

## WORKING PAPER SERIES

# The Reform of Employee Compensation in China's Industrial Enterprises

Helen De Cieri  
Cherrie Jiu Hua Zhu  
Peter J. Dowling

Working Paper 98-05



## **The Reform of Employee Compensation in China's Industrial Enterprises**

Helen De Cieri  
Department of Human Resource Studies,  
Cornell University  
393 Ives Hall  
Ithaca NY 14853-3901  
Telephone: (607) 255.3012  
Fax: (607) 255.1836  
E-mail: hld8@cornell.edu

Cherrie Jihua Zhu  
Department of Management  
Monash University, Australia

Peter J. Dowling  
Department of Management  
University of Tasmania, Australia

Working Paper 98-05

<http://www.ilr.cornell.edu/cahrs>

This paper has not undergone formal review or approval of the faculty of the ILR school. It is intended to make results of the Center research available to others interested in preliminary form to encourage discussion and suggestions.

## **ABSTRACT**

Although employee compensation reform in Chinese industrial sector has been discussed in the literature, the real changes in compensation system and pay practices have received insufficient attention and warrant further examination. This paper briefly reviews the pre- and post-reform compensation system, and reports the results of a survey of pay practices in the four major types of industrial enterprises in China. The research findings indicate that the type of enterprise ownership has little influence on general compensation practices, adoption of profit-sharing plans, and subsidy and allowance packages. In general, pay is linked more to individual performance and has become an important incentive to Chinese employees. However, differences are found across the enterprise types with regard to performance-related pay. Current pay practices are positively correlated to overall effectiveness of the enterprise.

## **THE REFORM OF EMPLOYEE COMPENSATION IN CHINA'S INDUSTRIAL ENTERPRISES**

It is nearly two decades since China embarked on its unprecedented economic reforms to transform "from plan to market" (see Liew, 1997). Since then, the reforms "have substantially upgraded China's old-style 'command economy' to a new 'socialist market economy'" as commented by Goodall and Warner (1997: 569). As part of the "three-system reforms" (Warner, 1995), the employee wage and welfare system and practices are undergoing radical changes from being state-fixed and non-performance linked to being enterprise-determined, performance-related, and incentive-oriented (e.g. Chen, 1995; Chow, 1992; Jackson, 1992; Warner, 1995).

The Chinese employee wage system and practices during Mao's regime have received considerable research attention (e.g. Bernardo, 1977; Hoffmann, 1967, 1974; Howe, 1973; Li, 1991; Shaw, 1996; Takahara, 1992). More recently, the substantial impact of economic reforms on this system as well as the development of new compensation practices has been examined (e.g. Child, 1994; Goodall & Warner, 1997; Hannan, 1995; Jackson, 1992; Zhao, 1995). Few writers, however, have provided detailed discussion of the current reform of employee wages and welfare in Chinese industrial enterprises under the four major types of ownership, i.e. state-owned enterprises (SOEs), collectively owned enterprises (COEs), privately owned enterprises (POEs) and foreign invested enterprises (FIEs).

What changes are evident in employee compensation and benefits due to the wage reform? What is the perceived effectiveness of current compensation practices in China? Does the type of ownership have an impact on compensation practices? Which issues are emerging for the future? In this paper, we seek to answer these questions, firstly offering a brief literature review on pre- and post-reform wage system, and then analyzing results from a survey of compensation reform in the four types of industrial enterprises in China.

### **THE COMPENSATION SYSTEM DURING MAO'S REGIME<sup>1</sup>**

Compensation, as Geringer and Frayne have defined it, "includes those rewards - monetary and non-monetary, direct and indirect - that an organization exchanges for the contributions of its employees, both job performance and personal contributions" (1990: 114). However, this definition could hardly be applied to the compensation system under a centrally planned economy in China, because the wage and benefit system was strictly controlled by the

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<sup>1</sup> See Zhu & Dowling (1994) for more detail.

state rather than an enterprise. This system was characterized by the following major features, that is, centralization and poor enterprise performance, minimal wage differentials; non-performance linked but seniority-based wage promotion; a stress on moral-encouragement rather than 'bourgeois materialism' incentives; and low take-home pay but high subsidies. These features are examined briefly as follows.

#### Centralization and Poor Enterprise Performance

Under a centrally planned economy, industries "were owned and run by the state, and their growth was regulated by planning targets rather than by the profit-maximizing decisions of independent entrepreneurs" (Putterman, 1992: 468). Enterprises were thus described as "little more than appendages of the state bureaucracies that administered them" (Harding, 1987: 113). The government gave mandatory instructions to enterprises that guaranteed both the delivery of inputs, including capital, production material and human resources, and a set price for all the products (Borgonjon & Vanhonacker, 1992). Enterprises had no right to set up or change any wage scale, let alone to increase their total payroll regardless of their performance. This was especially true for Chinese state-owned enterprises (SOEs), because managers in profitable enterprises "did not have residual rights to the profit of the enterprise" (Liew, 1997: 78) and thus lost incentive. Meanwhile, the state's "soft budget constraints" provided loss-making managers with unlimited protection from the consequences of poor performance (see Kornai, 1980, 1986; Walder, 1986: 28). Therefore, managers in SOEs had no incentive to improve either their efficiency or effectiveness.

The most popular wage system in China was a nationally unified wage scale structured by the state in 1956 for both blue and white collar employees (Li, 1991). Generally, there were eight grades for workers, fifteen grades for technical personnel, and twenty-five grades for cadres such as managers and administrative personnel (Campbell, 1987; Yue, 1985). Under this system, there were minimal wage differentials among employees and managers, and the entry level was very low (Shore, Eagle & Jedel, 1993; Sun, Zhang & Ge, 1989). The highest pay received in an enterprise was usually two to three times more than one in the lowest (Wang, 1997; Zhao, 1995).

The small gap between wages reflected strong ideological and political influences. Mao Zedong and his Party advocated the elimination of three major distinctions between city and country, between worker and farmer, and between mental and manual labor. This was believed to be "an important step to facilitate the transition from socialism to communism, and from income distribution according to work to distribution according to needs" (Zhao, 1991: 21).

Furthermore, during the so-called Cultural Revolution (1966-1976), the leftists even declared that “the bigger the differences in the payment for labour, the more capitalism there is” (Henley & Nyaw, 1987: 131).

Wages at each grade were fixed and total payroll was determined by the overall number of employees. Employees routinely assumed that people assigned to the same work position should get the same pay regardless of variations in job content or performance (He & Shu, 1992). This wage system was not linked to personal performance, work attitude or even technical skills. Wage increases were infrequent, occurring at intervals of several years (Henley & Nyaw, 1987). The increases commonly took the form of national unified grade promotions for all employees and these promotions were dominated by decisions based on seniority or political background and connections (Knight & Song, 1991; Shenkar & Chow, 1989; Walder, 1986). While the state specified the quota of total employment and associated payroll, SOEs were not allowed to go beyond the ceiling of the total amount, and were required to send a copy of their total payroll figures to the People's Bank of China, thus placing SOEs under surveillance of the Bank (He & Shu, 1992). When this fixed wage system together with the ‘iron rice bowl’ were in practice, employees did not need to worry about job insecurity or pay inequity. This system essentially encouraged poor performance, and became one of the major reasons for low efficiency and low productivity in Chinese enterprises.

