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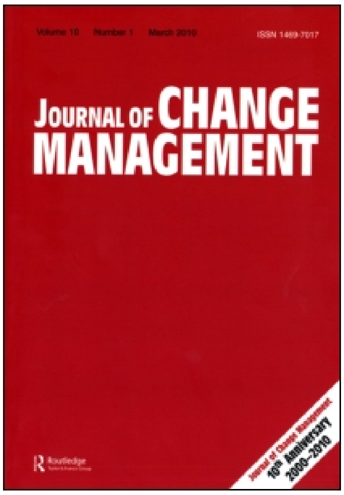

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Factors Influencing Changes in Chinese Management Accounting Practices

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ABSTRACT *This study provides insight into the factors that influence change in Chinese management accounting practices. Multivariate analysis indicates that the size of the firm, foreign partner and level of knowledge of senior managers and employees have positive bearing on the changes in management accounting practices of the foreign-partnered joint ventures. The size and level of knowledge of senior managers appear to influence changes in management accounting practices. However, no support is found for the hypothesis that the Chinese government has a significant influence on the changes in management accounting practices of joint ventures and state-owned enterprises.*

KEY WORDS: Management accounting change, joint ventures, state-owned enterprises, China

Introduction

Over the past two decades, the Chinese socialist economy has transformed into an essentially market-oriented economic system. Underpinning the economic transformation is the restructuring and modernization of state-owned enterprises (SOEs). It is widely argued that privatization and the opening up of the Chinese economy to market forces and foreign investors are key elements in Chinese economic success. For example, Perez (1997) argues that a moderate foreign presence is sufficient to generate positive spill-over effects, even when there is a relatively wider technological gap between foreign- and locally owned companies. Feinberg and Majumdar (2001), Meyer (2004) and Buckley *et al.* (2007a) endorse this view that the entry of foreign companies into the host market is sufficient to stimulate

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both the acquisition and transfer of skills and management practices not only to foreign-partnered enterprises, but also to locally owned firms.

There is still a considerable amount of debate about what factors influence the diffusion of knowledge and management practices to host country firms and the speed of change (see Chanegrih, 2008). Relatively few studies have been conducted into the diffusion of knowledge and management accounting practices, especially in the Chinese context. O'Connor *et al.* (2004) suggest that by understanding the factors influencing the changes in management accounting practices in China, the success with which such practices are disseminated can influence the speed of economic development. Guthrie (1999) supports this view and argues that to fully achieve the aims of the market reforms, sustain economic growth and ensure an efficient market system in China requires effective accounting, budgeting and uninhibited use of management accounting practices. Moreover, existing studies (see, Firth, 1996; O'Connor *et al.*, 2004; Wu *et al.*, 2007) have not as yet explored the potential influence of the level of knowledge of the top-level Chinese managers and accounting staff on the adoption of management accounting practices in joint ventures (JVs) and SOEs. By examining the impact of these factors on changes in management accounting practices we assess whether these factors involve a shift of power from Communist Party officials to senior managers and employees in the firms, constituting a key aspect of Chinese economic reforms.

Given the quest to integrate its economy fully into the global economy and the dearth of research in this area, it is imperative to investigate the factors influencing the changes in management accounting practices in China. The goals of this article, reporting on a study of SOEs and JVs covering the period 2006–2010, are twofold: (1) to extend prior research on factors influencing emerging management accounting practices; and (2) to present new insights into how the level of knowledge possessed by Chinese managers and employees may influence the adoption of management accounting practices.

First, a concise review of the literature on factors influencing changes and adoption is provided and the study's hypotheses are set out. Second, the research methods and sample characteristics are identified. Third, the results and discussion are presented. Finally, we discuss the study's managerial implications and conclusions.

