

Negative Impact of Hrm Complementarity on Knowledge Transfer in Mncs

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**NEGATIVE IMPACT OF HRM COMPLEMENTARITY ON KNOWLEDGE
TRANSFER IN MNCs**

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Abstract

This paper explores reasons for negative complementarity among HRM practices. It is built upon the premise that there are certain HRM practices influencing extrinsic and intrinsic motivation of knowledge receivers. If those HRM practices are applied in a complementary way, their impact on knowledge-related outcomes will result in crowding effect of extrinsic and intrinsic motivation and be negative. Hypotheses derived from these arguments are tested on the data from 92 subsidiaries of Danish multinational corporations located in 11 countries.

Key words

Extrinsic/intrinsic motivation, HRM practices, knowledge transfer

Introduction

Previous research has found that multinational corporations (MNCs) can institute various organizational policies and practices to overcome transfer barriers associated with knowledge transfer determinants, thereby facilitating internal knowledge transfer. In particular, it was suggested that human resource management (HRM) practices could influence knowledge transfer by influencing among other things determinants associated with motivation of knowledge receivers (Lane and Lubatkin, 1998; Minbaeva et al, 2003).

Studies on HRM and knowledge transfer have seldom considered the impact of complementarity among HRM practices on knowledge transfer, and those, which did, assumed complementarity as having a positive impact on knowledge-related performance of any kind. However, as Whittington *et al* (1999) argued, organizational practices that are associated with positive performance when taken individually may be found to have negative effects when combined with their complements. Indeed, although Milgrom and Roberts (1990, 1995) defined complementarity as when “doing more of one thing increases the returns of doing more of the others” (p. 181), they did not assume an effect on performance from a simple pairwise relationship between two practices. Instead, they argued for multiple, complex interactions among several practices, reinforcing the effect of other practices in either positive or negative direction. Negative complementarity occurs when the elements of the system destroy value rather than create it (Becker and Huselid, 1996).

This paper explores reasons for negative complementarity among HRM practices. It is built upon the premise that there are certain HRM practices influencing extrinsic and intrinsic motivation of knowledge receivers. If those HRM practices are applied in a

complementary way, their impact on knowledge-related outcomes will result in crowding out effect of extrinsic and intrinsic motivation, and be negative.

The paper is structured in the following way: first, the existing literature on motivation of knowledge receivers and knowledge transfer is reviewed. The differences between extrinsic and intrinsic motivation are addressed. Then, it is argued that there are certain HRM practices that influence extrinsic and intrinsic motivation of subsidiary's employees, and thereby enhance knowledge transfer to the subsidiary. However, when those practices are applied simultaneously, their complementarity has negative effect on knowledge transfer due to the crowding out effect. The hypotheses are tested on the data set of 92 subsidiaries of Danish based MNCs located in 11 countries. At the end of the paper, results are discussed and future research perspectives as well as implications for practitioners are discussed.

Motivation of knowledge receivers and knowledge transfer

Szulanski (1996) argues, “the movement of knowledge within the organization is a distinct experience, not a gradual process of dissemination, and depends on the characteristics of everyone involved” (p. 28). Therefore, the degree of internal knowledge transfer depends on various factors, among which motivation of knowledge receivers (Szulanski, 1996). There is a general consensus among theoretical and conceptual researchers that a strong willingness on behalf of the knowledge receivers to absorb new knowledge increases the likelihood of a successful knowledge transfer. One of the most often referred concepts connected to motivation is the reluctance of knowledge receivers to accept new knowledge – the “Not-Invented-Here” syndrome (see for example, Katz and Allen, 1982). This reluctance influences all later stages of knowledge transfer, in which the receiver is involved:

“absorbing the source’s understanding, analyzing the feasibility of transfer, bridging the communication facilities necessary for successful absorption of new knowledge, assigning personnel for education and training, and solving unexpected problems that stem from the utilization of new knowledge” (Szulanski, 2003: 29).