#### Emphasis on Moral Encouragement Rather Than “Bourgeois Materialism” Incentives

The pre-reform compensation system laid emphasis on the moral rather than the materialistic dimensions of the human aspirations, because it involved less risk for managers to use non-material incentives (Zhao, Y. 1995). Martinko and Yan (1990) noticed that the spiritual encouragement or non-monetary reward, such as the award of a ‘model worker’ or the presentation of a red flower, was commonly adopted, while meaningful tangible rewards were very limited. During periods of “political extremism” (Henley and Nyaw, 1987), such as the Cultural Revolution, monetary rewards were severely criticized as “bourgeois materialism” and were eliminated. The withdrawal of material incentives during such political upheavals, combined with the equality-oriented planned wage system, seriously affected the implementation of the principle of ‘to each according to his/her work’ (Shenkar & Chow, 1989; Zhao, 1991). Xiang (1982: 112) concluded that the consequence of the old compensation practices was “absolute egalitarianism whereby the advanced gained nothing, the backward lost nothing and the initiative of the masses was seriously dampened”.

#### Low Take-Home Pay but High Subsidies

It is widely recognized that China has adopted a low-wage system since the founding of the PRC. One reason for this was that the wage is not determined by employee's contribution in the production process, nor by its market exchange value, but rather by the 'existential' value of the employees themselves (Sun, Zhang & Ge, 1989). While low wages may affect work motivation and thus productivity, the state was suffering the heavy burden of subsidizing employees, especially those in SOEs.

Tsang (1994) has pointed out that the provision of numerous subsidies to employees is a distinct feature of the Chinese enterprise system. An internal document, "The Joint Venture Labor Management Provision", issued by the state in 1984 listed subsidies paid by SOEs for their employees (Documents, 1993: 12). These subsidies included working insurance, medical coverage, public welfare, non-staple food, winter heating fee, and home-leave travelling allowances. Subsidies paid by the central government comprised housing, education and medicine, transportation and staple foods (eg, rice). In 1979, when employees' average annual take-home pay was 717 yuan (Chinese dollar), subsidies paid by the enterprise and the government were 269.54 yuan and 610.11 yuan respectively. This indicates that total subsidies (879.65 yuan) were 122.68 percent of an employee's average annual pay (717 yuan). In the early 1980s, details of this complicated wage and benefits structure was provided to foreign investors in order to ensure that foreign companies would pay full labor costs (Stevenson-Yang, 1996). This high subsidy level "reduced the portion in the consumer fund which could otherwise be placed at the workers' direct disposal through income distribution according to their work" (Zhao, 1991: 27). These subsidies helped to form the 'iron rice bowl' and made the enterprises become "mini-welfare states" (Zhu & Campbell, 1996: 33).

### **THE COMPENSATION SYSTEM IN TRANSITION**

The traditional compensation system became a major target of China's economic reforms. The first step in compensation reform involved the restructuring of SOEs into relatively independent business units and the development of links between compensation and enterprise performance. Consequently, the state-fixed wage system has been replaced by diversified wage packages with more emphasis on enterprise profitability and individual performance. As an important part of wage packages, the bonus system was restored and further developed. Compensation reform has resulted in a shift from equal distribution to income polarization among employees working in different types of enterprises, especially in

the burgeoning non-state sector (which includes foreign invested enterprises). This shift brought a number of significant changes.

#### Compensation Linked to Enterprise Performance

In 1984, the central government launched enterprise reforms with the main objective to provide incentives for enterprises and individuals to be more efficient (Xu, 1996). A series of new policies and regulations such as profit retention and the separation of management from ownership was introduced. For example, the Contract Management Responsibility System (CMRS), introduced in 1986 and widely adopted in 1987, was aimed at separating the ownership of an enterprise from the authority to operate and manage it (Chen, 1995). The Enterprise Law issued in 1988 and the Regulations for Changing the Methods of Operation of State-owned Industrial Enterprises (hereinafter referred to 'the Regulations') issued in 1992 further endorsed autonomy granted to enterprises. This autonomy, as defined in the Regulations, included four responsibilities of enterprises, i.e., the responsibility for their own business and operations; profits or losses; development and expansion; and legal compliance (Economic Daily, 25 August, 1992).

As a result, enterprises have become relatively independent business units and obtained more decision-making autonomy (Hsu, 1991). The Enterprise Law states that "enterprises possess the sovereign authority over incentive award payments and the form of wages as appropriate to the conditions of the particular enterprise" (Article 3). The Regulations stipulate that instead of using fixed national wage scales, an enterprise's total wage cost should be related to its economic performance. This provision was the first confirmation in legal form of the sovereignty of enterprises over internal distributions (Yabuki, 1995). Premier Li Peng emphasized the importance of wage system reform in his 1992 government report, stating that further steps should be taken to eliminate egalitarianism and enterprise payroll should be linked to performance (Documents, 1992: 8).

#### Diversification of Wage Packages

In late 1984, the central government announced that it was planning to develop measures that would better link wages and bonuses with improved enterprise performance (Harding, 1987). In 1985, diversified forms of wage systems, such as floating and structural wage systems, were introduced. Floating wage systems aimed to link individual wages to enterprise and/or individual performance, and the range of wage fluctuation was usually half or less of the total income (Jackson, 1988; Takahara, 1992). Structural wage systems were usually composed of four components: basic pay, post (or job related) pay, seniority pay

(based on the length of service), and bonus (Child, 1994; Nyaw, 1995). However, it was not until 1987 that the State Economic Commission officially proposed to hand over wage-fixing powers to enterprises (Jackson & Littler, 1991). Autonomy for enterprise managers to decide wage scales, combined with inflation, led to rapid wage increases. The annual average wage in the manufacturing sector escalated from 597 yuan in 1978 to 1,112 yuan in 1985, 2,073 yuan in 1990 and 4,283 yuan in 1994 (The Statistical Yearbook of China, 1995).

In 1992, the Minister of Labor introduced a new position-and-skills wage system to facilitate enterprise reform. This new system was based on the four major working factors emphasized by the International Labor Organization in 1950, i.e. knowledge and skills required, responsibility assumed, work intensity (load) involved and working conditions (Hu & He, 1992). Enterprises were thus required to include the four components into wage packages, to eliminate the egalitarianism characteristic of the pre-reform wage scale. Zhao and Nichols have noted that “operationally, the new system is said to render it easier to quantify the worker’s performance and easier to link such performance to pay” (1996: 14). The new system is quite flexible as enterprises may place different weights on each of the four factors. For example, the factor of one’s knowledge and skills has received weight ranging from 25 to 40 percent in the wage package (Hu & He, 1992). In the absence of job analysis in many enterprises, the degree to which performance-related pay is allocated may now be varied across enterprises.

