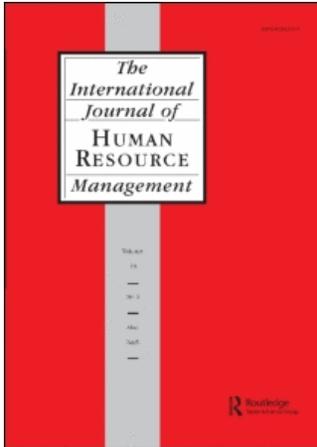


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## **Innovative human resource management and corporate performance in the context of economic liberalization in India**

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The Indian economy was forced to adopt a structural adjustment programme at the beginning of 1991. The structural adjustment programme or liberalization initiated the process of the opening up of an otherwise closed economy of India. Liberalization created a hyper-competitive environment and to respond to this turbulence, Indian organizations adopted innovative changes in their HRM practices. Current research shows that HRM practices are important for enhanced corporate performance but little has been reported on the effect of HRM practices and corporate performance in the context of economic liberalization of India. This study tries to understand the role of innovative HRM practices and specifically questions how HRM practices, such as the role of HR department, recruitment, retraining and redeployment, performance appraisal and compensation, enhance corporate performance during the change process. A multiple-respondent survey of 69 Indian organizations was undertaken to study the impact of innovative HRM practices on firm performance. The survey found that the innovative recruitment and compensation practices have a positive significant relationship with firm performance. It was observed that recruitment, the role of the HR department and compensation practices seem to be significantly changing within the Indian firms in the context of India's economic liberalization. The synergy between innovative HRM practices was not significant in enhancing corporate performance during the liberalization process.

**Keywords:** India; innovative HRM; liberalization; performance

### **Introduction**

In the last 20 years, research has shown that the strategic use of human resource management (HRM) is likely to be one of the most important determinants of organizational performance. Researchers have built evidence that links HRM practices with corporate performance (Schuler and MacMillan 1984; Schuler and Jackson 1987, 2005; Storey 1992; Arthur 1994; Dyer and Reeves 1995; Huselid 1995; Purcell 1995; Delaney and Huselid 1996; Huselid and Becker 1996; Ichniowski, Shaw and Prenzushi 1997; Delery 1998; Pfeffer 1998; Wright and Snell 1998; Gratton, Hope-Hailey, Stiles and Truss 1999; Truss 2001; Guest, Michie, Conway and Sheehan 2003; Paauwe 2004; Paauwe and Boselie 2005; Wright, Snell and Dyer 2005). Drawing on this extensive body of research on strategic human resource management (SHRM), this article examines the effects of SHRM practices on firm performance during significant macro-environment changes. This research focuses on three issues; first, in contrast to most SHRM research, which has occurred largely within the context of industrialized Western economies, the present study focuses on these issues from the point of view of an emerging economy. This research considers the impact of western SHRM framework and provides empirical evidence

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from India. This is in line with Ericksen and Dyer (2005) and Wright et al.'s (2005) call for further empirical research from different contexts. Gerhart (2005, 178) justifies the question, *to what extent Western SHRM framework is valid for other (in this case Indian) contexts* by saying: "This is a concern because it seems unlikely that one set of HR practices will work equally well no matter what context." To further examine the existence of such a relationship, it is important to conduct research in non-US/UK contexts (Katou and Budhwar 2007), especially in emerging economies. The second feature of this research is in line with international HRM studies, that adds to the growing body of literature on management practices and HRM on India (Lawler, Jain, Venkata Ratnam and Atmiyanandana 1995; Sparrow and Budhwar 1997; Venkata Ratnam 1998; Amba-Rao, Petrick, Gupta and Von der Embse 2000; Ramaswamy and Schiphorst 2000; Budhwar and Khatri 2001; Budhwar and Sparrow 2002; Paul and Anantharaman 2003; Singh 2003; Budhwar and Boyne 2004; Bhatnagar and Sharma 2005). Finally this research article contributes in providing evidence from an important emerging economy where the strategic role of HRM as a key driver of firm performance has gained currency after the liberalization of Indian economy in 1991.

### **Background: the changing Indian context**

India witnessed a spurt of corporate activity following a policy of economic liberalization beginning in 1991. India's liberalization and economic restructuring programme was triggered by a serious balance of payments crisis when its foreign exchange reserves touched their all time low at a mere billion dollars. IMF and the World Bank agreed to help India avert the crisis with structural adjustment loans. The ensuing liberalization included a process of macro-economic stabilization (devaluation of the rupee, reducing fiscal deficit, reducing government expenditure, reduction of some subsidies, controlling inflation), phased deregulation and elimination of the license regime to bring in competition, opening of economy to foreign and private investment, rationalization of tax structure, healthier functioning of capital markets, increase functioning autonomy of PSUs and implementation of safety nets for those hurt by structural adjustment programme. The opening of the Indian economy witnessed an inflow of foreign capital with an increasing number of multinational firms commencing operations (Gopinath 1998). This was the initial phase of liberalization.