However, empirical studies on the role of employee motivation in knowledge transfer reported mixed results. For example, Szulanski (1996) defined a knowledge receiver’s lack of motivation as a general reluctance to accept knowledge from the outside. Empirical results did not provide expected output: motivational factors were superseded by knowledge-related factors, such as the ability of knowledge receivers. Simonin (1999a, 1999b) also found the willingness of external sources to fully cooperate in knowledge transfer (low partner protectiveness) to have a non-significant effect on the outcomes of knowledge transfer. According to Simonin, this finding may be due to the bias answers, difficulties in detecting or observing the phenomena, partners’ opportunistic behavior, etc. Gupta and Govindarajan (2000) hypothesized that the motivational disposition of the knowledge senders would have a positive impact on the magnitude of knowledge inflow and outflow. They operationalized this construct in terms of subsidiary vs. corporate focus of the incentive system for the subsidiary president. The results did not provide much support for their prediction. According to Gupta and Govindarajan, there are at least two possible explanations. First, the motivational disposition to share knowledge may depend on variables other than the incentive system of the CEO. Second, the receivers’ motivation to acquire knowledge is more important than motivation of the senders to transfer it.

The lack of consistency in the results may be ascribed to the fact that the operationalization of the named determinants substantially differ from one study to another. In addition to that neither of the reviewed studies distinguished between two

types of motivation – extrinsic and intrinsic. That could be a serious limitation since not only introducing the difference, but also the dynamics of interplay between extrinsic and intrinsic motivation helps ”to determine which factors influence the intensity and quality of the production of intangible firm-specific pool resources, especially tacit knowledge” (Osterloh, Frost and Frey 2002: 67).

Two kinds of motivation are very different. Extrinsic motivation occurs when employees are able to satisfy their needs indirectly through financial rewards and incentives for past performance. Intrinsic motivation is “fostered by commitment to the work itself: “there is no apparent reward except the activity itself” (Deci, 1975: 23). Intrinsically motivated employees would engage in activities to feel competent and self-determining in relation to the environment. Extrinsic motivators are incentives come from outside the person in question while intrinsic motives come from within the person (Frey and Jegen, 2001).

Osterloh and Frey (2000) point out that both kinds of motivation are crucial for transferring knowledge. They also note that there is a systematic dynamic relationship between two types of motivation: intrinsic and extrinsic motivations are not additive but rather interactive (Osterloh and Frey, 2000). Further, there might be a negative effect of introducing extrinsic motivation to people who are already intrinsically motivated (Frey, 1997). In that situation extrinsic motivation is said to crowd out intrinsic motivation (Frey and Jegen 2001). Crowding-out effect takes place when external intervention via monetary incentives or punishments are perceived to be controlling by the intrinsically motivate employees (Osterloh, Frost and Frey, 2000; Frey and Jegen, 2001).

Whether intrinsic or extrinsic, motivation could be driven by application of HRM practices. “Examples of firm efforts to direct and motivate employee behavior

include the use performance appraisals that assess individual or work group performance, linking these appraisals tightly with incentive compensation systems, the use of internal promotion systems that focus on employee merit, and other forms of incentives intended to align the interests of employees with those of shareholders (e.g., ESOPs and profit-and gain sharing plans)” (Huselid, 1995: 637-638). How to define HRM practices affecting intrinsic and extrinsic motivation? To be able to answer this question, in the next section I distinguish between HRM practices aimed at ”keeping a person on the job” and HRM practices aimed at “motivating him to perform effectively on that job” (Deci, 1975). The former increases extrinsic motivation while the latter affects intrinsic motivation. I also argue that one could expect negative HRM complementarity on the degree of knowledge transfer, since HRM practices influencing extrinsic motivation may crowd-out HRM practices influencing intrinsic motivation.

HRM practices influencing extrinsic and intrinsic motivation of knowledge receivers

To keep a person on the job an organization needs to satisfy his/her needs. That could be achieved through the use of external reward system that compensates subsidiary employees for the value of their job and their personal contribution to organizational performance. Well-developed compensation systems may consist of many things: (competitive) salary, bonuses, fringe benefits, paid-for education, etc. This system must be administered not unconditionally but rather selectively so that the more effective an employee’s performance, the more rewards the employee receives (Deci, 1975). Therefore, in order for the reward systems to motivate employees, an external control should be in place. The control is achieved through employment of performance appraisal system. An integrated part of most performance appraisal

systems is the evaluation of the past performance, identification of gaps between employees past performance and management expectations, and establishment the course of actions, which aim at fulfilling the identified gaps.¹