Literature Review and Hypotheses Development

A wide range of variables has been suggested in the literature as factors influencing the changes/adoption of management accounting practices in an organization. They can be grouped into: (1) culture-related factors, which encompass traditional management norms and practices (Liu and Zhang, 1996; Hoon-Halbauer, 1999; O'Connor *et al.*, 2004; Chanegrih, 2008); (2) firm and industry-related factors, such as size, industry of JVs and age of JV (Firth, 1996; Goodall and Warner, 1999; Yang, 1999; O'Connor *et al.*, 2004; Buckley *et al.*, 2007b); (3) partner-related factors, such as foreign partner's influence, experiences of host and foreign partners (Firth, 1996); (4) host country-related factors, including government influence, legislation and level of market competition (Li, 1997; O'Connor *et al.* 2004; Jarvinen, 2006); and (5) economy-related factors, which include market competition (Granlund and Lukka, 1998). For example, Firth (1996) found that the nationality of the foreign partner, the degree of competition, the experience of Chinese partners and size of enterprise are positively and significantly related to the adoption of management accounting practices. O'Connor *et al.* (2004) indicate that the use of limited-term employment contracts, joint venture experience, stock exchange listing, market competition, government influence, Chinese management norms, enterprise age and availability of training for accounting staff significantly influence the adoption of management accounting practices.

Hypotheses

Government influence/ownership and management accounting practices.
Boateng and Glaister (2002) suggest that the nature of the ownership type may influence how firms are managed and controlled. This is because the level of ownership (partly/fully owned) influences the level of resource commitment and consequently the control and strategic direction of the firm (Lorange and Roos, 1990). A strong theoretical basis should therefore exist for linking ownership type (JVs and SOEs) to strategic decision-making in a firm. In the context of China, we contend that ownership of enterprises (whether jointly or wholly owned) by the state allows the government to interfere in the management of enterprises. A number of studies, including Child (1994), Groves *et al.* (1994) and O'Connor *et al.* (2004), suggest that the Chinese government uses its shareholding in enterprises to constrain SOEs' latitude for change, as well as shifting management attention away from efficiency and profitability objectives in favor of providing employment to augment social stability. Similar conclusions are drawn by Goodall and Warner (1999) who show how government influence impedes the implementation of modern management practices. Given that most JVs in China are partnered by SOEs, the above conclusion may be equally applicable to foreign-partnered JVs in China.

By contrast, Hassard *et al.* (1999) suggest that recent modernization and SOE restructuring has placed emphasis on reducing government interference in enterprise management. Lin *et al.* (1998) share the same view and suggest that SOEs in more decentralized industries and costal cities tend to have more freedom of action as they do not have state representatives on the board of directors. In the light of the above discussion, it is hypothesized that:

> *H1*: There is a clear correlation between government ownership in both JVs and SOEs, and the organizations' changes in management accounting practices.

Size of JV and SOE and management accounting practices.
Lin *et al.* (1998) and Goodall and Warner (1999) indicate that large SOEs in China help to bear a heavy part of the burden for retirement pensions, redundancies and to alleviate unemployment. In return, SOEs have garnered preferential support from the government during the various stages of reforms, compared with small SOEs where the government strategy has been a 'let go' approach. O'Connor *et al.* (2004) therefore argue that government support is likely to reduce both

the urgency and leeway for adopting more formal and transparent management accounting controls, hence SOEs' use of Western management accounting would decrease with their size.

Prior literature suggests that firm size is an important variable affecting the changes designed to improve a company's performance (Smith *et al.*, 1989; Pan and Li, 2000; Boateng and Glaister, 2002). Large firms are likely to have better access to both human and financial resources required for modifying, upgrading or replacing existing systems. For example, large firms have a larger asset base with which to raise loans to finance changes compared with small firms. In the context of this study, it can be argued that to effect a change in management accounting practice necessitates a clear commitment of both human and financial resources. The above discussion leads to the second hypothesis of the study:

> *H2*: There is a clear correlation between the size of enterprise (JV and SOE) and the changes in management accounting practices.