#### Restoration and Development of the Bonus System

Since 1978, the bonus system has been restored and further developed, with the aim of ending egalitarianism and rewarding good performance. A survey conducted by Henley and Nyaw (1987) in 1984 showed that material incentives such as wage increases and bonuses were ranked by workers as first and second out of twenty motivation items. However, research conducted in 1980s has revealed that in practice, bonuses tended to be distributed equally to all workers and managers in a given job grade, and the bonus often became a solid part of the basic wage (Laaksonen, 1987; Nelson & Reeder, 1985; Tu & Jones, 1991). As bonus distribution became the norm and engendered a new form of egalitarianism, its effectiveness was reduced. Nelson and Reeder (1985) noted the difficulty in motivating a work force in China with no linkage between pay and performance. Similarly, Von Glinow and Teagarden (1990) have noted that Chinese state-owned enterprises had the least motivated and least competitive workers, partly due to the legacy of egalitarianism.

More recent research on bonus distribution has indicated that increased emphasis is now placed on workers' performance and efficiency both in practice and in employees' expectations (Chow, 1992; Goodall & Warner, 1997; Zhao & Nichols, 1996). Government documents have discussed ways to "improve the method of linking total wages to economic efficiency and performance" (Warner, 1996: 218). However, minimal bonus differentials and envy or 'red eyes' (a Chinese phrase for jealousy) are still in existence and form a barrier to the development of links between individual performance and bonuses (Branine, 1997; Warner, 1997). The absence of regular and objective performance evaluation in many Chinese enterprises (Shore, Eagle & Jedel, 1993; Zhu & Dowling, 1997) raises the question of how to distribute a bonus so as to match compensation with the contribution made by individuals. This is a difficult emergent issue in China, and efforts to manage this are at an experimental stage.

#### Compensation Practices in Foreign Invested Enterprises

By the end of 1996, foreign direct investment (FDI) in China reached US\$ 171.8 billion, with 281,298 projects (*People's Daily*, 19 December 1996). China ranked second to the US as a global destination for FDI (Walker & Ridding, 1996). Foreign invested enterprises<sup>2</sup> (FIEs) were subject to much less government regulations compared with state-owned enterprises (SOEs). However, prior to the issue of the Labor Law in 1994, FIEs were not totally free to set their own wage scale. In 1980, the state's Regulations for the Management of Foreign Joint Ventures set a bottom line and top ceiling of the wage scale for FIEs. Specifically, their wage level should be 120 to 150 percent higher than the average wage of workers in SOEs in the same locality and line of business. In 1986, the state eliminated the ceiling "to allow more flexibility for enterprises that want to encourage productivity through higher wages" (Horsley, 1988: 53). This ceiling was re-introduced by the Ministry of Labor in 1990 on the condition that approval was granted by the supervising department (Documents, 1990). However, it was difficult to gauge local average earnings as "there is no recognized range of wages and no consensus on what constitutes a basic wage" (Tretiak and Holzmann, 1993: 138). FIEs generally took the government's regulations as broad guidelines or just for reference. Since the issue of the Labor Law in 1994, FIEs only need to follow the minimum wage regulation. In fact, FIEs have much larger pay differentials and have the highest wage level compared with SOEs and collectively-owned enterprises (COEs) (Tretiak & Holzmann, 1993; Zhu, Y. 1997). In 1995, for example, wages in FIEs were 132 percent of wages in SOEs and 189 percent of

wages in COEs (Zhu, Y. 1997). Even more marked differences in wage packages have been reported by Goodall and Warner (1997: 577), suggesting that the bonus could range from hundreds to five thousand yuan in an FIE.

FIEs are now free to decide their wage scales so long as they observe the law of minimum wages. Lump sum allowances are increasingly popular in FIEs, as employers may discard the traditional system of paying various stipends, such as meal, clothing, and shower allowances (Delisle & Chin, 1994). This does not mean, however, that FIEs all have adopted “Western” style human resource management (HRM) practices to replace China’s traditional egalitarian compensation practices. Goodall and Warner (1997) have noticed that the legacy of ‘iron rice-bowl’ practices and comparison with their Chinese partners has led to the retention of pre-reform wage practices in FIEs, especially joint ventures. This situation was explained by a foreign general manager of a joint venture (JV) in China<sup>3</sup>,

Our enterprise is undergoing a transition from a state owned enterprise to a foreign-managed JV. The change is being deliberately managed at a steady pace to ensure that it is not too quick for the local people to understand.

Consequently many practices and philosophies that shall be phased out are currently still in place.

Our literature review has highlighted major features of the pre-reform compensation system and its transition since the implementation of economic reform. In the next section, survey results are analyzed to further explore compensation reform in the major types of enterprises in China.

## **RESEARCH METHOD**

### **Sample and Procedure**

Survey questionnaires were distributed to 850 managers and employees in the four major enterprises types in China. The surveys were distributed by the first author in three major Chinese cities (Shanghai, Nanjing and Tianjing) during 1994 and 1995. These cities were selected because research access was available and they were considered to be representative of most industrialized cities in China. A total of 440 usable questionnaires were received from 104 state-owned enterprises, 45 collectively-owned enterprises, 16 privately-owned enterprises and 53 foreign invested enterprises (for more information on this survey,

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<sup>2</sup> Foreign invested enterprises include Sino-foreign joint ventures and wholly foreign owned enterprise.

<sup>3</sup> This comment was added to the questionnaire by the General Manager of a Sino-Australian joint venture in

see Zhu, 1997: 31-32). Due to decentralization and restructuring, different compensation practices may co-exist within an enterprise. Therefore, responses from enterprises under the same type of ownership were grouped together to indicate the impact of ownership on compensation practices.

This survey was part of a research program to study HRM practices in China's manufacturing sector before and after the economic reforms. The survey questionnaire builds upon the work of Von Glinow and colleagues on best international HRM practices (Teagarden et al., 1995; Von Glinow, 1993). As recommended for international research (Cavusgil & Das, 1997), the first author checked the translated questionnaire and made some alterations in the Chinese version to specify some terms used (e.g., benefits, futuristic orientation of pay) and to reflect local management practices. Survey items relevant to this paper covered four aspects:

- Compensation practices in general. Respondents indicated to what extent 9 employee compensation practices are being used currently ('is now') and should be used in the future ('should be'). These aspects were measured by a five-point, Likert-type scale ranging from (1) 'not at all' to (5) 'to a very great extent';
- Perceived effectiveness of compensation practices in terms of employee performance, job satisfaction and organizational operation;
- Current wage packages including bonus across the four types of ownership; and
- Welfare benefits offered across the four types of ownership.