The more the above-mentioned HRM practices are applied by the organization, the more the extrinsic needs of organizational employees are satisfied. “The greater the extent to which an employee’s needs are satisfied at his job, the greater the extent to which he will respond, presumably with gratitude or loyalty, by producing effectively on that job” (Vroom and Deci, 1970: 11). Further, once an employee’s action is followed by a reward, the probability that the action will be repeated is increased.² Accordingly, if employees’ activities related to knowledge transfer are rewarded, it is very likely that extrinsically motivated employees will be engaging more actively in knowledge assimilation and utilization. Thus,

Hypothesis 1. The more the subsidiary employs HRM practices enhancing extrinsic motivation of subsidiary employees, the higher the degree of knowledge transfer to that subsidiary.

Performance-based rewards are not enough to motivate employees to perform effectively on their job. Intrinsically motivated employees can derive satisfaction from doing an effective job per se: “they can become ego-involved with their jobs,

¹ Note, performance appraisal could be carried out differently, for different purposes. In addition to the described evaluative purpose, in some organizations, performance appraisal systems are designed to provide employees with feedback on their performance and competencies, and give directions for enhancing their competencies to meet the needs of the organization. If the system is designed in this way, it may also affect intrinsic motivation: through the process of feedback, intrinsic motivation can be either enhanced or diminished (Deci, 1975)

² The approach rests on what psychologists termed the Law of Effect or the Principle of Reinforcement.

emotionally committed to doing them well and take pride from evidence that they are effective in furthering the objectives of the company” (Vroom and Deci, 1970: 15). Management could not administer intrinsic motivation directly. Instead, as behavioral school of participative management (Theory Y) suggests, the efforts should be made to structure jobs in a way that gives employees various opportunities to participate in decision making on important issues related to them. Furthermore, jobs should be designed to be challenging and interesting (Deci, 1975). What HRM practices could help organizations to achieve both? Flexible working practices and job design can be beneficial for employees allowing them to balance their work and other aspects of their lives. Horizontal and vertical transfers may help organizations to better allocate individual needs for growth and development. In addition to the learning experience and improved competencies, employees achieve higher degree of self-actualization and involvement. In MNCs, international rotation helps to increase the level of integration and interunit trust (Edstrom and Galbraith, 1977), but at the same time exposes local employees to international challenges and demanding assignments. To this list of HRM practices increasing intrinsic motivation, I will add orientation programs, which are designed to help new people to adjust quicker to the new environment, receive realistic information about the job and learn about “who-knows-what” in the organization.

In sum, intrinsic motivation could be influenced by HRM practices with emphasis on self-actualization, self-control and self-regulation. The aim is to create conditions under which “effective performance can be a goal rather than a means to the attainment of some other goals” (Vroom and Deci, 1970: 16). By applying HRM practices, in which the incentives are in the task or job itself, organizations will be able to give intrinsically motivated employees a freedom in determining how to do the

job, where to search for needed competences, etc. Employees will be willing to take up more challenging jobs, offer creative and innovative solutions, and be more attentive to new ideas.

Hypothesis 2. The more the subsidiary employs HRM practices enhancing intrinsic motivation of subsidiary employees, the higher the degree of knowledge transfer to that subsidiary.

As it was argued earlier, two types of motivation are neither independent nor additive. If they were, “intrinsic and extrinsic motivation could be managed by firms according to their relative advantages and disadvantages” (Osterloh and Frey, 2000: 540). That is not a case: organizations often apply practices influencing intrinsic and extrinsic motivation simultaneously. What will happen if an intrinsically motivated person begins to receive an extrinsic reward for his actions? According to Motivation Crowding Theory, “external intervention via monetary incentives or punishments may undermine, and under different identifiable conditions strengthen, intrinsic motivation” (Frey and Jegen, 2001: 589). In this paper, the focus is on “undermining” - crowding out, which takes place when application of extrinsic motivators decreases the effect of intrinsic motivators.

