

## THE CHANGING ROLE OF HRM IN TRANSITIONAL ECONOMIES: EVIDENCE FROM CHINA

C.J. Zhu, H. De Cieri, B. Cooper & S.M. Zhao

*Working Paper 6/07  
March 2007*

DEPARTMENT OF MANAGEMENT  
WORKING PAPER SERIES  
ISSN 1327-5216



### Abstract

China's progressive integration into the global economy has strengthened its position as a 'magnet' for foreign direct investment. The inevitably increased competition in the Chinese economy has led firms to adopt more market-oriented approaches to human resource management (HRM). Based on a survey conducted in 2005 of 813 respondents (mainly HR personnel) in industrial firms in China, this paper examines the impact of vertical integration of the human resource function, measured by the strategic integration and devolvement of HRM practices, on the performance of industrial firms in China. The results of this preliminary research found some evidence for a positive relationship between the degree of strategic integration of HRM with business strategies and firm performance. Although more analyses need to be conducted on the data collected by this study, our findings provide some signals that the HR function is emerging as a strategic player in Chinese enterprises.

*This paper was presented at the Academy of International Business Annual Meeting, Beijing, China, June, 2006*

**This paper is a work in progress. Material in the paper cannot be used without permission of the author.**

# THE CHANGING ROLE OF HRM IN TRANSITIONAL ECONOMIES: EVIDENCE FROM CHINA

## INTRODUCTION

This study investigates how the human resource management (HRM) function and practices have evolved in industrial firms in China in response to the challenge of an increasingly competitive environment brought by the reform in corporate governance structures and China's accession to the WTO. By examining the role of HRM in China, the study (1) tests the application of strategic HRM theory, developed in advanced market economies, to a transitional economy; (2) offers empirical evidence of the extent to which strategic HRM is practised in industrial firms with different characteristics (e.g., size, ownership structures, and the nature of industry); and (3) draws implications for HRM practitioners, especially those in the increasing number of foreign firms operating or planning to operate in China. Overall, the study aims to enrich our knowledge about the changing HRM function and practices in China. This paper starts with a brief review of strategic HRM, with a focus on HRM in China; we then detail the empirical study conducted in China. As this is a work-in-progress, we present preliminary results to answer the first of the research questions to be addressed in our larger study. Finally, we consider the likely implications of the research findings for HR and international business scholars and practitioners.

## THEORETICAL BACKGROUND: STRATEGIC HRM, FIRM PERFORMANCE AND CHINA

HRM is developed and widely practised in market economies (e.g., Brewster and Hegewisch, 1994). The research field of strategic HRM emerged in the early 1990s with an emphasis on an integrative and value-driven approach to HRM (Butler, Ferris and Napier, 1991; Schuler, 1992), supported by both theoretical work such as the resource-based view of the firm (e.g., Wright, Dunford and Snell, 2001) and empirical evidence (e.g., Becker and Gerhart, 1996; Huselid, 1995; Wright, Gardner and Moynihan, 2003). This view of strategic HRM assumes that human resources are assets for investment, and the management of human resources is strategic rather than reactive, prescriptive and administrative (Budhwar, 2000a; Buyens and De Vos, 2001). A widely adopted definition of strategic HRM is the pattern of human resource deployments and activities that are planned to enable an organization to achieve its goals (Wright and McMahan, 1992). This definition of strategic HRM highlights the two important dimensions that distinguish it from traditional HRM, i.e., vertically it links HR practices with the strategic management process of the firm and horizontally it allows HR practices to be integrated and supportive of each other. Over the past decade, a substantial research effort has been built around exploration of the link between strategic HRM and organizational performance (e.g., Bowen and Ostroff, 2004; Guest, Michie, Conway and Sheehan, 2003; Huselid, 1995). Recent research, including the work of Datta, Guthrie and Wright (2005) and Wright, Gardner, Moynihan and Allen (2005), has continued to investigate and refine the measurement of the relationship between HRM and organizational performance. As the vertical integration of HRM and its impact on performance are the foci of this paper, they are elaborated more in the following sections.