#### Data Analysis

As an initial step, the data were inspected to eliminate multivariate outliers that corresponded to participants who provided a highly irregular pattern of responses, and to ensure that all variables approximately conformed to a normal distribution. To detect the presence of multivariate outliers, Mahalanobis distances were calculated on each item for each respondent (Tabachnick & Fidell, 1996). Nine multivariate outliers were revealed and deleted from further analyses. None of the items generated distributions that departed considerably from normality.

Following this procedure, factor analysis was utilized to identify clusters of related items regarding compensation practices (Kline, 1994). During the analysis, the principal-axis factoring extraction method was used to uncover sets of related items (see Cattell, 1978), followed by a varimax rotation (Tabachnick & Fidell, 1996). Items associated with compensation practices were subjected to two separate factor analyses. The first analysis

employed the responses that related to current practices ('is now') and the second used the responses that related to future practices ('should be'). Only factors that emerged in both of these procedures were used in further analyses. Each of these analyses generated two factors. The factors associated with current practices resembled the factors associated with future practices.

In addition to factor analysis, paired-sample t-tests were conducted to compare the gap between current ('is now') and future ('should be') compensation practices. Spearman rank-order correlations were calculated between perceived effectiveness of compensation practices and enterprise performance. Furthermore, a MANOVA test was conducted to explore the impact of ownership on compensation practices. Finally, chi-square tests were employed to analyze differences among compensation practices across the four major types of ownership.

## **RESULTS AND DISCUSSION**

### **Compensation Practices**

In this section, we discuss the scales associated with compensation practices as developed by factor analyses. Table 1 provides the factor loadings that correspond to the first factor. The first two columns specify the variables that correlated significantly with this factor. The third column specifies the factor loadings associated with the current practices ('is now'). The final column specifies the factor loadings associated with future practices ('should be'). The pattern of factor loadings does not differ between current and future practices; Apart from one discrepancy (ie. C7), current and future practices generated a similar factor structure. As these items relate to the general domain of compensation practices, the first factor is termed 'general compensation'.

**TABLE 1.**  
**FACTOR LOADINGS ASSOCIATED WITH THE FIRST FACTOR**  
**- 'GENERAL COMPENSATION'**

Employee Compensation Practices	is now	should be
C1 Pay incentives such as bonus or profit sharing are an important part of the compensation strategy in this enterprise.	0.55	0.57
C3 In this enterprise a portion of an employee's earnings is contingent on group or enterprise performance goals being achieved.	0.44	0.63
C4 Our pay policies recognize that long-term results are more important than short-term results.	0.71	0.66
C6 Pay incentives are designed to provide significant amount of an employee's total earnings in this organization.	0.62	0.65
C7 The employee benefits package is very generous compared to what it could be.	0.50	#
C8 The pay system in this enterprise has a futuristic orientation. It focuses employee's attention on long-term (2 or more years) goals.	0.79	0.54
C9 In this enterprise pay raises are determined mainly by an employee's job performance. There is a large pay spread between low performers and high performers in a given job.	0.70	0.55
Percentage of variance accounted for by the factor	34.5%	31.4%

# Items that do not appear in this table and the empty cell correspond to factor loadings below 0.40 (10% of variance).

The second factor is indicated in Table 2. Again, current and future practices generated the same pattern of factor loadings. However, these factors account for only a small percentage of the total variance. These items seem to pertain to welfare issues, which are often linked to seniority, particularly in China. Hence, the second factor is called 'welfare'.

**TABLE 2.**  
**FACTOR LOADINGS ASSOCIATED WITH THE SECOND FACTOR - 'WELFARE'**

Employee compensation practices		is now	should be
C2	The benefits are an important part of the total pay package.	0.55	0.59
C5	An employee's seniority does enter into pay decisions.	0.43	0.45
C7	The employee benefits package is very generous compared to what it should be.	0.47	0.78
Percentage of variance accounted for by the factor		6.5%	8.8%

Note: Items that do not appear in this table correspond to factor loadings below 0.32 (10% of variance).

After uncovering the two factors, items were averaged to generate a single score for each factor (Gorsuch, 1983, Wackwitz & Horn, 1971). Accordingly, four scales were constructed and each corresponded to the average score on those items that related to a particular factor. These scales are shown in Table 3. In this table, the first column provides a label for each scale, the second column lists the items that correspond to each scale, the third column provides an interpretation of high scores, and the final column reports the value of Cronbach's (1951) alpha that corresponds to each scale. From Table 3 it can be seen that the inter-item reliability associated with the welfare scales is insufficient (< 0.7), thus these scales are discarded from further factor analyses. In contrast, the inter-item reliability associated with the general compensation scales is approximately 0.8 and is thus encouraging.

**TABLE 3.**  
**SUMMARY OF THE FOUR SCALES ASSOCIATED WITH COMPENSATION PRACTICES**

Name of scale	Corresponding items	Interpretation of high scores	Cronbach's Alpha
General Compensation (is now)	'is now' C1, C3, C4, C6, C8, C9	Compensation in general is regarded as important.	0.81
General Compensation (should be)	'should be' C1, C3, C4, C6, C8, C9	Compensation in general should be regarded as important.	0.79
Welfare (is now)	'is now' C2, C5, C7	Welfare is regarded as important in this enterprise.	0.52
Welfare (should be)	'should be' C2, C5, C7	Welfare should be regarded as important in this enterprise.	0.64

A paired-sample t-test demonstrated that current general compensation practices ('is now' mean = 3.47, s.d. = 0.64) do not fulfill the ideal ('should be' mean = 4.00, s.d. = 0.51),  $t(333) = 13.99$ ,  $p < 0.001$ . There are six items relating to the factor of general compensation, and statistically significant differences between current and future practices indicate a clear expectation of greater emphasis on each of these pay practices in the future. These results show that material incentives are emphasized by employees, now and for the future. It is also worth noting that respondents place more weights on future practices such as 'individual performance linked pay' (C9) and 'futuristic orientation of the pay' (C8). The emphasis on individual performance linked pay will be discussed in the following section. The attention given to long-term oriented pay may, to some extent, reflect dissatisfaction with the Contract Management Responsibility System (CMRS) that has been popular in enterprises, especially SOEs, since the late 1980s. The contract usually lasts one to five years, and its short-term nature has induced myopic behavior of managers, such as using earnings to finance wage increases rather than capital improvements, and considering little long-term investment (Liu, 1996; Xu, 1996). This phenomenon can also be observed in Sino-foreign joint ventures when the "Chinese partner pressed for a high level of short-term profits and profit distribution" to secure short-term returns (Child, 1994: 277).