Deci (1975) argues, “if monetary rewards are given to subjects for doing an intrinsically motivated activity, and if the rewards are made contingent on their performance, their intrinsic motivation for the activity will decrease” (p. 132). Thus, HRM practices that support intrinsic motivation of knowledge receivers may create a “crowding-out effect” when applied together with those practices that support extrinsic motivation.

Hypothesis 3. HRM practices influencing intrinsic and extrinsic motivation are complementary; their complementarity has negative effect on the degree of knowledge transfer to the subsidiary.

Data

The hypotheses are tested on the data set of 92 subsidiaries of Danish MNCs located in 11 countries. For the construction of the data set, the Hermes CD Direct from KOB (Kobmandstandes Oplysnings Bureau) was used.³ The database query was initiated by selecting those firms that were headquartered in Denmark, and then reducing the sample to those that had two or more subsidiaries abroad. The procedure resulted in a list that was crosschecked with the Borsen 500⁴ in order to ensure that the population was as complete and relevant as possible. The number of the MNCs included in the sample was further limited to only those whose subsidiaries employ more than 30 employees, as it is commonly stated that small-scale companies, in general, and small subsidiaries, in particular, do not employ a wide range of formal HRM practices (Miner and Crane, 1995).

Subsidiaries' contacts were obtained from the headquarters in Denmark and from the foreign commercial sections of the Danish Embassies in Germany, Sweden, USA, China, and Russia. Those countries were chosen due to the internationalization trend of Danish MNCs. Majority of the Danish subsidiaries are located in close vicinity of Denmark (Germany and Sweden) and in those countries, which take majority of

³ The KOB dataset is a comprehensive, continuously updated data set of domestic and international Danish firms (www.kob.dk).

⁴ Borsen is the Danish business sector's global, national and regional newspaper. Every year the newspaper publishes an annual status report of Danish businesses (www.borsen.dk)

Danish exports (USA). Recently, two more regions have become important area of establishment – Eastern Europe and Asia. To represent the regions, two countries – Russia and China – were chosen due to the high representation of Danish subsidiaries.

The final data set consisted of 305 Danish subsidiaries. Questionnaires were addressed to a HRM Manager/General Manager of the focal subsidiary. If the approached manager was unable to complete the survey, it was up to him/her to forward the questionnaire to another senior/middle level manager with sufficient knowledge regarding the themes of the study.

To collect the data a web-based survey was chosen due to the time and cost considerations. The respondents were approached by the cover letter sent via email. The cover letter/email used in this survey explained the purpose of the survey, informed about the research process and analysis procedures, offered follow-up reports and related working papers, and provided straightforward directions about how to complete the questionnaire. Additionally, a web-page was established to back up the survey. The respondents were invited to visit the web-page and read more on the survey subjects and the related themes. The link to the questionnaire was provided within the text of the cover letter/email. The survey was put on the page that can only be accessed through that link. There were no links to it from other web pages. This step restricted unwanted answers and decreased the risk of potential error.

The above strategy resulted in achieving a response rate of 30 percent (92 out of 305 subsidiaries). There were 20 subsidiaries located in Germany, 17 in the USA, 15 in Russia, 14 in China, 10 in Sweden, 6 in the UK, 6 in France and one each in Sri Lanka, Philippines, Spain and Portugal (see Table 4.6 in the new version). Majority of the subsidiaries included in the sample were located in close vicinity of Denmark: almost 40 percent of all subsidiaries were located in Germany, Sweden and UK. 30

out of 92 subsidiaries employed more than 100 employees. More than half of the subsidiaries in Russia were large. 25 percent of total sample of the subsidiaries represented the manufacturing sector, among which the majority of production subsidiaries were located in USA and Asia. The rest of the subsidiaries were mainly sales and marketing. Among the subsidiaries included in this data set there were only four subsidiaries where R&D activities comprised more than 15 percent: two located in China, one in Russia, one in Sweden and one in the UK. The subsidiaries were established through various modes of entry. Only one third of the sample was Greenfield. The European subsidiaries were owned by shared capital while the rest had majority of foreign capital in the ownership packages. All subsidiaries had some experience in working internationally. Exceptions to this were subsidiaries located in Sweden, which is not surprising since Denmark and Sweden are two neighboring countries with a lot of similarities in the ways business is conducted and comparatively small cultural differences.