**Vertical integration** has two directions, namely upward and downward. "Upward" refers to *strategic HR integration*, or the involvement of HRM in the formulation and implementation of organizational strategies and the alignment of HRM with the strategic needs of an organization (e.g., Budhwar, 2000b), whereas "downward" refers to the delegation or *devolvement* of HR practices to line managers (Currie and Proctor, 2001).

Researchers argue that, in order to achieve *strategic HR integration*, or be a strategic partner, HR managers should be involved in strategic decision-making alongside other senior managers, providing greater opportunity to align HR goals, strategies, philosophies and practices with corporate objectives and the implementation of business strategy (Farndale, 2005). This involvement would include the membership of HR managers in the most senior management team in the organization (see Budhwar 2000b, 2000c), which provides the opportunity for HRM to

represent its concerns and influence business strategy from the outset of decision-making. The involvement of the senior HR manager in a firm's senior management team provides an important channel of interactive information flow and communication.

Downward integration, i.e., the *devolvement* of HR practices to line managers is defined as the involvement of line managers in the execution and administration of HR practices (Budhwar, 2000a, 2000c), such as performance assessment, selection and training. It is argued that, to make HR managers more available for participation in strategic decision-making processes, the responsibility of day-to-day HR practices should be delegated to line managers as they also have direct and frequent contact with employees and a capacity to understand, motivate, control, and respond quickly to employees (Budhwar and Khatri, 2001; Ulrich, 1997). In addition to providing increased opportunities for involvement of the HR function in strategic decision-making, devolvement may have more direct effects on firm performance because this may increase contact between HR managers and line managers to assist HR managers in understanding front-line business problems, enhance the ability of HR managers to promote changes at a corporate level, and better control costs as line managers would work more directly with employees (Budhwar, 2000c; Currie and Proctor, 2001).

However, for the benefits of devolvement to be realised, line managers need to possess appropriate skills to execute HR practices competently and effectively (Budhwar, 2000c). This means that the senior HR manager needs to be a strategic partner with line managers, providing training, resources, incentive and a communication channel to ensure these HR practices are carried out in accordance with HRM policy (Budhwar, 2000c; Budhwar and Khatri, 2001; Teo, 2002). Hence, the amount of line management training in executing HR practices is likely to act as a moderator by positively strengthening any relationship between devolvement and firm performance.

Overall, there is evidence that vertical integration of HR tends to result in enhanced competence, congruence and cost effectiveness (Black and Boal, 1994; Budhwar, 2000b; Teo, 2002; Teece, Pisano and Shuen, 1997), and subsequently leads to a positive impact on firm performance.

**Firm performance** can be viewed from several different perspectives. Much of the research for evidence of the link between strategic HRM and firm performance has focused on intermediary performance indicators such as absenteeism, commitment, customer satisfaction and innovation (e.g. Chew and Chong, 1999; Bowen, Galang and Pillai, 2002; Laursen and Foss, 2003). Another substantial stream of empirical work has examined the impact of HRM on productivity and financial performance (e.g., Black and Lynch, 2001; Huselid, 1995; Li, 2003). However, there are continuing calls for more research on these relationships (Datta et al., 2005; Wright et al., 2005).

Researchers (e.g., Bowen et al., 2002; Brewster, 1999) point out that strategic HRM research has been mainly carried out in advanced market economies. They suggest further research is needed in transitional economies to explore whether HRM practices translate into improved productivity at firm level. A recent study conducted on HRM in China (Zhu, Cooper, De Cieri and Dowling, 2005) suggests that there are emerging relationships between organizational strategy, HRM practices and organizational performance that are worthy of further investigation in the Chinese context.

**Prior Research on strategic HRM in China.** Our recent search of two journal databases (Business Source Premier and Proquest) with the search command of 'China and human resource management' found that in the period of 1979 to 2004, at least 160 academic articles were published in regards to HRM in China (excluding Hong Kong and Taiwan). Many of these have focused on individual HRM practices (e.g., training or compensation) or on more general aspects of management, rather than specifically on HRM. Only six of the articles published after 1999 used strategic HRM as a primary focus (namely, Cooke, 2000; Ding, Ge, and Warner, 2004; Ding, Goodall, and Warner, 2000; Li, 2003; Takeuchi, Wakabayashi and Chen, 2003; Yan and Warner, 2002). Given the developments in the Chinese economy, there is an obvious need for more

research work to examine the application of strategic HRM to the Chinese context and its effect on firm performance.