As the three items with respect to 'welfare' were excluded from the factor analysis due to a lack of insufficient inter-item reliability, paired-sample t-tests were conducted to compare

the current and future practices of those items individually. Apart from 'seniority' (C5), there is a clear increase in the weights given to employee benefits including various subsidies and allowances [means of C2 and C7 increase from 3.34 and 3.02 to 3.75 and 3.69 respectively,  $t^{C2} (289) = 7.05, p < 0.001$  and  $t^{C7} (285) = 11.52, p < 0.001$ ]. The significance of these differences indicates that benefits are perceived to be important in employee compensation. In contrast, seniority in pay decision is expected to be less important in future practice [mean decreases from 3.27 to 3.24,  $t (290) = 0.39, p > 0.05$ ]. This reduced emphasis on seniority is consistent with extant literature (e.g. Jackson, 1992; Nyaw, 1995). Caution should be displayed, however, when deriving conclusions from these findings as each of these analyses utilized only a single item.

#### Perceived Effectiveness of Compensation Practices

This part of the survey consists of three items relating to the extent to which the various compensation practices are perceived to be effective. Survey respondents were asked whether compensation practices "(1) help the enterprise to have high-performing employees; (2) help increase job satisfaction; and (3) make a positive contribution to the overall effectiveness of the enterprise". The three measures of effectiveness were rated on a five-point Likert scale. Spearman rank-order correlations between current general compensation and the three measures of effectiveness are 0.41, 0.39, and 0.40 respectively ( $p < 0.01$ ), whereas correlations between future general compensation and the three measures are 0.18, 0.19, and 0.18 respectively ( $p < 0.01$ ).

Correlations between effectiveness and current practices tended to be greater than correlations between effectiveness and future practices. One explanation for this may be that compensation practices are undergoing transition with many uncertainties for the future associated with enterprise reform. These uncertainties include issues such as the likelihood of a national social security system being established to remove the heavy burdens of welfare from enterprises, and the extent to which an enterprise may become an independent economic entity.

#### The Impact of Ownership on Compensation Practices

A MANOVA test was conducted to ascertain whether the two scales of the factor, 'general compensation', varied across the four types of ownership. Table 4 displays the means and standard deviations on both scales of the factor as a function of the type of ownership. The results demonstrated that the type of ownership did not influence current or future practices in employee general compensation [ $F (6, 638) = 1.13, p > 0.05$ ].

**TABLE 4.**  
**IMPACT OF OWNERSHIP ON THE FACTOR OF GENERAL COMPENSATION**

Variables	SOEs m (s.d.)	COEs m (s.d.)	POEs m (s.d.)	FIEs m (s.d.)
General compensation (is now)	3.50 (0.634)	3.48 (0.524)	3.33 (0.923)	3.43 (0.647)
General compensation (should be)	4.03 (0.505)	4.03 (0.522)	3.94 (0.548)	3.86 (0.520)
F (6,638) = 1.13, p > 0.05 (n.s.).				

m = mean

s.d.= standard deviation

Current wage packages. Table 5 shows the components of wage packages across enterprises with four types of ownership. It can be seen that the adoption of a floating wage (usually based on individual and/or group and enterprise performance) and positional allowances was more common in state-owned enterprises (SOEs) and collectively-owned enterprises (COEs) than in privately-owned enterprises (POEs) and foreign invested enterprises (FIEs), given  $\chi^2(3, n = 276) = 23.69, p < 0.001$  and  $\chi^2(3, n = 275) = 26.90, p < 0.001$  respectively. Table 5 also indicates that base pay was commonly used in all types of enterprises, and differences across the four types of ownership were not statistically significant. The enterprises surveyed all had other components in their wage packages in addition to base pay, floating wage and positional allowances. These included various subsidies required by the state and local government, and allowances decided by each enterprise. Some major subsidies and allowances are detailed later in the article.

TABLE 5.

## COMPONENTS OF WAGE PACKAGES

Variables	SOEs % (n)#	COEs % (n)	POEs % (n)	FIEs % (n)	Chi-square value
Base pay	98.1 (n = 154)	94.9 (n = 59)	91.7 (n = 12)	98.1 (n = 52)	$X^2$ (3, n = 277) = 2.94
Floating wage	76.7*** (n = 154)	69.5*** (n = 59)	50.0*** (n = 12)	41.2*** (n = 51)	$X^2$ (3, n = 276) = 23.69***
Positional allowances	77.9*** (n = 154)	54.2*** (n = 59)	41.7*** (n = 12)	44.0*** (n = 50)	$X^2$ (3, n = 275) = 26.90***

# % (n) = percentage (%) of the number (n) of respondents coming from enterprises under the same type of ownership.

\*\*\*  $p < 0.001$

While Table 5 shows that many enterprises surveyed used a floating wage as part of their compensation, an important question is whether they used a profit-sharing plan for their bonus system. The survey data reveal that only 20 to 30 percent of enterprises surveyed had such a plan, and the results were all statistically non-significant. This indicates that ownership has little impact on the adoption of profit-sharing plans.

Although profit-sharing plans were not popular in our survey, all the enterprises surveyed included bonuses in their compensation packages. Researchers have pointed out that the distribution of bonus in the Chinese industrial sector is shifting from egalitarianism to polarization based on individual and/or collective performance (Chow, 1992; Warner, 1996, 1997). The question arises as to which items had an impact on bonus distribution. The results shown in Table 6 indicate that consumer price index (CPI) is a major determinant of bonuses, which means the bonus is given as compensation for inflation purposes. 'Attendance' was used as a prominent determinant of bonus, whereas 'profitability' only received a minor consideration. This has reflected inertia of Chinese managers who used to have little concern about "the relationship between costs and revenues" under a planned economy (Davidson, 1987: 72).

**TABLE 6.**  
**VARIABLES THAT DETERMINE THE BONUS DISTRIBUTION**

Variables	SOEs % (n) #	COEs % (n)	POEs % (n)	FIEs % (n)	Chi-square value
Individual performance	75.4 (n = 171)	72.3 (n = 65)	77.8 (n = 18)	71.2 (n = 73)	$X^2$ (3, n = 327) = 0.70
Group performance	45.9* (n = 172)	41.5* (n = 65)	16.7* (n = 18)	30.1* (n = 73)	$X^2$ (3, n = 328) = 9.63*
Attendance	62.2 (n = 107)	59.4 (n = 64)	38.9 (n = 18)	49.3 (n = 73)	$X^2$ (3, n = 327) = 6.21
Profitability	9.4 (n = 171)	8.1 (n = 62)	17.6 (n = 17)	12.0 (n = 73)	$X^2$ (3, n = 323) = 4.99
CPI	90.6 (n = 171)	91.9 (n = 62)	82.4 (n = 17)	87.7 (n = 73)	$X^2$ (3, n = 323) = 4.99