Measures

Degree of Knowledge Transfer. The degree of knowledge transfer was defined at the beginning of the questionnaire as the extent to which subsidiary employees received knowledge transferred to the subsidiary from the rest of the MNC (HQ and sister subsidiaries). The operationalization was adopted from Gupta and Govindarajan (2000). Data was collected on the following items: marketing know-how, distribution know-how, packaging design/technology, product designs, process designs, purchasing know-how, and management systems and practices. Respondents were asked to evaluate the degree of knowledge transfer from the sister subsidiaries and from the HQ for each aspect using a five-point Likert-type scale, where 1 indicates very low use of knowledge and 5 indicates substantial use of knowledge. Responses

were averaged to yield a composite index reflecting the degree of knowledge transfer to the focal subsidiary from the rest of the MNC.

HRM practices. Measures for HRM practices were adopted from previous studies by Huselid (1995), Huselid, Jackson and Schuler (1995), Delaney and Huselid (1996), etc. In addition, scales were adopted from the Cranet survey on International Human Resource Management (1991, 1995, 1999).⁵ Measures were then cross-checked with the conclusions of theoretical papers, findings from the case studies and limited empirical work on the link between HRM and knowledge-related outcomes. On the 5-point Likert-type scale (from 1 – never to 5 – always), respondents were asked to indicate the degree to which HRM practices employed within the subsidiary.

Control variables. The studies on the influence of organizational practices on motivation of knowledge receivers identified other factors that could influence knowledge transfer to the subsidiary. Among them are size, mode of entry and ownership (Lyles and Salk, 1996; Mowery, Oxley and Silverman, 1996; Lane, Lyles and Salk, 2001; Minbaeva et al, 2003). Thus, when testing the hypothesis, it was important to control for the potential effects of the above-mentioned factors. No predictions were made on the influence of the control variables on the results of hypothesis testing.

The operationalization of the variables is presented in Table 1. Cronbach Alpha – a coefficient of reliability – was used to measure how well a set of items (or variables)

⁵ The Cranet Survey was coordinated by the Center for European HRM at the Cranfield School of Management. The Center has been collecting representative, factual and longitudinal data on HRM policies and practices since 1989. It involves a network of leading academics and practitioners in over 30 countries worldwide, providing a coherent picture of comparative HRM practices throughout the world.

measures a single one-dimensional latent construct. All variables were captured through perceptual, self-report measures. Perceptual or self-report measures are used in the majority of organizational behavior studies. Despite their obvious weaknesses, the self-reported questionnaire can be quite useful in providing a picture of how people perceive and feel about their job-related behavior (Spector, 1994, Schmitt, 1994; Howard, 1994). Self-reported questionnaires are especially useful when the constructs they measure are, by definition, perceptual in nature (for instance attitudes, perception, understanding, affective responses, etc). Moreover, Howard (1994) argued that the use of perceptual, self-reported measures is the most suitable methodology for the study of human behavior and, when employed within a sensible design, may even be superior to other approaches.

- INSERT TABLE 1 ABOUT HERE -

Results

The descriptive statistics of the variables and correlation matrix are presented in Tables 2 and 3 respectively. The argument for complementarity is indicated by the fact that HRM practices influencing extrinsic and intrinsic motivation are highly correlated with each other ($p < 0.001$). The positive sign of the correlation suggests that an upward change in HRM EXTR is accompanied by an upward change in HRM INTR, and vice versa. To test the hypotheses, regression analyses are run on the degree of knowledge transfer. Results are presented in Table 4. Unstandardized coefficients are reported.

- INSERT TABLE 2 ABOUT HERE -

- INSERT TABLE 3 ABOUT HERE -

- INSERT TABLE 4 ABOUT HERE -

Model 1 tests the effect of control variables on the degree of knowledge transfer. Models 2 and 3 present the results of the regression analysis, when independent variables are introduced singly. Both models are significant with $p < 0.01$ and $p < 0.10$ respectively. The effect of HRM EXTR on the degree of knowledge transfer is positive and significant ($p < 0.01$). In Model 3, the impact of HRM INTR in the degree of knowledge transfer is also positive and slightly significant ($p < 0.10$). Hypotheses 2 and 3 are confirmed.