Furthermore, many researchers have claimed that western HRM has been practised in China either with Chinese characteristics, hybridised features, or a possibly increasing degree of convergence, reflecting the influence of foreign multinational corporations that have invested in China (Björkman and Lu, 2001; Ding et al., 2004; Warner, 2004; Warner and Zhu, 2004; Zhu, 2005). This study aims to test these claims while China is still in a process of a series of reforms launched by Chinese government to encourage further integration with the global economy. These changes include an unprecedented restructuring of ownership structure in its industrial sector, subsequent emergence of a flourishing non-state sector including foreign invested and local privately owned firms which often greatly out-performed the state ones, reforms in corporate governance which offer firm management full authority to operate business in a market-driven economy. Given these issues, we seek to explore several research questions in completing our large research project that is in progress. For the present paper, our focus is on the following research question:

- What is the impact of the strategic integration and devolvement of HRM practices on the performance of industrial firms in China?

## RESEARCH METHOD

To address our research question, a quantitative survey methodology is appropriate to assess the extent of integration and devolvement of HRM at the firm level, and to assess the relationships between integration and devolvement and their impact on firm performance. The questionnaire was developed in English then translated into Chinese using the back-translation method.

### Sample and Data

Industrial firms in Jiangsu Province of China formed the sample of this study and the survey was conducted during the period from May to October 2005. Jiangsu is one the most industrialized provinces in China with a population of over 74 million people and among those firstly opened coastal areas to foreign investment in the early 1980s. Survey questionnaires were distributed to managers in each firm, with a self-sealed envelope and an explanatory sheet. As a reward to maximise the response rate, potential respondents were offered either a summary of the survey results or a book on HRM in China written by one of the co-authors. A total of 813 usable questionnaires were received, an effective response rate of 33.9 per cent based on the total number of 2,400 questionnaires distributed. Most of the respondents were HRM personnel.

The profile of respondents, including their age, gender, education, occupation, types of firm they worked for, the duration in the current job and with the current enterprise, is set out in Table 1. The table also displays a mixture of characteristics of the firms, including size, industry and ownership.

-----  
Table 1 about here  
-----

### Measures

Vertical integration was measured in two ways. First, *strategic HR integration* was measured by asking respondents to indicate the degree to which HR practices were linked to the firm's business strategy for eight items, using a five-point Likert-type scale (see Appendix 1 for scales). Cronbach's alpha coefficient for this measure was .89. *Devolvement* was measured by asking respondents to report on six items referring to the responsibilities for HR practices in the organization. The practices included recruitment and selection, compensation, commercial

insurance packages, training, performance assessment and job design. Respondents were asked to indicate those who assumed responsibilities of the practices, including senior management, middle management, line management, HR and outsourcing.

*Firm performance* was measured using perceptual performance indicators; one set measuring market performance, the other set measuring organizational effectiveness (see Appendix 2 for scales). Market performance was measured by three items related to return on equity and assets and profitability (Cronbach's alpha = .85). Organizational effectiveness was measured by five items related to company's competitiveness by timely adapting its products/services and strategy, maintaining its quality, and achieving employee and customer satisfaction (Cronbach's alpha coefficient = .87).

*Ownership types* of sample firms are represented by four dummy variables, i.e., state-owned (including both state and collectively owned firms), share-holding firms (mainly state-owned turned, with mixture of ownership), domestic privately owned firms, and foreign/overseas (i.e., Hong Kong, Macau and Taiwan) invested firms including joint ventures and wholly foreign-owned firms. *The types of industry* are represented by three groups, namely, manufacturing; mining and resource; and services. *Firm size* was measured by the number of employees.

## Results and Discussion

As shown in Table 1, 68.8% of respondents were between the ages of 30 and 49 and roughly two thirds of them were males. The majority, i.e., 90.1% had a Bachelor's degree or higher. Among the respondents, 40% were working in manufacturing industry, 37.2% in the service industry and remaining in other industries mainly in the areas of mining and resources. In respect of ownership structure, respondents who worked in public sector enterprises accounted for 26.3% of the sample. The others were working in the non-state sector, including shareholding firms, private firms such as those domestic and foreign/overseas invested ones.