# % (n) = percentage (%) of the number (n) of respondents coming from enterprises with the same type of ownership.

\*  $p < 0.05$

It is worth noting that, for each type of enterprises surveyed, over 70 percent used 'individual performance' to determine the bonus distribution. In contrast, 'group performance' received quite different levels of emphasis across the enterprises, with privately-owned enterprises (POEs) displaying the least interest in linking bonus to group performance. China is a collective society (Hofstede, 1993) and its pre-reform compensation system was characterized by collectivism and egalitarianism. The economic reforms have brought a radical change in this system, but there remains a legacy of failure to link bonuses and individual contribution. Therefore, after over a decade of the compensation reform, employees still expect a closer link between reward and individual performance. Our research finding is consistent with other researchers when they claim that Chinese employees would prefer to have reward differentials "determined primarily according to individual contributions" (Zhao, Y. 1995: 127) and there is higher receptiveness to widened reward disparities based on one's performance (Aiello, 1991; Walder, 1991). Apart from 'group performance', [ $X^2$  (3, n = 328) = 7.19,  $p < 0.05$ ], the impact of ownership on the distribution of bonuses was not statistically significant.

Welfare benefits. Table 7 displays major allowances offered by the enterprises and the impact of ownership on these welfare benefits. The table indicates that 'pension insurance' was included in most of the state-owned enterprises (97.3%) but not in all the other types of enterprises. It is likely, however, that the significant differences have been diminished since this survey was conducted, as this insurance became compulsory since the Labor Law came into effect on 1 January 1995. 'Medical allowances' were offered by over 80 percent of the enterprises, with no significant difference between the enterprise ownership types. It is interesting to note that the housing allowance was supplied quite unequally across the enterprises, [ $X^2(3, n = 338) = 21.79, p < 0.001$ ]. It appears that a much greater portion of state-owned enterprises (82.1%) offered this allowance to their employees than foreign invested enterprises (56.9%). Foreign partners of joint ventures have often resisted the Chinese expectation "that they should provide accommodation for their employees" (Child, 1994: 271). With the exception of small and privately-owned enterprises, however, national regulations now require enterprises to make some provisions for housing, even though it is not mandated in the Labor Law (Stevenson-Yang, 1996). Unfortunately, due to vagueness in policies and conflicting regulations issued by state and local governments, foreign investors find that transparency is desperately lacking in social insurance systems such as housing. Further, practices vary greatly even within a municipality, depending on negotiations between enterprises and local labor authorities (Stevenson-Yang, 1996).

**TABLE 7.**  
**WELFARE - PENSION INSURANCE, MEDICAL AND HOUSING ALLOWANCES**

Variables	SOEs % (n)#	COEs % (n)	POEs % (n)	FIEs % (n)	Chi-square value
Pension insurance	97.3* (n = 182)	86.5* (n = 74)	89.5* (n = 19)	84.2* (n = 76)	$X^2(3, n = 351)$ = 15.81*
Medical allowances	86.3 (n = 175)	83.1 (n = 71)	84.2 (n = 19)	89.5 (n = 76)	$X^2(3, n = 341)$ = 1.32
Housing fund	82.1*** (n = 179)	60.3*** (n = 68)	73.7*** (n = 19)	56.9*** (n = 72)	$X^2(3, n = 338)$ = 21.79***

# % (n) = percentage (%) of the number (n) of respondents coming from enterprises with the same type of ownership.

\*  $p < 0.05$ , \*\*\*  $p < 0.001$

Survey items included major subsidies and allowances offered by enterprises, such as those for non-staple food, personal hygiene, books and newspapers. Over 85 per cent of respondents indicated that their enterprise offered subsidies for non-staple food, but fewer enterprises offer subsidies for books and newspapers (between 44 and 75 per cent of respondents). The subsidy for books and newspapers heavily depends on the job position of respondents, as in many enterprises only white-collar employees, e.g. engineers and managers, are entitled to this subsidy. The subsidy for personal hygiene such as a bath and haircut is offered by fewer SOEs and COEs, probably because these enterprises already provide facilities for employee personal hygiene needs. Subsidies offered across the four types of ownership are not significantly different, indicating that ownership does not have a significant impact on subsidy and allowance packages.

### **IMPLICATIONS AND CONCLUSION**

Our examination of the impact of ownership on compensation practices shows that enterprises under different types of ownership have fairly similar approaches to general compensation practices, such as placing emphasis on material incentives by including bonuses in pay packages, and linking pay to performance rather than seniority. Our findings support previous research suggesting that compensation reform has started to “introduce ‘economism’ into workers’ attitude” (Goodall & Warner, 1997: 579) and that compensation in China is undergoing a transition from state planned egalitarianism to an enterprise determined motivational mechanism (e.g. Liu, 1996; Osigweh, Yg & Huo, 1993).

Although ownership did not have a significant impact on general compensation practices, adoption of profit-sharing plans, or subsidy and allowance packages, it did affect the choice of wage packages and the methods used to distribute bonuses. When the survey was conducted in late 1994 and 1995, the floating wage system was popular. The survey results reveal, however, that FIEs and POEs were less likely to adopt floating wages and positional allowances in their wage packages, and they seemed to prefer a simplified package rather than dividing it into different components. In terms of bonus distribution, more POEs linked this reward to individual performance and enterprise profitability rather than group performance and attendance.

Although current compensation practices in general are regarded as important and show positive correlations with enterprise effectiveness, the survey results indicated a clear preference for greater emphasis on the linkage between individual performance and reward, performance differentiated pay and long-term oriented pay practices. Furthermore, our

research has identified some issues emerging for the future. For example, will the recently introduced joint stock system for enterprises help overcome short-term orientation in compensation practices? Will the emphasis on material incentives lead to higher turnover and disloyalty as observed in FIEs (Tomlinson, 1997)? Should other forms of incentives also be adopted and, if so, how? Will income polarization cause social and political instability when some employees are only paid minimum wage, or even less, due to enterprise loss-making?

According to General Secretary Jiang Zemin's report at the recent Party's National Congress, China will continue its economic restructuring and implementation of economic development strategies from the late 1990s to the first decade of the next century. These strategies include the development of diverse forms of ownership with public ownership in the dominant position, the introduction of the joint stock system into enterprises, and the acceleration of state-owned enterprise reform. The joint stock system has been especially encouraged to separate ownership from management and to help raise the efficiency and productivity of enterprises (Documents, 1997).

These strategies together with the government's desire for enterprises to "become corporate entities and competitors adaptable to the market" (Documents, 1997: 20) have become driving forces for employee compensation reform in China. This reform has profound implications for management practices, particularly HRM. One of the major implications is the interdependence of other reforms. When the PRC was founded in 1949, the government adopted a 'three into one' system which mixed employment, wages and welfare (Huang & Yang, 1987). This policy forced enterprises, especially those in the public sector, to evenly distribute subsidies and allowances to their employees. Therefore, while a new compensation system is needed to help improve productivity, it depends on reforms in other fields, such as releasing SOEs' heavy burden of social welfare (Liu, 1996), and establishing an acceptable objective performance appraisal system to strengthen the link between work and pay (Zhu & Dowling, 1997).