Foreign partner influences

The modernization of SOEs has been a cornerstone of China's economic reforms (Lee, 2001). Lee (2001) suggests that restructuring Chinese SOEs includes changing the firm from a quasi-government entity to a profit-oriented organization and converting the financial statements from cash-based, Soviet-style fund accounting to accrual-based, Western-style financial accounting. It may be argued that this can be done by forming JVs between SOEs and Western multinational companies which possess the skills and capabilities for delivering the change. As a result, the Chinese authorities actively encourage the formation of JVs as a preferred entry mode of foreign direct investment (Beamish, 1993; Firth, 1996). This line of thinking is consistent with Contractor and Lorange (1988) and Glaister and Buckley (1996) who show how JVs can act as mechanism for the transfer of much needed technological expertise into the host country. This point has been endorsed by Child and Markoczy (1993), Yan and Gray (1994) and Firth (1996), who suggested that foreign partners in Chinese JVs often assist the change process through on-the-job and/or formal in-house training. It is expected that foreign partners who have the skills and capabilities of Western-style management accounting practices are more likely to influence management accounting change in a JV. The above discussion leads to the third hypothesis:

> *H3*: There is a clear correlation between the influence of foreign partners and changes in the management accounting practices of JVs.

The level of knowledge of accounting staff and management accounting practice.

Van de Ven *et al.* (1989) argue that people and context are two important factors that can influence innovation and its implementation processes. It is people who push, develop, modify and drop ideas, whereas context is the setting or institutional order within which innovative ideas are developed. Therefore, at the firm level, the influence of senior management and employees can play a significant role in the management accounting change process. In the context of China, it may be argued that an increased level of environmental complexity, together with greater amounts of delegated decision-making authority to SOEs, has implications for both middle and senior management levels. Senior managers may face an increased need to rely on information obtained from subordinates. Prior literature suggests that a high level of employees' knowledge may reduce resistance to change and create a better understanding for the need to change. Thus, employees' qualifications and consequently their levels of knowledge may be a key factor for the adoption of new management accounting practices.

H4: There is a clear correlation between level of knowledge of accounting employees and the changes in management accounting practices.

Senior management and management accounting practice.
Organizational restructuring often involves top management being directly involved in all major decisions and hands-on involvement until the innovations/new rules finally become part of the accepted order and established routines. Simply put, top management constitutes a powerful influence on any change processes, including those in management accounting. A number of studies (Garratt, 1980; Wang, 1980; Lockett, 1988; Hu and Chen, 1996; Cui, 1998; Sergeant and Frenkel, 1998; Hoon-Halbauer, 1999) have suggested that low levels of technical and professional skills among Chinese managers are a major problem. According to Garratt (1980), the origin of this problem lies in the rapid promotion of cadres with political and military, rather than industrial, experience to senior management positions due to their allegiance to the Communist Party. The problem of poor management skills is compounded by the resistance of older, less-qualified managers to either retire or move into an advisory role. Despite the above, no study explicitly investigates the correlation between level of knowledge of senior Chinese managers and the adoption of management accounting practices in China. Hence it is hypothesized that:

H5: There is a clear correlation between level of knowledge of Chinese senior managers and the changes in management accounting practices in JVs and SOEs.

Method and Sample Characteristics

Data spanning the period 2006–2010 was gathered through a cross-sectional survey using a questionnaire on a sample of Chinese JVs and SOEs. A questionnaire survey was deemed to be the most appropriate for this study given that the research population of interest is widely spread throughout China. The questionnaire presented a list of 40 items aimed at identifying the extent to which various management accounting practices have changed and benefitted the SOEs and JVs over the 5-year period. The management accounting practices used in the questionnaire were divided into five sub-groups: (1) product cost systems, (2) budgeting and performance evaluation systems, (3) planning and control, (4) decision support systems, and (5) responsibility accounting. Management accounting is a comparatively young discipline in China and the initial pilot study revealed that more recently developed techniques such as benchmarking, balanced scorecard and shareholder value analysis are not widely used by the majority of Chinese accountants. Therefore, these techniques were not incorporated in the study.