Table 2 reports the results for the strategic HR integration scale. As Table 2 shows, strategic integration in the public sector enterprises was significantly higher compared with other ownership types ( $p < .05$ ) across the four dimensions. Further research is required to examine the characteristics of HR practices in public enterprises, their strategic integration and relationships with more objective measures of performance.

-----  
Table 2 about here  
-----

Table 3 shows results for devolvement, measured by the responsibilities assumed by managerial staff at different levels for major HR practices conducted in the firm. As Table 3 indicates, most HR practices were carried out by senior managers and HR managers. Line managers were not delegated to conduct HR practices, with less than 10% indicating such involvement. Further analysis will be conducted to examine the relationship between devolvement and firm performance.

-----  
Table 3 about here  
-----

Table 4 reports the means, standard deviations and correlations of the key variables discussed in this paper, i.e., strategic integration, firm market performance and organizational effectiveness, and four types of ownership. Tables 5 and 6 present the results of multiple regression analysis predicting market performance and organizational effectiveness. The results of the regression analysis show that strategic HR integration was positively related to both market performance and organizational effectiveness. Interestingly, after controlling for strategic HR integration and firm size, non-state sector firms performed significantly better than state sector enterprises.

-----  
Tables 4, 5 and 6 about here  
-----

## **CONCLUSION**

The preliminary analysis of the data obtained from this study has indicated a positive relationship between strategic HR integration and perceived firm performance, which has partially addressed our research question on the impact of the strategic integration and devolvement of HRM practices on the performance of industrial firms in China.

Before more analyses are conducted on the data, we should acknowledge some limitations of this preliminary investigation. First, the data are cross-sectional and a longitudinal design would have helped to strengthen causal inferences. Second, the data were gathered using perceptual indicators of firm performance. Future studies could obtain measures from different sources, including more objective indicators of firm performance (Wright et al., 2005).

For the next step in this study, we will examine the extent to which HRM was integrated into the organizations' core business operations, i.e., the level of strategic integration in both vertical and horizontal directions. The empirical evidence has indicated a lack of devolvement, which raises questions about the extent to which HRM is vertically integrated in Chinese enterprises (Currie and Proctor, 2001; Zhu et al., 2005). Our further study will also examine the relationship between upward and downward integration and the impact of this relationship on firm performance.

An important contribution of this study is that the results of this preliminary research found some evidence for a positive relationship between the degree of strategic integration of HRM with business strategies and firm performance. Overall, our findings provide some signals that the HR function is emerging as a strategic player in Chinese enterprises (Zhu, 2005). The current direction of changes in the Chinese economy suggests that demand for this strategic HR role will increase in the future.

This research provides empirical testing of the transfer of western concepts and practices to a transitional economy, and contributes to the small but growing body of literature on the emergence of strategic HR in China. The research is a significant contribution in that the findings will enrich our knowledge about the changing HRM function and practices in China and contribute to theory-building. Further analysis needs to be conducted to provide full explication of the roles and relationships of HR with regard to organizational business strategy and firm performance.