Overall, the results of our survey have supported the prediction of Adler, Campbell and Laurent (1989) that reforms in China would bring a trend towards performance-based compensation systems. Shenkar has argued that continuing reforms "may change the situation, particularly in collective, private, and foreign-invested enterprises" (1994: 15). Our research findings suggest that there is likely to be greater diversity in China in the future, with POEs and FIEs, in particular, placing increasing emphasis on performance-based compensation.

## REFERENCES

- Adler, N.J., Campbell, N. & Laurent, A. 1989. In search of appropriate methodology: From outside the People's Republic of China looking in. Journal of International Business Studies, Spring: 61-74.
- Aiello, P. 1991. Building a joint venture in China: the case of Chrysler and the Beijing Jeep Corporation. Journal of General Management, 17 (2): 47-64.
- Bernardo, R.M. 1997. Popular management and pay in China: automating nonfinancial motivation through organization improvement. Quezon, Philippines: University of the Philippines Press.
- Borgonjon, J. & Vanhonacker, W.R. 1992. Modernizing China's managers. The China Business Review, September-October: 12-18.
- Branine, M. 1997. Change and continuity in Chinese employment relationships. New Zealand Journal of Industrial Relations, 22 (1): 77-94.
- Cattell, R.B. 1978. The scientific use of factor analysis in behavioral and life sciences. New York: Plenum Press.
- Cavusgil, S.T. & Das, A. 1997. Methodological issues in empirical cross-cultural research: a survey of the management literature and a framework. Management International Review, 37 (1): 71-96.
- Campbell, N. 1987. Enterprise autonomy in the Beijing municipality. In M. Warner (Ed.) Management reform in China: 53-70. London: Frances Printer.
- Chen, K. 1995. The Chinese economy in transition: micro changes and macro implications. Singapore: Singapore University Press.
- Child, J. 1994. Management in China during the age of reform. Cambridge: Cambridge University Press.
- Chow, I.H. 1992. Chinese workers' attitudes towards compensation practices in the People's Republic of China. Employee Relations, 14 (3): 41-55.
- Cronbach, L.J. 1951. Coefficient alpha and the internal structure of tests. Psychometrika, 16: 297-334.
- Davidson, W.H. 1987. Creating and managing joint ventures in China. California Management Review, 29: 77-94.
- Delisle, P. & Chin, S. 1994. Remunerating employees in China - the complicated task faced by foreign firms. Benefits & Compensation International, September: 16-20.
- Documents, 1990. The wage management of Chinese employees in foreign joint ventures. (No. 65). Beijing: The Ministry of Labor of China.

- Documents, 1992. Premier Li Peng's government report to the Seventh National People's Congress. Beijing: Xinhua News Agency.
- Documents, 1993. The handbook of joint venture labor management. Nanjing, China: Nanjing Labor Bureau.
- Documents, 1997. Jiang Zemin's report - Hold high the great banner of Deng Xiaoping theory for an all-round advancement of the cause of building socialism with Chinese characteristics into the 21st century. Beijing Review, October 6-12.
- Economic Daily (Jingji Ribao), references in text.
- Geringer, J.M. & Frayne, C.A. 1990. Human resource management and international joint venture control: a parent company perspective, Management International Review, 30, Special Issue: 103-120.
- Goodall, K. & Warner, M. 1997. Human resources in Sino-foreign joint ventures: selected case studies in Shanghai, compared with Beijing. The International Journal of Human Resource Management, 8 (5): 569-594.
- Gorsuch, R.L. 1983. Factor analysis. Hillsdale, NJ: Erlbaum.
- Harding, H. 1987. China's second revolution, reform after Mao. Washington, D.C.: The Brookings Institution.
- He, G. & Shu, R. 1992. Laodongli tiaojelun (Adjustment theory of labor force). Nanjing, China: South East University Publishing House.
- Henley, J.S. & Nyaw, M.K. 1987. The development of work incentives in Chinese industrial enterprises - material versus non-material incentives. In M. Warner (Ed.) Management Reform in China. London: Frances Printer: 114-148.
- Hoffmann, C. 1967. Work incentive practices and policies in the People's Republic of China, 1953-1956. Albany: State University of New York Press.
- Hoffmann, C. 1974. The Chinese worker. Albany: State University of New York Press.
- Hofstede, G. 1993. Cultural constraints in management theories. Academy of Management Executive, 7 (1): 81-94.
- Horsley, J.P. 1988. The Chinese workforce: reforms in the domestic labor system complement innovations at foreign invested enterprises. The China Business Review, May-June: 50-55.
- Howe, C. 1973. Wage patterns and wage policy in modern China: 1919-1972. Cambridge: Cambridge University Press.
- Hsu, R.C. 1991. Economic theories in China, 1979-1988. Cambridge: Cambridge University Press.

- Hu, X.Y. & He, P. (Eds.) 1992. Gangwei jineng gongzi shishi wenda (The implementation of post-plus-skills wage system). Beijing: Wage Research Institute of the Ministry of Labor of China.
- Huang, X. J. & Yang, X. 1987. From iron ricebowls to labor markets: reforming the social security system. In B. L. Reynolds (Ed.), Reform in China: Challenges & choices. New York/London: M. E. Sharpe, Inc. : 147-160.
- Jackson, S. 1988. Management & labour in Chinese industry: a review of the literature. Labour & Industry, 1 (2): 335-363.
- Jackson, S. 1992. Chinese enterprise management: reforms in economic perspective. Berlin, New York: Walter de Gruyter.
- Jackson, S. & Littler, C.R. 1991. Wage trends and policies in China: dynamics and contradictions. Industrial Relations Journal, 21: 5-19.
- Kline, P. 1994. An easy guide to factor analysis. London and New York: Routledge.
- Knight, J. & Song, L. 1991. The determinants of urban income inequality in China. Oxford Bulletin of Economics and Statistics, 53 (2): 123-154.
- Kornai, J. 1980. Economics of shortage. Amsterdam: North-Holland.
- Kornai, J. 1986. Contradictions and dilemmas: studies on the socialist economy and society. Cambridge, Mass: MIT Press.
- Laaksonen, O. 1988. Management in China during and after Mao, Berlin, New York: Walter de Gruyter.
- Li, W.H. 1991. Zhongguo gongzi zhidu (China's wage system). Beijing: China Labor Press.
- Liew, L. 1997. The Chinese economy in transition: from plan to market. Cheltenham,. UK: Edward Elgar.
- Liu, L. L. 1966. A gradual approach. The China Business Review, May-June: 19-24.
- Martinko, M.J. & Yan, F. 1990. A comparison of leadership theory and practices in the People's Republic of China and the United States. In A. Nedd (Ed.) International Human Resource Management Review, Vol 1: 109-122.
- Nelson, J. & Reeder, J. 1985. Labor relations in China. California Management Review, 27 (4): 13-32.
- Nyaw, M.K. 1995. Human resource management in the People's Republic of China. In L.F. Moore & P.D. Jennings, Human resource management on the Pacific rim. Berlin: Walter de Gruyter : 185-216.