During the second phase of liberalization process (post 1996–1997) Indian firms witnessed a turbulent era in the form of hyper-competition (Venkata Ratnam 1995; Budhwar and Sparrow 1998; Khandwalla 2002; Som 2006). Liberalization created intensive competition through easier entry and greater foreign participation. It opened up many opportunities for growth because of the removal of artificial barriers on pricing and output decisions, investments, mergers and acquisitions, JVs, technology imports, import of foreign capital etc. It enabled corporations to expand, diversify, integrate and globalize more freely. Economic restructuring also had a profound impact on effective management of organizations and performance (Som 2006) in the face of superior competition (Khandwalla 2002). To face the challenge of competition Indian firms embarked upon a change process that brought about a transition employee profile, the demography, de-skilling, re-skilling and multi-skilling, and issues related to work-force reduction (Venkata Ratnam 1995; Budhwar and Sparrow 1998; Gopinath 1998; Chatterjee and Pearson 2000). All this had direct implications for HRM in India (Krishna and Monappa 1994) and Indian personnel specialists were under pressure to bring about large-scale structural changes in their organizations in order to cope with the challenges brought by economic liberalization. A study of 54 Indian corporations revealed that out of eight items of change in business, respondents considered turbulence in the product market environment characterized by many unexpected changes, intense competition, greater

buoyancy and growth potential, and greater requirements for technological sophistication as the four most important changes (Som 2002). Post-liberalization, these were the considerable changes in the business environment for firms operating in India. For this article, changing HRM practices from conventional HRM practices in Indian firms is defined as *innovative HRM practices*. It means,

Any intentional introduction or change of HRM program, policy, practice or system designed to influence or adapt employee skills, behaviours, and interactions and have the potential to provide both the foundation for strategy formulation and the means of strategy implementation that is perceived to be new and creates current capabilities and competencies. (Som 2006)

The objective of this article is to understand whether changing HRM practices from conventional HRM practices in Indian firms, which we define as *innovative practices*, were associated with improved organizational performance to face the post-liberalization changes in the business environment. The article tries to identify whether certain innovative HRM practices have stronger significant effect than others and whether *synergies* among such practices can enhance organizational performance (Wright and McMahan 1992; Huselid and Becker 1996; Garcia-Olaverri, Huerta-Arribas and Larraza-Kintana 2006) in the Indian context.

### Literature review: theory and hypotheses

In this article HRM is conceptualized as carefully designed combinations of such practices geared towards improving organizational effectiveness and hence better performance outcomes. Wright and McMahan (1992: 298) define it as: “the planned HR deployments and activities intended to enable [an organization] to achieve its goals” (see also Delery and Doty 1996: 805). HR deployments reflect the central assumptions behind the (positive) conceptualization of what HRM is and does: namely, that it responds accurately and effectively to the organization’s environment and complements other organizational systems and contingencies (Boselie, Dietz and Boon 2005).

Outcomes of worldwide empirical research summarized in recent work of Boselie et al. (2005) and Katou, and Budhwar (2006) suggest that there are commonalities and also contradictions in HRM and performance research (Wright and Boswell 2002; Wall and Wood 2005). Huselid’s (1995) study of the relationship between HR practices and corporate performance serves probably as the seminal and definitely most-cited work in this area. He developed and validated indexes of high-involvement HRM practices through factor analysis. His work supports a configurational view of HRM practices, where techniques tend to work synchronously. He found high-involvement HRM practices to be strongly and positively linked to various measures of organizational performance, including work attachment, firm financial performance, and productivity. In an another study, Delaney and Huselid (1996) found that practices consistent with a high involvement HRM strategy, such as highly selective staffing, incentive compensation, and training, were positively linked to organizational performance. However, Delaney and Huselid’s efforts to establish the impact of internal consistency among such practices by considering the interaction effects on pairs of strategies were not particularly successful. Katou and Budhwar (2006) in their study of 178 Greek manufacturing firms found support with the universalistic model and reported that HRM policies of recruitment, training, promotion, incentives, benefits, involvement and health and safety are positively related to organizational performance. Follow up empirical works have shown reasonably strong, positive relationships between the extent of a firm’s adoption of high-involvement HRM strategies and organizational performance (MacDuffie 1995; Delery and Doty 1996; Youndt, Snell, Dean and Lepak 1996; Huselid, Jackson and Schuler 1997; Ichniowski et al. 1997; Chadwick and Cappelli 1998; Katou and Budhwar 2007).

A number of authors has explored the links between individual HR practices and corporate financial performance. For example, Lam and White (1998) reported that firms' HR orientations (measured by the effective recruitment of employees, above average compensation, and extensive training and development) were related to return on assets, growth in sales, and growth in stock values. Using a sample of banks, Richard and Johnson (2001) examined the impact of strategic HRM effectiveness (ratings of how effectively a variety of HR practices were performed) on a number of performance variables. They found that strategic HRM effectiveness was directly related to employee turnover and the relationship between this measure and return on equity was stronger among banks with higher capital intensity (greater investments in branches). This is exemplified by Terpstra and Rozell's (1993) study of the relationship between recruiting/selection practices and firm performance, where they found a significant and positive link between extensiveness of recruiting, selection and the use of formal selection procedures and firm performance. Cascio (1991) argues that the financial returns associated with investments in progressive HR practices are generally substantial. Russel, Terborg and Powers (1985) demonstrated a link between the adoption of employment training programmes and financial performance. The use of performance appraisals (Borman 1991) and linking such appraisals with compensation has also been consistently connected with firm profitability (Gerhart and Milkovich 1990). Koch and McGrath (1996) reported that firms using more sophisticated staffing practices (planning, recruiting, and selection) had higher labour productivity. Huselid (1995) reported that HR practices can influence firm performance through provision of organizational structures that encourage participation among employees and allow them to improve and redesign how their jobs are performed. Green, Wu, Whitten and Medlin (2006) reported that organizations that vertically aligned and horizontally integrated HR function and practices performed better and produced more committed and satisfied HR function employees who exhibited improved individual and organizational performance.