## REFERENCES

- Becker, B. and Gerhart, B. (1996) 'The Impact of Human Resource Management on Organizational Performance: Progress and Prospects', *Academy of Management Journal*, 39 (4): 779-801.
- Björkman, L. and Lu, Y. (2001) 'Institutionalization and Bargaining Power Explanations of HRM Practices in International Joint Ventures: The Case of Chinese-Western Joint Ventures', *Organization Studies*, 22 (3): 491-512.
- Black, J. A. and Boal, K.B. (1994) 'Strategic Resources: Traits and Configurations and Paths to Sustainable Competitive Advantage', *Strategic Management Journal*, 15: 131-148
- Black, S. E. and Lynch, L. M. (2001) 'How to Compete: The Impact of Workplace Practices and Information Technology on Productivity', *Review of Economics and Statistics*, 83 (3): 434-445.
- Bowen, D.E. and Ostroff, C. (2004) 'Understanding HRM-Firm Performance Linkages: The Role of the "Strength" of the HRM System,' *Academy of Management Review*, 29 (2): 203-221.
- Bowen, D.E., Galang, C., and Pillai, R. (2002) 'The Role of Human Resource Management: An Exploratory Study of Cross-Country Variance', *Human Resource Management*, 41: 103-122.
- Brewster, C. and Hegewisch, A. (eds.), (1994) *Policy and Practice in European Human Resource Management*, London: Routledge.
- Brewster, C. (1999) 'Strategic Human Resource Management: The Value of Different Paradigms', *Management International Review*, 39: 45-60.
- Budhwar, P. (2000a) 'A Reappraisal of HRM Models in Britain', *Journal of General Management*, 26(2): 72-91.
- Budhwar, P. S. (2000b) 'Evaluating Levels of Strategic Integration and Devolvement of Human Resource Management in the UK', *Personnel Review*, 29: 141-161.
- Budhwar, P. (2000c) 'Strategic Integration and Devolvement of Human Resource Management in the UK Manufacturing Sector', *British Journal of Management*, 11(4): 285-302.
- Budhwar, P. and Khatri, N. (2001) 'HRM in Context: Applicability of HRM Models in India', *International Journal of Cross Cultural Management*, 1(3): 333-356.
- Butler, J. E., Ferris, G. R. and Napier, N. K. (1991) *Strategy and Human Resources Management*. Cincinnati, OH., South-Western.
- Buyens, D. and De Vos, A. (2001) 'Perception of the Value of the HR Function', *Human Resource Management Journal*, 11(3): 70-89.
- Chew, I. and Chong, P. (1999) 'Effects of Strategic Human Resource Management on Strategic Vision', *International Journal of Human Resource Management*, 10(6): 1031-45.
- Cooke, F. L. (2000) 'Manpower Restructuring in the State-Owned Railway Industry of China: The Role of the State in Human Resource Strategy', *International Journal of Human Resource Management*, 11 (5): 904-24.
- Currie, G. and Procter, S. (2001) 'Exploring the Relationship between HR and Middle Managers', *Human Resource Management Journal*, 11 (3): 53-69.
- Datta, D., Guthrie, J. and Wright P. M. (2005) 'Human Resource Management and Labor Productivity: Does Industry Matter?', *Academy of Management Journal*, 48: 135-145.
- Ding, D. Z., Ge, L. and Warner, M. (2004) 'Evolution of Organizational Governance and Human Resource Management in China's Township and Village Enterprises', *International Journal of Human Resource Management*, 15 (4&5): 836-52.