The research population of interest was obtained from secondary sources (The State Economic & Trade Commission [SETC], PRC and Ministry of Foreign Trade and Economic Cooperation [MOFTEC], PRC). These sources of data were used because they are an authorized company database and represent the most reliable source in China. In total, 1093 questionnaires were mailed or delivered to the senior financial managers, and 179 usable responses were returned. This represents an overall response rate of 16.4% with JVs constituting 64 (36%) and SOEs 115 (64%) of the sample.

Sample Characteristics

The characteristics of the sample are summarized in Table 1. Manufacturing constitutes about three-quarters of both JV and SOE samples and the other quarter consists of enterprises in agriculture (forestry and fishery), financial services (banking and insurance), transport (road, sea, rail and air transport), general trade (retail, wholesale and import and export trade), building and construction, information technology and other services (hotel, restaurant, travel, entertainment and media). Company size was measured using the number of employees. Table 1 shows that companies employing not more than 2000 people constitute ~ 44.4% of the sample. This is followed by companies employing between 500 and 2000 people (30.6%) and the companies employing fewer than 500 people (25%). In terms of age of the enterprises in the sample, Table 1 indicates that ~ 51.9%

Table 1. Sample characteristics

	Joint ventures (%)	State-owned enterprises (%)	Total (%)
Industry classification			
Manufacturing	73.0	73.4	73.3
Agriculture	5.4	0	1.2
Financial services	2.7	4.0	3.7
Transport	2.7	4.8	4.3
General trade	0	8.1	6.2
Building and construction	10.8	2.4	4.3
Information technology	5.4	3.2	3.7
Other services	0	4.2	3.1
	100	**100**	**100**
No. of employees			
<500	40.5	20.3	25.0
500–2000	35.1	29.3	30.6
>2000	24.4	50.4	44.4
	100	**100**	**100**
Year established			
<10 years	62.2	19.2	29.0
10–22 years	32.4	15.2	19.1
>23 years	5.4	65.6	51.9
	100	**100**	**100**

Note: $N = 179$.

have been in existence for over 23 years, 19.1% between 10 and 22 years, and 29% for fewer than 10 years.

Statistical Analysis

To examine the hypothesized relationships, a correlation coefficient was first computed, followed by the implementation of multiple regressions.

The Model

The discussion of the hypotheses suggests the following model for the change in management accounting practices (CMAPS) for JVs and SOEs respectively

$$\mathrm{CMAPS} = \beta_0 + \beta_1 GOVT + \beta_2 FPART + \beta_3 SIZE + \beta_4 EMPLY + \beta_5 SNMGR + \varepsilon \tag{1}$$

$$\mathrm{CMAPS1} = \beta_0 + \beta_1 GOVT + \beta_2 SIZE + \beta_3 EMPLY + \beta_4 SNMGR + \varepsilon \tag{2}$$

Measures of Dependent and Independent Variables

Benefit received from the changes in management accounting practices over 5-year period (CMAPS).

The changes in management accounting practices were measured using the perceived benefits received from the changes in the following management accounting practices: product costing systems, budgeting systems, performance evaluation systems, decision support, planning and control, and responsibility accounting. Respondents were assessed on a 7-point scale on the perceived benefits received from the changes in the individual management accounting practices in JVs and SOEs over the 5-year period. In terms of the overall CMAPS, we use a composite index (an arithmetic average score) consistent with the measures used by Sim and Ali (1998) and Boateng and Glaister (2002). The overall measure has a Cronbach's alpha of 0.88 and is used to construct the correlation matrix. The list and Cronbach's alpha of the individual measures are as follows:

Management Accounting Practice	*Cronbach's alpha*
Benefits from changes in product cost systems	0.88
Benefits from changes in budgeting systems	0.87
Benefits from changes in performance evaluation techniques	0.86
Benefits from changes in decision support systems	0.85
Benefits from changes in planning and control	0.86
Benefits from changes in responsibility accounting	0.86

Independent variables.

The manner in which the independent variables are measured is shown in Table 2.