Most of the work on HRM and performance has been undertaken in the US and recently in the last decade in UK. The question which arises, though, is whether US and UK-oriented models, however appropriate they might be for the US, hold in other contexts (see debate in special issue of the *International Journal of Human Resource Management* 12, 7, 2001). Numerous researchers outside the US have built upon this foundation over the past few years to add to this literature. Harel and Tzafrir (1999) found that among public and private organizations within Israel, HR practices were related to perceived organizational and market performance. Lee and Chee (1996) found no relationship between HR practices and firm performance, where Bae and Lawler (2000) found a significant relationship between HR and firm performance in their sample of 138 Korean firms. Lee and Miller (1999) found some evidence on the relationship between HR practices and performance among their sample of Korean firms, but this relationship was most strongly pronounced among firms using dedicated positioning (marketing differentiation or innovative differentiation) strategies. Bae, Chen, Wan, Lawler and Walumba (2003) in their study of HR strategy in Pacific Rim countries found that in general, the effect of high-performance work systems worked effectively, though under tremendously variable conditions. Morishima (1998) found support for the contingency perspective in a sample of Japanese companies. Firms with well-integrated high-involvement work practices and firms with well-integrated practices consistent with more traditional Japanese employment strategies both did better than firms with poorly integrated practices. A study by Ngo, Turban, Lau and Lui (1998) investigated certain work practices (training and compensation techniques) with high involvement characteristics and found they tended to increase organizational performance in Hong Kong companies. Ngo et al. (1998) also provided some evidence in support of the contingency

perspective, as a firm's country of origin significantly moderated the relationship between some HRM practices and firm performance. Although the country of origin is taken as a culture proxy, it might also represent different organizational strategies rooted in national culture. Tessema and Soeters (2006) examined how, when and to what extent HR practices affect performance in Eritrea, Africa's youngest and poorest country. They reported that successful implementation of HR practices could enhance individuals and the civil service organization of Eritrea, but the economic and political environment within which HR practices operate is not conducive. Their study tried to shed some light on the HRM-performance debate within the context of a developing country. Tsai (2006) study in Taiwan reported that effective use of employee empowerment practices is positively related to organizational performance. Zheng, Morrison and O'Neill (2006) explored high performance HRM practices in 74 Chinese SMEs and with performance-based pay, participatory decision-making, free market selection and performance evaluation, only high-level employee commitment was identified as the key HRM outcome for enhancing performance. Nevertheless, although it is well accepted that HRM is positively related to organizational performance, there seems a rising interest and need for additional robust and quantitative evidence to support the HRM-performance link (Gerhart 2005). It also calls for investigations from different contexts (Wright et al. 2005). To summarize, prior and recent research have started to investigate, in-depth, the HRM-performance link in the context of developing and emerging economies but the black-box still remains illusive.

A considerable amount of interest has since gained ground on understanding the link between HRM and performance in the Indian context (Budhwar and Sparrow 1997; Amba-Rao et al. 2000; Singh 2003; Paul and Anantharaman 2003; Budhwar and Boyne 2004). With a relatively large questionnaire survey of 137 companies, Budhwar and Sparrow (1997) analysed the levels of integration of human resource management in the corporate strategy and devolvement of responsibility for HRM to line managers in India. Singh (2003) from his survey of 84 companies found a significant relationship between strategic HR orientation index and firm performance. Amba-Rao et al. (2000) in his empirical study compared performance appraisal practices and management values in India among foreign and domestic firms in India. They found that managers have to adapt selectively to firms depending on the basis of a firms ownership structure. Paul and Anantharaman (2003) in their study of 35 Indian software companies determined, developed and tested a causal model linking HRM with organizational performance through an intervening process. They observed that no single HRM practice has direct causal connection with organizational financial performance, though HRM practices have an indirect influence on the operational and financial performance of the organization. In their comparative study of 137 large manufacturing firms Budhwar and Boyne (2004) differentiate the HR practices in public sector and private sector companies in India. Their findings suggest that against the established notion, the gap between the Indian private and public sector HRM practices (structure of HR department, role of HR in corporate change, recruitment and selection, pay and benefits, training and development, employee relations and key HRM strategies) is not very significant but in a few functional areas (compensation, training and development), private-sector firms have adopted a more rational approach than their public sector counterparts.

All these studies concluded that in the context of India's post-liberalization scenario strategic HRM practices may enhance, reinforce, and sustain organizational performance. However, very few of the studies considered whether this changes in innovative HRM practices were associated with improved organizational performance. None of the previous studies tried to understand whether by practicing some of the innovative HRM practices, firms will outperform those who do not. These issues are be taken up in this study.

This study posits that for firms facing the turbulent environment in India that:

*Hypothesis 1:* In the context of liberalization, innovation of HRM practices (role of HRM, recruitment, retraining and redeployment, performance appraisal) will be positively related to organizational performance.

*Hypothesis 2:* In the context of liberalization, HRM practices adopted in the post-liberalization era would be significantly more innovative than those followed in the pre-liberalization era.

These two hypotheses propose that in the context of liberalization, individual innovative HRM practices have a positive “main effect” on organizational performance. Later on in the discussion the study lists the various innovative HRM practice measures. Here it is important to mention that although liberalization in India started in 1991, with phased deregulation and changes in the industry, it was around the second phase of 1997–1999 that organizations started to restructure and adopt innovative practices to face competition (Som 2006). Thus a 5-year time period was selected as it seemed apt for measuring the respondent’s perception (1997–2002).