The hypothesis on negative complementarity between HMR INTR and HRM EXTR is tested in Model 4. The model is significant ($p < 0.01$) with R-square 0.260. The main effect of the independent variables is entered along with the interactive effect (as recommended in Capelli and Neumark, 2001). Both HRM EXTR and HRM INTR have kept positive and significant effect on the dependent variable ($p < 0.10$ and $p < 0.05$ respectively). However, their interaction effect has negative sign and is significant at $p < 0.05$. The hypothesis 3 is confirmed.

Concluding remarks

The paper challenges the view that complementarity among HRM practices is always positive for knowledge transfer. On a contrary, as it was hypothesized and confirmed, some HRM practices, when applied simultaneously, affect negatively knowledge transfer process. The identification of those practices was done conceptually (as recommended by MacDuffie, 1995; Youndt *et al.*, 1996). The identification was built upon the Motivation Crowding Theory, which argued that extrinsic and intrinsic motivation may crowd-out each other.

In particularly, it was suggested that the use of performance based compensation system enhances extrinsic motivation of knowledge receivers and thereby positively

affects knowledge transfer. In earlier studies, performance based compensation was also found to be positive for knowledge transfer (Minbaeva et al, 2003). Indeed, companies-pioneers in Knowledge Management are actively using extrinsic motivators to enhance internal capturing, developing and reusing of knowledge (see for example, the experience of Siemens ICN with its ShareNet Incentive System described in Nielsen and Ciabuschi, 2003). On the other hand, activities related to knowledge transfer are intrinsic in nature. HRM practices with emphasis on self-actualization, self-control and self-regulation were identified as facilitating intrinsic motivation of employees and hence increasing knowledge transfer. Similar findings were also obtained by Laursen and Foss (2003), who found that, among others, the adoption of interdisciplinary workgroups, planned job rotation, delegation of responsibility, and integration of functions influence innovation performance positively.

When an employee receives a high reward for doing an intrinsically interesting task, the reward becomes the important goal, thus the employee's interest tends to focus on that goal rather than on the performance of the task itself. When HRM practices affecting extrinsic and intrinsic motivation are applied simultaneously, their effect on the degree of knowledge transfer is negative. Some empirical evidence, which could qualitatively back up these findings, exists in the field of Cognitive Evaluation Theory (described in Deci, 1975).

The scope of generalization of the findings is constrained by the fact that statistical analysis is based on samples collected at specific times and in specific places from specific groups. Clearly, there is a need for a similar study with a much larger sample and countries representation, in the hope that some of the overlooked issues will be possible to consider. Data limitations aside, the analyses suggest one main

observation: complementarity among HRM practices exists and it is not always positive for knowledge transfer.

What can companies do to avoid negative complementarity? Should they choose between extrinsic and intrinsic motivators, and never apply them together? Not necessarily. Deci (1975) argues that extrinsic motivators always come first. “The simplest reason why people look first to external causes is that external forces are readily observable and therefore more reliable” (p.271). Further, if extrinsic motivators are applied, there will be an increase in a level of motivation for performance of any kind and the level of that performance, but only at the beginning: “the relationship between amount of motivation and performance approximated the inverted U-function” (Vroom, 1970: 231). Being at least once rewarded for knowledge transfer, employees will most probably repeat their activities, which may lead to higher degree of knowledge exploitation. However, “a highly motivate person may attend only to those cues which he expects to be useful in the attainment of his goals” (Vroom, 1970: 232). Employees may ignore new and relevant information, thus avoid all activities related to knowledge exploration. To achieve higher degree of knowledge transfer both exploitation and exploration are needed (March, 1991). Thus, organizations should enhance two kinds of motivation. The question is how to combine them since they should not be applied simultaneously (to avoid negative complementarity). At which stage should HRM practices influencing extrinsic motivation be combined/supplemented by HRM practices affecting intrinsic motivation? That is an empirical question, which should be studied next.