Results and Discussion

Tables 3, 4 and 5 show a summary of the means, standard deviations, correlation matrix for the dependent and independent variables, and variance inflation factor (VIF) test results, which indicate that there were no problems with the data in terms of multicollinearity. Bivariate relationships, shown in Table 3, provide support for the following independent variables for JVs: government influence ($P < .05$), foreign partner ($P < .1$), accounting staff level of knowledge ($P < .01$) and size of JV ($P < .01$). In respect of SOEs, the result provides support for the following independent variables: size ($P < .01$), level of knowledge of senior managers ($P < .01$) and level of knowledge of accounting staff ($P < .05$).

Multiple regressions were conducted to identify the factors influencing the change of each management accounting practice used in the JVs and SOEs. Tables 6 and 7 show the results of the multiple regressions. Tables 6 shows that the F-value for CMAPS was significant ($P < .01$) and that the regression explained well over 60% of the variation in the change of management accounting practice in Sino-foreign JVs. The regression procedure suggests that size ($P < .05$), foreign partner ($P < .01$), level of knowledge of senior management (0.05) and level of knowledge of accounting staff ($P < .01$) have a positive influence on the change in management accounting practices of JVs in China. This provides support for *H2*, *H3*, *H4* and *H5*. In the case of individual management accounting practices, foreign partner, level of knowledge of senior management and level of knowledge of accounting staff influence the change of performance evaluation technique. Regarding product costing, planning and control, two

Table 2. Measurement of independent variables

Independent variables	Measurement
Government influence (GOVT)	Ordinal measure developed on the basis of government input in respect of the adoption of management accounting practices (Boateng and Glaister, 2002)
Size of JV (SIZE)	A variable developed on the basis of the number of employees for JV and SOE (up to 750 = Small/Medium; over 750 = Large)
Foreign partner influence (FPART)	Ordinal measure developed on the basis of foreign partner's input regarding the adoption of management accounting practices in the JV (Boateng and Glaister, 2002)
Level of accounting employees knowledge (EMPLY)	A composite index indicating management accounting employees qualifications and understanding of management accounting practices introduced
Level of senior managers' knowledge (SNMGR)	A composite index indicating senior management accountants' qualifications and understanding of management accounting practices introduced

Note: JV, joint venture; SOE, state-owned enterprise.

Table 3. Spearman correlation matrix of the dependent and independent variables: JVs

Variable	Mean	SD	A	B	C	D	E
A. GOVT	1.78	1.43					
B. FPART	5.68	1.53	0.15				
C. SIZE	1.54	0.51	0.10	0.02			
D. EMPLY	3.82	1.58	0.39**	-0.18	0.28*		
E. SNMGR	1.78	2.01	0.61***	0.16	0.02	0.26	
E. CMAPS	3.31	0.57	0.52***	0,27*	0.41**	0.67***	0.24

Note: No. of cases = 64. JV, joint venture; SD, standard deviation.
*$P < .1$, **$P < .05$, ***$P < .01$.

Table 4. Spearman correlation matrix of the dependent and independent variables: SOEs

Variable	Mean	SD	A	B	C	D
A. SIZE	1.77	0.42				
B. SNMGR	4.04	1.59	0.24**			
C. EMPLY	3.60.	0.94	0.14	0.30***		
D. GOVT	4.96	1.86	0.17*	0.11	0.22**	
E. CMAPS	4.19	0.66	0.32***	0,31***	0.21**	−0.16

Note: No. of cases = 115. SD, standard deviation; SOE, state-owned enterprise.
*$P < .1$, **$P < .05$, ***$P < .01$.

Table 5. Variable inflation factor (VIF) test

Variable	VIF		1/VIF	
	SOE	JV	SOE	JV
Size	1.070	1.105	0.935	0.905
Knowledge of employees	1.128	1.354	0.886	0.739
Knowledge of managers	1.163	1.503	0.860	0.665
Government influence	1.029	1.755	0.972	0.570
Foreign partner	–	1.120	–	0.892

Note: JV, joint venture; SOE, state-owned enterprise.