Recent work has also argued that synergies among a firm’s HRM practices can have an additional and positive effect on firm performance (Delaney and Huselid 1996). The notion of synergies is intuitively appealing, but it is not easily measured. The paucity of empirical evidence on this subject, specifically during turbulent changes in the competitive environment, led to developing a rough measure of synergy among HRM practices for a set of sample firms. Accordingly:

*Hypothesis 3:* In the context of liberalization, synergies among innovative HRM practices would be positively related to organizational performance.

## **Method**

### **Data**

The unit of observation for this study was compiled from data from academic journals and the business press in India (*Business India, Business Today, Business World, Economic Times, News Abstract* from CMIE and *Vanscom Database 1993–2002*). These sources generated a sample size of 194 organizations that included large, medium and small sized organizations both from the private and the public sector all having undergone a change process.

The top-management of these 194 organizations was contacted through email and a letter of invitation to participate in the study. The letter of invitation provided a brief description about the study, a commitment to share the findings and a complete anonymity of the respondents and the firms. Company policy, paucity of time, unavailability of senior level personnel caused 60 organizations to decline. Of the 134 firms 85% belonged to the top 500 list of companies as compiled by *Economic Times* and *Business Today*.

The study used multi-raters (Batt 1999). The study tried to follow Gerhart, Wright, McMahan and Snell (2000) recommendations are of least four raters per unit of analysis for HRM indicators and at least three for performance indicators. For this study, each of the 134 organizations was sent six questionnaires. Several authors (Wright, McMahan, Snell and Gerhart 2001) recommend selecting respondents according to the research question, and that overall HR effectiveness is best appraised by senior executives. The questionnaire was addressed to the head of HR or to the CEO/Chairman of the organization explicitly informing that the response required was from a senior executive (Managing Director/Director/Vice President/General Manager) who had an adequate knowledge about the company’s history, operations, business strategy, HR strategy and business environment with the condition that at least one senior HR personnel had to be one of the six respondents. This was followed by two reminders in the form

of emails, letters, telephone calls and faxes. Out of the 804 questionnaires sent 196 usable responses from 69 organizations were obtained. On average there were three respondents for each organization. Organizational response rate was about 51.49% while individual response rate of the participating 69 firms was 47.34%.

The sample covered a wide spectrum of organizations. In terms of sales revenue 35% organizations reported sales revenue of over US\$100 million; 2% in the range of US\$80 to 100 million, 9% in the range of US\$60 to 40 million; 28% in the range of US\$20 to 40 million; and 17% below US\$20 million. In terms of industry sector, about 37% were from production sector, 22% were from the service sector, 13% from the capital goods sector, 11% each from the non-durable consumer goods and the industrial goods sector while 6% were from the consumer durable goods sector. In terms of ownership, 56% of respondent organizations were Public Limited Companies; 26% were multinationals; 11% were Government/Semi-Government owned while 7% were private limited organizations.

The questionnaire included items for a number of different scales. These items were intermingled with one another in such a way that items from the same scale were separated from one another by items from different and unrelated scales. This intermingling created natural “distracter” items that reduced the likelihood of common source bias. A number of items were also reverse-scored. Finally, items related to the principal dependent variable in the study – firm performance – were asked later in the questionnaire to limit the possibility of respondents rationalizing answers to those items through their answers to items used to construct independent variable scales.

The instrument was designed to ask for ratings on a Likert-type 5-point scale (1 = Strongly Disagree; 5 = Strongly Agree) for what was happening “now” (2002) in the organization and what happened 5 years earlier (1997). The respondents were asked the following: “Here are some general statements about Recruitment and Selection in your organizations. Please give your rating as to what extent do you agree or disagree with the situation prevailing 5 years before, and as of now.” This was to measure the pre- and post-liberalization changes in 2002 within the organization compared to 1997 when the effect of liberalization (that started in 1991 and gradually took momentum) started affecting the overall business environment. The questionnaire was pre-tested on a sample of 29 professionals in India and the instrument was iteratively refined, if found necessary, based on their feedback on meaningfulness, relevance and clarity.

## **Measurement**

### *Dependent variable*

The dependent variable, *perceived organizational performance*, is adapted from Khandwalla’s (1977) study and is used to operationalize the index of relative performance (Bae and Lawler 2000; Khandwalla 2002). However, the measurement of the performance impact of strategies is particularly problematic in emerging economies (Hoskisson, Eden, Lau and Wright 2000). As financial reporting might not be based on conventional developed market standards and, even where relevant financial reporting legislation has been enacted, its enforcement may be problematic. Comparisons of financial performance over time make it difficult to link data compiled under different regimes and systems. These problems apply to listed and non-listed enterprises and are especially acute in private firms, where assets values can be quite fictitious (Bae and Lawler 2000; Hoskisson et al. 2000). Khandwalla’s (1977) market focused indicators (similar to “organizational outcomes” of Dyer and Reeves 1995) like productivity, operating efficiency, growth rate, financial strength, market share, profitability were used. They seem quite closely related conceptually to some of the hypothesized precursors of performance, such as

HRM practices (Bae and Lawler 2000; Bae et al. 2003; Katou and Budhwar 2007). These indicators were rated anonymously by the participants on Likert-type 5-point scales (1 = Strongly Disagree; 5 = Strongly Agree) and each rating was done in relation to the perceived performance of the indicator of the best-performing organization(s) in the industry. Respondents were asked the following: “*Compared to the performance of best performing organizations in your sector/industry or in your line of activity of business in India, how does your organization rate on each of the following 5 years ago and now?*” The ratings of all the indicators were aggregated and averaged across the respondents from the organization to derive an organization’s score on the index of relative perceived organizational performance. The 6-item index had satisfactory reliability ( $\alpha = .89$ ). Table 1 presents the items that were used to construct the variables.

