central planning may also account for managers giving minimal support to courses as Production/Operations, and Law. Accepting the principle of a self-sufficient economic model for China, there is not much need, some would argue, for knowing extensively the laws or procedures for International Business. And with central planning overseeing production goals and products, this area too would not receive much support. But changes are occurring.

(4). Mathematics has often been applied to production problems in China (Chen, 1986), that along with the great number (580,168 in 1986) of students studying Engineering, may contribute to why Chinese managers strongly support Statistics and Math (ranked low by both Asian and U.S. managers) and Computer/Information Systems. China missed the technological revolution (Goldman, 1986) along with corresponding fewer technicians (Torbert, 1984), thus the managers' support, either initiated through central planning or gleaned from technological laboratories (Orne, 1985), implies a concern for more modern measures and technological advances as aids to improved production.

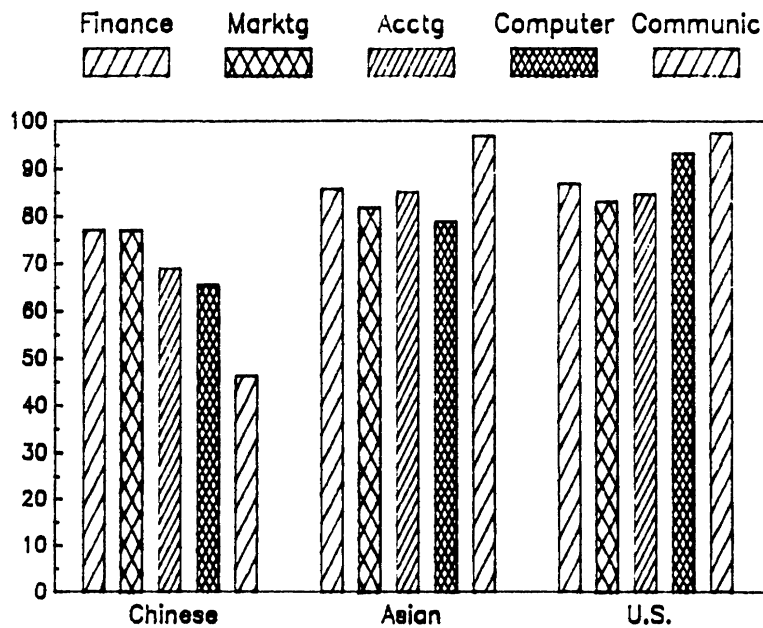
Comparisons and ranking of other recommended courses are in Table 6: "Very Important," 1; through "Very Unimportant," 5.

Table 6

Courses to Study

Courses	(Means)			Asian	U.S.
	Total	Chinese	Female		
Finance	1.95	1.97	1.91	1.78	1.75
Marketing	1.97	1.99	1.94	1.71	1.83
Accounting	2.09	2.09	2.10	1.95	1.81
Computer/Information Systems	2.18	2.17	2.18	1.91	1.54
Business Policy/Planning	2.18	2.20	2.15	1.66	1.64
Business Economics/ Public Policy	2.18	2.12	2.31	1.87	1.90
Advertising/Sales Promotion	2.25	2.27	2.24	2.12	2.30
Statistics	2.25	2.25	2.23	2.40	2.27
Personnel/Labor Relations	2.29	2.30	2.25	2.11	1.81
Written Communication	2.38	2.32	2.48	1.30	1.25
International Business	2.51	2.48	2.56	2.05	2.59
Production/Operation	2.51	2.54	2.43	2.47	2.07
Law	2.54	2.50	2.61	2.14	2.03
Oral Communication	2.57	2.60	2.52	1.27	1.24

Courses to Study



### SUMMARY PROFILE

While the reader may have drawn his or her own conclusions regarding the educational profile of the Chinese manager, the following statements attempt to summarize major characteristics. The profile, as additional information, was based on two-thirds of the group being male, nearly 39 years old on average, and living in the city of Beijing.

They represent larger enterprises, most coming from textile manufacturing, non-electrical machinery, automotive manufacturing, and computer technology manufacturing. Most, over two-thirds, are employed in enterprises larger than 7,500 people.

Chinese managers are less educated than their Asian or U.S. counterparts, with a third of them only possessing a high school education. That statement has more credibility with reference to older managers; conversely, the younger the manager the more their educational training. The government's interest in and support for education as a means of raising the managerial levels within its enterprises will result in higher education levels.

Few Chinese managers possess a post-graduate degree, that in sharp contrast to the over twenty-five percent of the Asian and U.S. managers. Again, with the high number of Chinese studying abroad, this post-graduate education statistic should rise when those students return to China.

Overwhelmingly, at both the undergraduate and graduate level, Chinese managers mirror the recommendation of their Asian and U.S. counterparts: Business Administration is the field of study to concentrate upon when preparing for a career in business. At the post-

graduate level the Chinese recommend Business Administration even more than their foreign counterparts. Engineering is recommended second followed by Science and Math.

While the preceding was a more macro look at preparation for success, the micro courses within the overall structure differ somewhat from the Asians and Americans. Finance, Marketing, Accounting, and Computer/Information Systems courses are recommended first. All these courses receive high ranking in Asia and the U.S. as well. A major shift, however, occurs regarding courses in Communication. While Asians and U.S. managers position communication courses first, Chinese managers position them last.

In sum, the Chinese government and its leader General Secretary Zhao recognize the inadequate education preparation of its enterprise leaders. Changes in educational priorities and support for those priorities are underway.



Notes

<sup>1</sup>While the term Asian or Asia may also include mainland China, for purposes of differentiation we will use the term Asian to refer to the regions of Hong Kong, Malaysia, Singapore, and Korea. We have resisted using the term South-East Asian because many of the "Asians" used for comparative purposes came from Hong Kong. Hong Kong Chinese (N=249) make up the bulk of the sample with the others representing Singapore (62), Malaysia (5), and Korea (3), for a total of 319 "Asian" managers. Most data is taken from Hildebrandt and Miller (1987b) A Managerial Profile: the Asian Manager.

<sup>2</sup>The term enterprise is generic to the factories and other workunits of the Chinese managers. While most of the managers (77.3 percent) came from the manufacturing sector, we use the term enterprise to refer to the other non-manufacturing units as well. Because the term enterprise has a somewhat different meaning in the U.S.,—usually the umbrella organization with numerous sub-units--we shall use the term company when referring to U.S. companies.

<sup>3</sup>The term "graduate" is less used in China when referring to students attending post-undergraduate or commonly known as graduate schools in the U.S. Hence the term "post-graduate" will be used when referring to studies beyond an undergraduate education.

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