factors, namely, foreign partner and level of knowledge of senior management have a positive bearing on the change in practices. Decision support and responsibility accounting are influenced by size of the JV, level of knowledge of senior management and foreign partners, whereas budgeting systems are influenced by level of knowledge of senior management. It is not surprising that foreign partners have positive and significant influence on the change in management accounting practices in Chinese JVs. One of the motivations for JV formation is to bring together the complementary skills, talents and technologies of the partners in order to gain synergy and enhance performance. JVs enable each partner to contribute a missing piece to the venture, thereby facilitating the achievement of the overall goals. JV partners from the Western capitalist economies appear to have

Table 6. Multiple regression results: factors influencing the changes in individual and overall management accounting practices for joint ventures

Variables in model	Product costing systems	Budgeting systems	Performance evaluation	Decision support	Planning and control	Responsibility accounting	Overall change
Constant	1.852 (1.731*)	4.488 (5.814***)	1.763 (2.058**)	-0.135 (-0.131)	1.498 (0.237)	0.702 (0.666)	3.065 (8.778***)
GOV'T	0.12 (948)	0.19 (1.039)	0.035 (0.267)	0.21 (1.860*)	0.135 (926)	-0.109 (0697)	0.205 (1.565)
FPART	0.38 (3.410***)	0.34 (2.428)	0.430 (3.589***)	0.28 (2.787***)	0.28 (2.097**)	0.307 (2.153**)	0.376 (3.60***)
SIZE	-0.02 (-0.171)	0.05 (0.34)	0.084 (0.680)	0.219 (2.080**)	0.064 (0.467)	0.377 (2.553***)	0.194 (1.874**)
EMPLY	0.69 (5.158***)	0.166 (1.192)	0.506 (3.511***)	0.14 (0.192)	0.13 (0.09)	0.200 (1.363)	0.633 (5.513***)
SNMGR	-0.018 (-0.158)	-0.41 (-2.458**)	0.263 (2.132**)	0.534 (4.366***)	0.576 (3.59***)	0.295 (1.714*)	0.216 (1.776**)
R-square	0.65	0.43	0.60	0.71	0.50	0.43	0.698
Adjusted R	0.60	0.35	0.54	0.66	0.43	0.34	0.649
F-value	11.707***	4.856***	9.295***	15.351***	6.356***	4.721***	14.314***
Number of cases	64	64	64	64	64	64	

Notes: *T*-values are given in parentheses.
*$P < .1$, **$P < .05$, ***$P < .01$.

Table 7. Multiple regression results: factors influencing the changes in individual and overall management accounting practices for state-owned enterprises (SOEs)

Variables in model	Product costing systems	Budgeting systems	Performance evaluation	Decision support	Planning and control	Responsibility accounting	Overall change
Constant	4.395 (4.4227***)	2.568 (2.792***)	0.938 (1.751*)	1.846 (2.078**)	2.822 (3.358***)	0.871 (0.683)	2.058 (2.930***)
GOV'T	-0.173 (-1.206)	-0.14 (-0.979)	0.149 (1.345)	-0.036 (-0.036)	-0.220 (-1.513)	0.273 (1.587)	-0.108 (-1.291)
SIZE	-0.104 (-0.738)	0.154 (1.051)	0.127 (1.94**)	0.175 (2.197**)	0.054 (0.391)	0.003 (-0.018)	0.250 (2.924***)
EMPLY	0.184 (1.258)	0.131 (0.875)	0.590 (3.256***)	0.175 (1.152)	0.29 (0.208)	0.019 (0.109)	0.097 (1.110)
SNMGR	0.380 (2.644***)	0.385(-2.602**)	0.192 (1.759**)	0.359 (2.326**)	0.504 (3.487***)	0.438 (2.744***)	0.221 (2.486**)
R-square	0.18	0.22	0.57	0.22	0.26	0.32	0.22
Adjusted R	0.10	0.14	0.53	0.14	0.19	0.23	0.182
F-value	2.303**	2.725**	13.289***	2.693**	3.646***	3.416**	6.667***
Number of cases	115	115	115	115	115	115	115

Notes: *T*-values are given in parentheses.
$^{*}P < .1$, $^{**}P < .05$, $^{***}P < .01$.

the requisite knowledge needed to transform the Chinese SOEs into competitive enterprises and therefore contribute significantly to Sino-foreign JV in this area.