There are many studies, mostly US based, that have employed market-based or accounting measures of performance (e.g. Venkatraman and Ramanujam 1986; Huselid 1995; Ngo et al. 1998; Ichniowski and Shaw 1999) given the fact that that financial measures are perhaps the best indicators of organizational success and sustainability. Boselie et al. (2005) found in their study that an equal number of studies have used perceptive measures (Delaney and Huselid 1996; Youndt et al. 1996; Guest 1997; Fey, Bjorkman and Pavlovskaya 2000; Perry-Smith and Blum 2000; Fey and Bjorkman 2001; Bjorkman and Xiucheng 2002; Bae et al. 2003; Katou and Budhwar 2006; Tsai 2006; Katou and Budhwar 2007). But for emerging countries perceptive measures are more easily accessible for these type of studies (Bae and Lawler 2000; Fey and Bjorkman 2001). Most of the studies using perceptive data have observed that there is a strong relationship between perceptual measures and objective measures of organizational performance. The study was able to collect some supplementary objective financial data on a limited subset of cases in the sample and used these data to help validate perceptual measures (see section on scale reliability and validity).

#### *Independent variable*

Table 1 includes information on the HRM practice measures included in the empirical model. Following an extensive literature survey and taking into account the proposed definition of innovative HRM practices, this study considered the role of HRM department, recruitment, retraining and redeployment, performance appraisal and compensation and reward practices as the most important variables. Boselie et al.’s (2005) meta-analysis of 104 articles found that training and development, contingent pay and reward schemes, performance management (including appraisal) and careful recruitment and selection were the top-four HRM practice-level categories used by different researchers. These are seen to reflect the main objectives of most conceptualizations of a “strategic” HRM programme (Batt 2000: 587) namely: to identify and recruit strong performers; provide them with the abilities and confidence to work effectively; monitor their progress towards the required performance targets; and reward them well for meeting or exceeding them.

Various Likert-type items were used to measure these HRM practices argued to reflect these underlying dimensions. In some instances, questions developed by other researchers were used, while other items were developed by the author. The ratings of all the indicators were aggregated and averaged across the respondents from an organization to derive the organization’s score on the index of each of the variables under innovative HRM practices. Organizations need to set up a professionally managed HR Departments to fulfil the role of HR within the organization. The role of the HRM department was measured using the variable *role of HRM* with 7 items ( $\alpha = .89$ ). Organizations need to recruit strong performers with professional qualifications. *Recruitment* index was measured using 3 items ( $\alpha = .73$ ). Employment training programmes have

Table 1. Items.

<i>Items</i>	<i>Mean</i>	<i>Range</i>	<i>Cronbach alpha</i>
<i>Innovative role of HRM department:</i>			0.89
HRM department has played an important role in the success of this organization	3.34	1–5	
HRM personnel in our organization are helpful and respected.	3.58	1–5	
HRM is proactive in this organization and anticipates changes and corporate dissatisfaction	3.19	1–5	
HR managers are coaches rather than regulators	3.43	1–5	
HRM is not about programmes, it is about building employee–employer relationship	3.74	1–5	
HRM department benchmarks with global excellent practices	2.95	1–5	
Overall, the HRM policies of the organization are fair	3.75	1–5	
<i>Innovative recruitment practices:</i>			0.73
Most of the persons recruited for supervisory and managerial levels are those with professional training and professional qualification like an MBA	3.78	2–5	
Information about job vacancies is easily available within the organization	3.23	1–5	
In this organization there is a formal induction, orientation and familiarization process designed to help the new managerial recruits understand the organization	3.98	1–5	
<i>Innovative retraining–redeployment practices:</i>			0.84
Personnel returning from training are encouraged to use what they have learnt in their training programme	3.73	1–5	
Coaching by boss/line manager helps a lot in increasing skills in this organization	3.90	1–5	
Selection to special project teams motivates personnel in our organization to learn more	4.10	3–5	
<i>Innovative performance appraisal practices:</i>			0.81
Managerial personnel are allowed to challenge or appeal appraisal decisions made by superiors	3.33	1–5	
People management skills are important in performance appraisal	3.92	1–5	
Personnel department has provided to all staff a clear explanation of the policy and how it is implemented	3.58	1–5	
Ranking/grading in performance appraisal directly relates to performance at work	3.89	1–5	
Performance appraisal system has enhanced role clarity in the organization	3.70	1–5	
<i>Innovative compensation and reward practices:</i>			0.79
Usually in this organization there is flexibility to work flexible hours	2.93	1–5	
The rewards received are directly related to the performance and contribution at work	3.81	2–5	
This organization provides a clear explanation of remuneration policy and how it is to be implemented	3.34	1–5	
<i>Index of perceived organizational performance:</i>			0.81
Level of productivity, operating efficiency	3.90	2–5	
Growth rate of revenues/sales/level of activity	3.75	2–5	
Financial strength (liquidity/reserves, borrowing capacity, etc.)	3.74	2–5	
Market share	3.50	1–5	
Profitability	3.32	1–5	
Innovation (product, process, systems, managerial)	3.82	2–5	

been linked to financial performance. Innovative *retraining and redeployment* was measured using a 3-item index ( $\alpha = .84$ ) that was standardized and averaged. Innovative *performance appraisal* practices has been consistently connected to firm profitability and in this study it was measured by a 5-item index ( $\alpha = .81$ ). Performance-contingent incentive *compensation* has been proved to align employee and shareholder interests. In this analysis a 3-item index of incentive compensation ( $\alpha = .79$ ) was used to measure innovative compensation and reward system within the organization. Taken as a whole, these five variables provide a reasonably broad reflection of the innovative HRM practices that have been identified in the literature. High values on all of these scales are consistent with HPWS methods, while low values are consistent with more traditional, bureaucratic employment systems. Since organizations are likely to design HR systems in order to achieve internal fit or coherence among various employment practices, it is not surprising that the scales are highly inter-correlated and may well reduce to a single dimension, as has been the case in many US-based HPWS studies (Bae et al. 2003).