- Ding, D. Z.; Goodall, K.; Warner, M. (2000) 'The end of the 'iron rice-bowl': whither Chinese human resource management?'. *International Journal of Human Resource Management*, 11 (2): 217-237.
- Farndale, E. (2005) 'HR Department Professionalism: A Comparison between the UK and Other European Countries', *International Journal of Human Resource Management*, 16: 660-675.
- Guest, D., Michie, J., Conway, N. and Sheehan, M. (2003) 'Human Resource Management and Corporate Performance in the UK', *British Journal of Industrial Relations*, 41: 291-314.
- Huselid, M. A. (1995) 'The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance', *Academy of Management Journal*, 38: 635-672.
- Laursen, K. and Foss, N.J. (2003) 'New Human Resource Management Practices, Complementarities and the Impact on Innovation Performance', *Cambridge Journal of Economics*, 27 (2): 243-263.
- Li, J. (2003) 'Strategic Human Resource Management and MNEs' Performance in China. *International Journal of Human Resource Management*, 14(2): 157-173.
- Schuler, R. S. (1992) 'Linking the People with the Strategic Needs of the Business', *Organizational Dynamics*, Summer: 18-32.
- Takeuchi, N.; Wakabayashi, M.; Chen, Z. G. (2003). 'The Strategic HRM Configuration for Competitive Advantage: Evidence from Japanese Firms in China and Taiwan'. *Asia Pacific Journal of Management*, 20 (4): 447-480.
- Teece, D. J., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities in strategic management', *Strategic Management Journal*, 18(7): 509-534
- Teo, S. (2002) 'Effectiveness of a Corporate HR Department in an Australian Public Sector Entity During Commercialisation and Corporatization', *International Journal of Human Resource Management*, 13(1): 89-105.
- Ulrich, D. (1997) 'Measuring Human Resources: An Overview of Practice and Prescription for Results', *Human Resource Management*, 36(3): 302-320.
- Warner, M. (2004) 'Human Resource Management in China Revisited: Introduction', *The International Journal of Human Resource Management*, 15 (4&5): 617-34.
- Warner, M. and Zhu, Y. (2004) 'Changing Patterns of Human Resource Management in Contemporary China: WTO Accession and Enterprise Responses', *Industrial Relations Journal*, 35 (4): 311-28.
- Wright, P.M., Dunford, B.B. and Snell, S.A. (2001) 'Human Resources and the Resource Based View of the Firm', *Journal of Management*, 27: 701-721.
- Wright, P.M., Gardner, T.M., Gerhart, B., and Delery, J.E. (2001) 'Measurement Error in Research on Human Resources and Firm Performance: Additional Data and Suggestions for Future Research', *Personnel Psychology*, 54: 875-901.
- Wright, P.M., Gardner, T.M. and Moynihan, L.M. (2003) 'The Impact of HR Practices on the Performance of Business Units', *Human Resource Management Journal*, 13 (3): 21-36.
- Wright, P. M, Gardner, T. M., Moynihan, L. M., and Allen, M. R. (2005) 'The Relationship Between HR Practices and Firm Performance: Examining Causal Order', *Personnel Psychology*, 58: 409-446.
- Wright, P.M. and McMahan, G.C. (1992) 'Theoretical Perspectives for Strategic Human Resource Management', *Journal of Management*, 18: 295-320.
- Yan, D. and Warner, M. (2002) 'Foreign investors' choices in China: going it alone or in partnership?' *Human Systems Management*, 21 (2): 137.



- Zhu, C. J. (2005) *Human Resource Management in China: Past, current and future HR practices in the industrial sector*. London and New York: Routledge.
- Zhu, C. J., Cooper, B., De Cieri, H. and Dowling, P. J. (2005) 'The Problematic Role of a Strategic Approach to Human Resource Management in Industrial Enterprises in China', *The International Journal of Human Resource Management*, 16 (4): 517-535.

**Table 1: Profile of survey respondents**

<b>Variables</b>	<b>Percentage</b>
<b>Age (N=808)</b>	
less than 30	21.0
30-39	43.1
40-49	25.7
50-59	9.5
60 and over	0.6
<b>Gender (N=807)</b>	
Male	67.2
Female	32.8
<b>Education (N=804)</b>	
High school certificate or less	0.9
Technical secondary school	9.0
Bachelor's degree	32.3
Some post-graduate education	46.4
Post graduate degree	11.4
<b>Industry (N=635)</b>	
Manufacturing,	40.0
Mining and Resource (including construction, energy and infrastructure)	22.8
Services (including wholesale, retail and trading, entertaining such as restaurant, hotel and other tourism related business, banking and finance, real estate, health, community or social services, culture, education and research and public sector management and IT)	37.2
<b>Ownership (N=651)</b>	
Public enterprises (state and collectively owned)	26.3
Share holding firm	37.0
Private business or firm and self employed	21.5
Foreign and Hong Kong/Macau/Taiwan invested enterprises (including joint ventures and wholly foreign owned)	15.2
<b>Size of Organization (N=660)</b>	
Less than 50 employees	10.6
51-200 employees	20.8
201-500 employees	21.7
501-1000 employees	12.7
More than 1000 employees	34.2

**Table 2: Strategic Integration of HR**

Variables	Public enterprises		Share holding firm		Domestic private business/self-employed		Foreign/HK, Macau, Taiwan invested firms	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Viewed as an important department/function	4.36	0.882	4.01	1.152	4.02	1.068	4.08	0.948
Tends to imitate HR practices used by other domestic or foreign firms	3.78	0.979	3.45	0.955	3.60	1.114	3.61	0.971
Works closely with the senior management on strategic issues	4.02	0.936	3.70	1.124	3.88	1.166	3.84	0.915
Viewed as an effective department	3.65	0.866	3.49	1.064	3.51	1.098	3.53	0.932