- Osigweh, C.A.B., Yg & Huo, Y.P. 1993. Conceptions of employee responsibilities and rights in the United States and the People's Republic of China. International Journal of Human Resource Management, 4 (1): 85-112.
- People's Daily (Renming Ribao), references in text.
- Putterman, L. 1992. Dualism and reform in China. Economic Development and Cultural Change, April, 40 (3): 467-494.
- Shaw, V. N. 1996. Social control in China: a study of Chinese work units. London: Praeger.
- Shenkar, O. 1994. The People's Republic of China: raising the bamboo screen through international management research. International Studies of Management and Organisation, 24 (1-2): 9-34.
- Shenkar, O. & Chow, I.H. 1989. From political praise to stock options: reforming compensation systems in the People's Republic of China. Human Resource Management, 28 (1), Spring: 65-85.
- Shore, L.M., Eagle, B.W. & Jedel, M.J. 1993. China-United States joint ventures: a typological model of goal congruence and cultural understanding and their importance for effective human resource management. International Journal of Human Resource Management, 4 (1): 67-84.
- Sun, L., Zhang, S. & Ge, M. 1989. Prospects of Chinese wage reform: a synergy of market and planning systems. International Journal of Social Economics, 16 (8): 26-34.
- Statistical Yearbook of China (The) 1995. Beijing: China Statistical Publishing House.
- Stevenson-Yang, A. 1996. Re-vamping the welfare state. The China Business Review, January-February: 8-17.
- Tabachnick, B.G. & Fidell, B.G. 1996. Using multivariate statistics. New York: Harper Collins College Publishers.
- Takahara, A. 1992. The politics of wage policy in post-revolutionary China. London: The Macmillan Press Ltd.
- Teagarden, M.B., Von Glinow, M.A., Bowen, D.E., Frayne, C.A., Nason, S., Huo, Y.P., Milliman, J., Arias, M.A., Butler, M.C., Geringer, J.M., Kim, N.K., Scullion, H., Lowe, K.B. & Drost, E.A. 1995. Towards building a theory of comparative management research methodology: An idiographic case study of the Best International Human Resources Management Project. Academy of Management Journal, 38: 1261-1287.
- Tomlinson, R. 1997. You get what you pay for, corporate recruiters in China find. Fortune, April 28: 218-219.
- Tretiak, L.D. & Holzmann, K. 1993. Operating joint ventures in China. Hong Kong: The Economist Intelligence Unit.

- Tsang, E.W.K. 1994. Human resource management problems in Sino-foreign joint ventures. International Journal of Manpower, 15 (9/10): 4-21.
- Tu, H.S. & Jones, C.A. 1991. Human resource management issues in Sino-U.S. business ventures, Akron Business and Economic Review, 22 (4), Winter: 18-28.
- Von Glinow, M.A. 1993. Diagnosing 'best practice' in human resource management practices. Research in personnel and human resource management, Supplement 3: 95-112.
- Von Glinow, M.A. & Teagarden, M.B. 1990. Contextual determinants of human resource management effectiveness in international cooperative alliances: evidence from the People's Republic of China. In A. Nedd (Ed.) International Human Resource Management Review, Vol 1: 75-93.
- Wackwitz, J.J. & Horn, J.L. 1971. On obtaining the best estimates of factor scores within an ideal simple structure. Multivariate Behavioral Research, 6: 389-408.
- Walder, A.G. 1986. Communist neo-traditionalism: work and authority in Chinese industry. Berkeley: University of California Press.
- Walder, A.G. 1991. Workers, managers and the state: the reform era and the political crisis of 1989. China Quarterly, 127: 247-492.
- Walker, T. & Ridding, J. 1996. Far less of an easy ride. Financial Times, 10 May: 21.
- Wang, X.L. (Ed.) 1997. Gongzi yu gongzi zhengyi chuli shiwu (Wage and wage arbitration). Beijing: People's Court Press.
- Warner, M. 1995. The management of human resources in Chinese industry. New York: St. Martin's Press.
- Warner, M. 1996. Beyond the iron rice-bowl: comprehensive labour reform in state owned enterprises in north-east China. In D.H. Brown & R. Porter (Eds.) Management issues in China: domestic enterprises. London and New York: Routledge.
- Warner, M. 1997. Management-labour relations in the new Chinese economy. Human Resource Management Journal, 7 (4): 30-43.
- Xiang, Q.Y. 1982. Economic development and income distribution. In D.X. Xu (Ed.) China's Search for Economic Growth. Beijing: New World Press.
- Xu, Y.C. 1996. Deepening and widening the economic reform in China: from enterprise reform to macroeconomic stability. The Journal of Developing Areas, 30 (April): 361-384.
- Yabuki, S. 1995. China's new political economy (translated by S.M. Harner). Boulder: Westview Press.
- Yue, G. 1985. Employment, wages and social security in China. International Labor Review, 124 (4), July-August: 411-422.

- Zhao, M.H. & Nichols, T. 1996. Management control of labour in state-owned enterprises: cases from the textile industry. The China Journal, 36 (July): 1-21.
- Zhao, R. 1991. The trend of changes in the distribution of workers' income. International Journal of Social Economics, 18 (8/9/10): 18-28.
- Zhao, S. M. 1995. Zhongguo qiye renli ziyuan guanli (Human resource management in China's enterprises). Nanjing: Nanjing University Press.
- Zhao, Y.W. 1995. 'Chinese' motivation theory and application in China: an overview. In H.S.R. Kao, D. Sinha & S.H Ng (Eds.), Effective organizations and social values. New Delhi/Thousand Oaks/London: Sage : 117-131.
- Zhu, C.J. 1997. Human resource development in China during the transition to a new economic system. Asia Pacific Journal of Human Resources, 35 (3): 19-44.
- Zhu, C.J. & Dowling, P.J. 1994. Employee compensation systems - one major target in China's economic reform. Paper presented at the 4th Conference of International Human Resource Management, Gold Coast, Australia, July 4-6.
- Zhu, C.J. & Dowling, P.J. 1997. Performance appraisal in China. In J. Selmer (Ed.) International management in China. London: Routledge (in press).
- Zhu, Y. 1997. The impact of foreign direct investment on labour relations: the case of China. Paper presented at International Labor Organization international seminar, Geneva, May 21, 1997.
- Zhu, Y. & Campbell, I. 1996. Economic reform and the challenge of transforming labor regulation in China. Labour and Industry, 7 (1): 29-50.