#### *Control variables*

Control variables included in the data analysis were firm age and firm size (Bae and Lawler 2000; Fey and Bjorkman 2001; Katou and Budhwar 2006). Age of the firm in years was included as a control to capture any founding values and maturation effects. Firms with more experience in the old business environment adopt differently in the liberalization regime than organizations which were relatively new. For size and scale effects, the natural logarithm of employees in the organization was controlled for as larger firms might have more resources to devote to business and to implement innovative systems and processes (including HRM practices) which smaller firms may not be able to afford during the turbulent, competitive environment. The natural log of number of employees was taken so that a few large firms would not disproportionately affect results. To further control for the potential impact of other factors, separate regression analysis with industry (manufacturing or service) were run. The industry dummy was not significant and was dropped from the regression analysis to preserve degrees of freedom.

## **Result**

### ***Scale reliability and validity***

This study measured both independent and dependent variables from a single subject, aggregated and averaged over multiple responses (Delaney and Huselid 1996; Fey et al. 2000; Bae and Lawler 2000; Fey and Bjorkman 2001; Bjorkman and Xiucheng 2002; Bae et al. 2003). For this reason response bias may occur but might be limited due to deliberate use of the independent variables before the dependent variables (Salancik and Pfeffer 1977; Podsakoff and Organ 1986; Katou and Budhwar 2007). Prior research has shown that subjective measures of firm performance correlate well with objective measures of firm performance (Geringer and Hebert 1991; Powell 1992; Fey et al. 2000). Wall et al. (2004) had also reported that subjective self-reports compared favourably with “objective” measures in terms of reliability. To address issues of possible common method variance reliabilities were checked these ranged from .73 to .89, which is satisfactory for a study of exploratory nature (Nunnally 1978).

Scale validity was tested by confirmatory factor analysis in an effort to rule out the possibility of a single general factor and to establish the validity of the multiple scales posited. Due to space limitations a full discussion cannot be carried out here, but the data analysis was able to reject a single general factor measurement model that yielded six factors explaining 70.27% of the variance. Khandwalla (2002) in his study of 139 Indian firms found similar results.

This does not preclude common method variance problems as multiple factors might be generated due to the same problem. To provide evidence for the support and validity of the perceptual organizational performance measure, financial data from a sub-sample of 39 out of the 69 firms, where data were available, were collected. For the purpose of this study the financial indicator used was *Return on Sale* (Profit After Tax/Sales). Boselie et al. (2005) observed that out of 104 studies, financial measures like profits and sales were used in exactly half of the sample articles. Khandwalla (2002) reported that his index of perceived organization performance had a correlation of .40 with the ratio of cash profit to sales. In this study the perceived organizational performance had a higher correlation of .50 ( $p < .01$ ) with PAT/Sales ratio and a reliability of .81 compared to Khandwalla's (2002) study of .89.

Discriminant validity is also indicated by the variability in the inter-correlations (Table 2). The correlations among the five innovative HR variables range from .24 to .74, the difference being significant well beyond the .01 level. The correlations between the innovative HR variables and the index of perceived organizational performance also vary substantially ranging from .24 to .37 the difference being significant well beyond the .01 level.

### Analysis

Principal component factor analysis with varimax rotation was done on the individual HRM management practice items to form the innovative HRM practice variables. The examination of interrelatedness among the items with Cronbach's alpha suggests that the items for each construct were highly related and thus they were aggregated to create a scale by taking their means.

Tables 2a and 2b provide descriptive statistics and correlations for all variables used in the regression equations. Table 2a provides the correlation between the dependent variable of perceived organizational performance (as measured "Now") and the independent variables of innovative HRM practices which are positive, ranging from .24 to .37 and significant. Consistent with prior work, this result provides preliminary support for the first hypothesis. The magnitude of the correlations is generally small to moderate, however, potentially pointing out the difference about the substantive importance of some innovative HRM practices over others. This result also provides initial support for the second hypothesis. Associations among innovative HRM practices are all positive. Table 2b provides descriptive statistics and correlations for all variables used in the regression equations for the first difference variables ("Present Measures" – "5 years ago": denoting the extent of changes). The results are similar though the correlations of the first difference measures were more strongly and positively correlated with change in the relative index of perceived organizational performance.

Table 3 indicates the results of the regression analysis that were done to test the hypotheses. Model 1 in Table 3 shows the results of the regression analysis for the innovative HRM practices for the "present" measures. The model is significant at .05 level with an  $R^2$  of .25 and Adjusted  $R^2$  of .15. Innovative recruitment and compensation were significant at the 0.05 level and were positively related to the index of perceived organizational performance, providing partial support for hypothesis 1. The control variables of firm size and age of firm were not significantly related with perceived organizational performance.