**Table 3: Devolvement of HR Practices (percentage)**

	Recruit and select applicants (N=784)	Administrate pay and benefits (N=783)	Design commercial insurance packages (N=715)	Train employees (N=771)	Execute performance assessments (N=755)	Job design (N=776)
<b>Senior Manager</b>	52.8	45.1	41.0	20.1	44.5	51.8
<b>Middle Manager</b>	45.4	39.5	42.9	52.4	56.3	51.7
<b>Line Manager</b>	3.3	4.7	4.8	8.3	8.3	6.1
<b>HR Manager</b>	45.9	43.3	37.5	53.6	37.5	32.2
<b>Outsourced</b>	0.5	0.4	0.8	2.7	0.9	0.1

Note: The summarised figures in each column is larger than 100 due to the overlapping roles of managers at different levels.

**Table 4: Means, standard deviations, and correlations of key variables**

	Mean	SD	1	2	3	4	5	6
1. Market performance	3.68	0.79						
2. Organizational effectiveness	3.77	0.72	0.656**					
3. Public enterprises	0.26	0.44	-0.100*	-.049				
4. Shareholding firm	0.37	0.48	0.013	-.070	-.460**			
5. Domestic private firm	0.21	0.41	0.005	.033	-.311**	-.399**		
6. Foreign invested firm	0.15	0.36	0.101*	.117**	-.254**	-.326**	-.220**	
7. Strategic HR integration	4.08	0.74	0.238**	.336**	.047	-.072	-.026	.070

\*  $p < .05$ ; \*\*  $p < .01$ .

**Table 5: Results of regression analysis (market performance)**

	Standardized Coefficients Beta	t	significance values
Shareholding firm	0.118	2.387	.017
Domestic firm	0.101	2.012	.045
Foreign invested firm	0.141	3.103	.002
Strategic HR integration	0.236	5.966	.000
Firm size	0.036	.858	.391

Note. Reference category for ownership type: state sector enterprises.

**Table 6: Results of regression analysis (organizational effectiveness)**

	Standardized Coefficients Beta	t	significance values
Shareholding firm	0.034	.712	.477
Domestic firm	0.098	2.018	.044
Foreign invested firm	0.12	2.735	.006
Strategic HR integration	0.328	8.598	.000
Firm size	0.05	1.213	.226

Note. Reference category for ownership type: state sector enterprises.

## Appendix 1. Measures for Vertical Integration

### 1. Strategic HR Integration

Please circle in each item the number that best describes human resources or personnel activities in your company.

(1=strongly disagree, 2=somewhat disagree, 3=neither, neutral 4=somewhat agree, 5=strongly agree)

1. HR practices help achieve business objectives e.g. for succession planning, to reduce/expand the workforce	1	2	3	4	5
2. HR strategy is formulated based on business strategy	1	2	3	4	5
3. HR is involved in business decision-making e.g. to allocate resources, to assist in technology development	1	2	3	4	5
4. The top HR executive is a strategic partner for other senior managers	1	2	3	4	5
5. HR practices, such as recruitment and training, are used to implement business strategies	1	2	3	4	5
6. HR managers or people are involved in the development of work procedures	1	2	3	4	5
7. HR issues are a part of the company mission statement e.g. commitment to people, people as a key investment	1	2	3	4	5
8. HR is involved in decision-making that co-ordinates your business(es)	1	2	3	4	5

### 2. Devolvement

**People with responsibility for HR** – If your organisation engages in the following HR practices, please tick (√) who has responsibility for those HR practices.

	Senior mgt	Middle mgt	Line mgt	HR	Outsourced
1. To recruit and select applicants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. To administrate pay and benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. To design various commercial insurance packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To train employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. To execute performance assessments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. To design job roles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 2. Firm Performance Measures

### **Market Performance**

How does your company's performance compare with the industry average? Please tick in the box.

	Very poor	Poor	Fair	Good	Very good
Return on equity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Return on assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Organizational Effectiveness**

How does your company's performance compare with the industry average? Please tick in the box.

	Very poor	Poor	Fair	Good	Very good
Timely adapting company products and/or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timely adapting company strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieving quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieving employee satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieving customer satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>