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Table 1. Measures

Variable	Label	Description
Degree of knowledge transfer. Cronbach Alpha 0.84	DoKT	Please evaluate the degree of knowledge transfer from... Likert type scale ranging from 1 – very low to 5 – outstanding. sister subsidiaries to your subsidiary: marketing know-how, distribution know-how, packaging design/technology, product designs, process designs, purchasing know-how and management systems and practices. the parent corporations (HQ) to your subsidiary: marketing know-how, distribution know-how, packaging design/technology, product designs, process designs, purchasing know-how and management systems and practices.
HRM practices influencing extrinsic motivation. Cronbach Alpha 0.71	HRM extrinsic	Please mark the number that best indicates the degree to which each statement describes the HRM practices employed within your subsidiary. Likert type scale ranging from 1 – never to 5 – always The company financially support degree-earning programs at various colleges and universities There is extra rewards and recognition for superior performance Employees are generally rewarded on the basis of the value of the job and their personal contribution to organizational performance Performance management system in our company has an evaluative purpose of letting people know where they stay
HRM practices influencing intrinsic motivation. Cronbach Alpha 0.57	HRM intrinsic	Please mark the number that best indicates the degree to which each statement describes the HRM practices employed within your subsidiary. Likert type scale ranging from 1 – never to 5 – always We use different approaches to job design - such as job enlargement, job rotation, team-based job design We use flexible working arrangements - such as flexitime, job sharing, part-time work – to accommodate best the individual working arrangements preferences All new employees will be oriented in the philosophy, ethics, values, and business priorities of the company Employee lateral transfer is considered as a development activity and one of the best ways to retain talented people Local nations are often transferred to headquarters or other international operations Career development in our company represents an ongoing and formalized effort of the corporate management

Ownership (% of foreign capital to total capital)	Ownership	<25%, 26-50%, 51-75%, 76-100%. Responses were coded 1 - 76-100% of foreign capital, 0 – otherwise
Mode of entry	Mode	Greenfield, Merging, Acquisition, Joint venture, Licensing, Franchising, WOS, Export and distribution, Other (please specify). Responses were coded 1 – Greenfield, 0 – otherwise
Subsidiary size	Size	Number of employees in your subsidiary: <30, 30-99, 100-499, >500. Responses were coded 1 – more than 100, 0 – otherwise

Table 2. Descriptive statistics

Variable	Min	Max	Mean	St.Dev.
HRM extrinsic	1.25	4.75	3.2157	0.84974
HRM intrinsic	1.00	5.00	2.7430	0.77442
DoKT	1.00	4.36	2.6235	0.66051
Ownership	0.00	1.00	0.7879	0.41194
Size	0.00	1.00	0.4054	0.49432
Mode	0.00	1.00	0.3152	0.46715

Table 3. Correlation matrix

	HRM extrinsic	HRM intrinsic	DoKT	Ownership	Size	Mode
HRM extrinsic	1.000					
HRM intrinsic	0.553***	1.000				
DoKT	0.295**	0.100	1.000			
Ownership	0.073	-0.008	-0.120	1.000		
Size	0.302**	0.236*	0.129	0.055	1.000	
Mode	0.012	0.005	0.025	0.288*	0.050	1.000

*** - $p < 0.001$, ** - $p < 0.01$, * - $p < 0.05$

Table 4. Regression analyses on knowledge transfer

Variables	Model 1		Model 2		Model 3		Model 4	
	β	<i>s.e.</i>	β	<i>s.e.</i>	β	<i>s.e.</i>	β	<i>s.e.</i>
Constant	2.659***	0.176	1.819***	0.310	2.115***	0.340	-1.032	1.370
Ownership	-0.196	0.196	-0.197	0.184	-0.178	0.193	-0.203	0.181
Size	0.304 [†]	0.156	0.083	0.160	0.239	0.157	0.104	0.157
Mode	-0.026	0.170	-0.076	0.160	-0.059	0.168	-0.114	0.158
HRM EXTR			0.297**	0.092			1.110	0.401**
HRM INTR					0.205 [†]	0.110	1.126	0.533*
HRM EXTR x HRM INTR							-0.311	0.146*
F	1.579		3.799**		2.091 [†]		3.402**	
R-square	0.071		0.202		0.121		0.260	
Adjusted R-square	0.026		0.149		0.063		0.184	

*** - $p < 0.001$, ** - $p < 0.01$, * - $p < 0.05$, [†] - $p < 0.1$

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