Model 2 shows the results of the regression analysis for the "first difference" measures. The model is significant at the .05 level with an  $R^2$  of .32 and Adjusted  $R^2$  of .24. Innovative role of HRM and compensation were significant at the 0.05 level and are positively related to the index of perceived organizational performance, providing partial support for Hypothesis 2. The coefficients of innovative HRM practice were similar in Model 1 (.33 and .38 for Innovative recruitment and compensation respectively) and Model 2 (.31 and .37 for Innovative role of

Table 2a. Descriptive statistics and correlations ("Present" measures).

	#Items	Mean	SD	1	2	3	4	5	6	7	8
1. Perceived organizational performance	6	2.09	4.17	1,00	(.81)						
2. Role of HRM	7	2.67	3.99	.29**	1,00	(.89)					
3. Recruitment	3	1.26	1.85	.37***	.60***	1,00	(.72)				
4. Retraining and redeployment	3	2.23	2.59	.26*	.63***	.68***	1,00	(.84)			
5. Performance appraisal	5	1.51	2.52	.24**	.62***	.67***	.74***	1,00	(.81)		
6. Compensation	3	2.09	4.17	.35***	.42***	.59***	.67***	.70***	1,00	(.79)	
7. Company age		46.02	14.07	.14	.12	-.07	.10	.02	-.06	1,00	
8. Log of number of employees				.22	.75	.45	.48	.44	.46	-.03	1,00

\*\*\*p < .001 (2-tailed); \*\*p < .01 (2-tailed); \*p < .05 (2-tailed); <sup>a</sup>N = 69. Numbers in parentheses are Cronbach reliabilities.

Table 2b. Descriptive statistics and correlations ("First differences").

	#Items	Mean	SD	1	2	3	4	5	6	7	8	9
1. Perceived organization performance	6	2.09	4.17	1,00	(.81)							
2. Role of HRM	7	2.67	3.99	.50***	1,00	(.89)						
3. Recruitment	3	1.26	1.85	.41***	.68***	1,00	(.72)					
4. Retraining and redeployment	3	2.23	2.59	.44***	.72***	.67***	1,00	(.84)				
5. Performance appraisal	5	1.51	2.52	.40***	.77***	.52***	.69***	1,00	(.81)			
6. Compensation	3	2.09	4.17	.46***	.60**	.48***	.20	.72***	1,00	(.79)		
7. Company age		46.02	14.07	-.04	-.03	-.07	-.06	.05	.01	1,00		
8. Log of number of employees		3.28	.12	.17	.30**	.23	.16	.201	.10	-.03	1,00	
9. Variance				.42***	.34**	.39***	.65***	.326	.50***	.22*	.123	1,00

\*\*\*p < .001 (2-tailed); \*\*p < .01 (2-tailed); \*p < .05 (2-tailed); <sup>a</sup>N = 69. Numbers in parentheses are Cronbach reliabilities.

HRM and compensation respectively). Thus, the model of effective Innovative HRM practices in response to liberalization seems supported. Additional support for part of the model has been reported in a study of 139 Indian firms (Khandwalla 2002) and another study of 54 Indian firms (Som 2002). These make sense in that Indian firms were confronted with significant pressures of liberalization. The control variables of firm size and age of firm were not significantly related with perceived organizational performance.

Hypothesis 3 concerns the synergies among innovative HRM practices. Positive co-variation of HRM variables implies low variability in their relative magnitudes for any individual firm. To confirm the suspicion that individual variables do not affect organizational performance but their configuration or synergy does, variance of the firms scores on HR variables, a term that measure this kind of synergy (Khandwalla 1973), if only roughly, was introduced in Model 2. It was negative as expected (in other words, the lower the variance in the firm's scores on the five innovative HRM variables, the higher the organizational performance) but not significant, thus Hypothesis 3 was not supported.

The results are consistent with many of the previously cited studies. In conclusion, consistent support was obtained for Hypothesis 1 (innovative recruitment and compensation and reward practices), Hypothesis 2 (need of innovative role of HRM department, compensation and reward practices were higher) and negligible support for Hypothesis 3.

### Discussion and conclusion

Studies of liberalization and de-regulation in an emerging context are rare. Within this context, this study examined the relationship between innovative HRM practices during the liberalization of one of the world's most populous emerging markets. A model, rooted in conventional Western practices, found support and is largely consistent with results obtained in studies of HRM-firm performance conducted in different cultural and institutional environment. A contribution of the present study is to corroborate these results in the context of India's economic liberalization. The data analyzed were perceptive and measured HRM practices within the organization in 2002 and also "5 years earlier" by a multi-rater respondent survey in a country undergoing macro-economic change process, so these results are highly relevant. The study contributes and adds to the general theme of HRM-firm performance within an emerging

Table 3. Regressions on perceived organizational performance.

<i>Independent variables</i>	<i>Model 1 (Present measures)</i>	<i>Model 2 (First difference measures)</i>
Role of HRM	.21	.31 <sup>+</sup>
Recruitment	.33**	.09
Retraining and redeployment	-.17	.09
Performance appraisal	-.22	-.20
Compensation	.38**	.37**
Log of number of employees	-.08	-.02
Age of firm in years	.18	.10
Variance of firms score on HR variables	Not tested	-.13
R <sup>2</sup>	.25	.32
Adjusted R <sup>2</sup>	.15	.24
F	2.475**	4.632**
N	69	69

a) Dependent Variable = Perceived organizational performance; b) Standardized regression  $\beta$  co-efficient are shown; c)\*\*\* p < .001; \*\* p < .05; \* p < .01; + p < .1.

market. The study adds to the literature of the universalistic or the “best practice” perspective that certain independent-dependent variable relationships hold across whole populations of organizations – that is, some HR practices are better or more important than others (Miles and Snow 1984; Pfeffer 1998; Colbert 2004) and these strategic (in this study “innovative”) HR practices consistently lead to higher organizational performance, more dependent on the environment (Delery and Doty 1996).