Table 7 shows that the *F*-value for CMAPS1 for SOEs was significant ($P < .01$). The regression procedure explained 18.2% of the variation in the change in management accounting practices (CMAPS1). The results suggest that size of the enterprise ($P < .01$) and level of knowledge of senior management ($P < .05$) have a significant influence on the change in management accounting practices in SOEs, thereby supporting *H2* and *H5*. With regard to the individual techniques, senior managers have significant influence in the changes of all practices, i.e. product costing, budgeting systems, performance evaluation, decision support, planning and control and responsibility accounting. Size of the SOE positively influences performance evaluation and decision support systems.

It is not surprising that firm size has a positive and significant impact on the changes in management accounting practices of JVs and SOEs in China. This is because greater size can be a crucial parameter in securing economies of scale, thereby helping to spread the large expenditures required for developing a new system such as management accounting practices over large output to reduce the average cost of implementation. It is thus argued that size can create financial, managerial and operational synergies that can reduce the operational vulnerability of firms (Ravenscraft and Scherer, 1987).

This study also demonstrates that the level of training/knowledge of senior management and accounting employees involved in the implementation of new techniques has a positive bearing on the change in management accounting practices of Chinese JVs. This is consistent with the conclusion drawn by O'Conner *et al.* (2004) who point out that, at the firm level, the availability of training is crucial for a change in management accounting practices. By contrast with SOEs, senior managers have significant influence on the adoption of management accounting practices.

It is somewhat surprising that the Chinese government has positive and negative, but not significant, influence on the changes in management accounting practices in JVs and SOEs. Hassard *et al.* (1999) indicate that the Chinese government uses its part ownership of JV through the power of the Communist Party and appoints cadres to the board to influence control and decision-making in a direction consistent with the goal of creating more employment. This appears inconsistent with O'Connor *et al.* (2004) who conclude that the Chinese government has a significant influence on the adoption of management accounting practices in SOEs. Perhaps our findings may be explained by the fact that SOEs have greater autonomy from the state as a result of the economic reforms embarked on by Chinese government over the past two decades. Hussain and Chen (1999) suggest that most SOEs have boards which have autonomy in strategic decision-making, thereby reducing government interference in running these enterprises. It is pertinent to point out that China's accession into the World Trade Organization may also provide further explanation for the lack of support for government influence on changes in management accounting practices. For example, *The Economist* (2007) reported that China has become more open because of commitments made to the World Trade Organization as a condition of membership.

Conclusions

This study represents one of the few attempts to identify factors influencing the changes in management accounting practices in Chinese SOEs and JVs with partners from Western countries. This study suggests that four factors have a positive influence on the change in management accounting practices in Chinese JVs. These are foreign partner, size of the firm, and level of training/knowledge of senior management and accounting employees. By contrast, two factors have a positive influence on the change in these same practices within SOEs. These were identified as size of the SOE and level of knowledge of senior managers. However, the results render no support for the level of knowledge of accounting staff as a factor influencing the adoption of management accounting practices in SOEs. This implies that senior managers continue to dominate the decision-making process in SOEs despite decades of reforms in China.

An important managerial implication to be drawn from this study is that foreign partner capabilities in management accounting should be carefully assessed when forming a JV. Chinese firms should look for foreign partners with relevant skills and technical capabilities necessary to deliver the changes required for the JV to succeed.

Another conclusion emanating from this study is that the Chinese government does not exert a significant influence on the change in management accounting practices in Sino-foreign JVs. This implies that the last two decades of economic reform in China appear to have changed, to a large extent, the restrictive environment in which companies operated in under the socialist system.

Further studies on the changes in management accounting practices in China appear warranted. They should focus on comparing the adoption of management accounting practices in SOEs and JVs in China using interview approaches, because surveys are less effective in producing in-depth findings relating to the knowledge of employees and senior managers.

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