The results add to the growing empirical evidence that people are key to achieving superior performance. It tested the theoretical assumptions of HRM-performance, during a macro-change process by measuring perceptible difference data between “now” and “before” in a non US/UK context. In the context of the liberalization of India, this study indirectly tested for the contingency perspective and there was support for this. Overall the results suggest that innovative HRM practices, including the role of the HR department, selectivity in staffing and incentive compensation, are positively related to perceptual measures of organizational performance. The role of HR is generally seen in ensuring that firms are able to attract, retain, motivate and develop human resources according to current and future requirements. Recent studies in India have reported similar results (Singh 2003; Som 2006). Organizations in India have been known to put greater emphasis on recruiting managerial staff by advertising internally and from current employees. Such norms indicate the practice of an informal approach to recruitment. In the Indian private sector there is a strong reliance on the recruitment of top-level employees based on social contacts and by the adoption of informal methods (Budhwar and Boyne 2004). The result of this study corroborates that the HRM department has become more proactive, fair, helpful, respected and acts as a coach and tries to benchmark with global excellent practices. In terms of practicing innovative recruitment practices, it seems that more recruitment is occurring for those who are professionally trained and qualified. This is a new finding compared to previous studies. Innovation in compensation and reward practices has been reported to be significant in both models. With liberalization, that created a de-regulated hyper-competitive environment, retaining key talent has been one of the important resources for competitive advantage for firms (Barney 1991; Ulrich 1997; Pfeffer 1998). Indian firms are using flexible hours, competency based payment schemes and clear remuneration policies to attract and retain talent. This is also a new empirical finding in the Indian context as previous studies (Venkata Ratnam 1995; Bordia and Blau 1998; Budhwar and Boyne 2004) reported that there is a subtle transition taking place away from seniority-based towards performance-based pay in India. Fey et al. (2000) reported similar results in another transition economy, Russia, where salary levels of both managers and non-managers were significantly related to performance.

Overall, this study finds support with recent studies viz. that the work pattern in India is under transition with more innovative HRM practices, increased flexibility, competency based remuneration and benchmarking.

### ***Implication***

Empirical studies of HRM do seem to be consolidating attention on certain broad areas of policy namely: careful investment in recruitment and selection; provisions for training and employee development; performance management and appraisal; and appropriate payment systems including some form of incentive bonus component (Boselie et al. 2005). These may be akin to Becker and Gerhart’s core, universalistic “HR principles” (1996, p. 786). From the study of 69 firms in the context of Indian liberalization, several managerial implications follow. First, Western firms planning or involved in business in India should realize that the state of innovative HR practices are changing in India and organizations are professionalizing their recruitment and

compensation policies to face competition. Second, the results of this research imply that Indian firms are focusing on innovative recruitment and compensation practices to improve their firm performance. As many HRM studies have indicated, an HRM system as a whole, affects firm performance. Therefore, workers are not just a cost to be incurred; rather, as is maintained in the resource-based perspective, people and HRM are emerging as critical sources of competitive advantage for firms (Barney 1991; Pfeffer 1994; Ulrich 1997; Bae and Lawler 2000). Third, among the five practices tested, not all were equally important. Innovative recruitment and compensation practices came out to be the most important practice for enhancing firm performance. Finally, the role of HR department is not only responsible for the design and evaluation of employee management policy and practices, but in the changing business environment in India it is also the one that has to implement the changes along with supervisors and frontline managers.

### **Limitation**

There are some limitations in this study. This study is cross-sectional and data were collected over two time periods but are still perceptible. Cross-sectional data might create problems with respect to causality. Positive significant relationships between innovative HRM practices (as independent variable) and index of perceived organizational performance (as dependent variable) might be cases of “reversed causality”. High performance (versus low performance) organizations are presumably more (versus less) willing to invest in HRM. Second, many of the US studies have used multiple criteria for performance, although it is not sure how well those would transfer to the Asian context. Not using multiple performance measures may create further limitation in the study. Third, the result should be interpreted with the provision that though the factor analysis rejected the overall single-factor model, while supporting the conclusion that common method variance problems were not at work in this study, is not conclusive. However, the study presents evidence as to the overall relationship between key independent variables and this general concept of performance and also corroborates it with a sub-sample of objective data as well. Fourth, the results were not tested for support of the contingency perspective. The sample size in this study was small, and estimation of models with interaction terms under such circumstances is problematic because of multi-collinearity. Although we cannot fully rule out contingency processes, there was no evidence to support them.

Finally, this study did not find evidence of the configuration argument and did not test the contingency argument, but could find evidence in the universalistic or the best practice perspective. One way of explaining this might be that due to the turbulent and hyper-competitive environment, firms are primarily supportive of innovative, adaptive nature of high-involvement work systems. In other words, there may be some restriction in range with regard to organizational environments that somehow undercut this study’s ability to provide a full test of the contingency perspective. Similar results were obtained by Bae and Lawler (2000) in their study of Korean firms. It might be generalized from these two studies that this phenomenon might apply to most of the other major emerging economies in this region.

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