

## **Human Capital, Capabilities & Competitive Advantage**

**Emily Auw**

*The resource-based view of the firm (RBV) research has been criticized to give little elaboration of how firms build new capabilities. And although recent management concern has been that a value of a firm's resources should be assessed, few empirical studies directly measure capabilities' relationships to human capital and competitive advantage. In response to this gap, this study will empirically examine the relationships between human capital, capabilities and competitive advantage of professional service firms in the Hong Kong, China and Taiwan regions.*

Fields of Research: Strategic Management, Human Capital, Skills Management,  
Internationalization

### **1. Introduction**

Resource-based view research has been criticized to give little elaboration of how firms build new capabilities (Cavusgil et al., 2007). Also, the recent management concern has been that a value of a firm's resources should be assessed (Barney & Hesterly, 2006), as competitive advantage of a firm has mostly been inferred from the presence of substantial resources and/or high performance rather than direct measurements (Peteraf & Barney, 2003). These previous studies are also descriptive/qualitative, and of abstract rather than practical nature (Thompson et al., 2001). Therefore, we will answer their call by employing a quantitative method to measure human capital for the professional firms by using Barney & Hesterly's (2006) Value-Rare-Costly-to-imitate-Organizationally-supported (VRIO) Framework to

---

**Emily Auw**, International Graduate School of Business (IGSB), *University of South Australia*,

Email: [e.auw@e-auw.com.hk](mailto:e.auw@e-auw.com.hk)

## Auw

evaluate the human capital and capabilities (skills) of professional service firms, affecting competitive advantage. This study will support the further development of the empirically-relevant resource-based view (RBV) theory. However, research studies of the quantitative types that link resources to competitive advantage are scarce in the RBV literature that we need to borrow from the internationalization literature. In internationalization literature, the two most recent works have been of Hitt et al. (2006) and Ruzzier et al. (2007). Hitt, Bierman, Uhlenbruck & Shimizu (2006) found that service firms that internationalize without strong human capital are likely to be at a competitive disadvantage. We will test this finding in our research. Further, the prior work of Ruzzier, Antoncic, Hisrich & Konecnik's (2007) international human capital model is still incomplete, as it does not include the most essential elements of a professional service firm, such as: Core Skills and Cross-Border Skills, as would be covered by our integrated framework. It is because skills are one of firms' internal investments needed to be continuously upgraded, in order to internationally competitive, other than products (or services) and business processes (Porter, 1991). Our framework will also examine how these local and international capabilities will be affected by the moderating factors of VRIOs as perceived by their firms' CEOs. Thus, the research here offers a more realistic view of human capital and extends the competitive advantage theories to the international business research context.

## 2. Literature Review

Based on the above management concerns, we will conduct our literature review in the following four areas: first, human capital; second, capabilities (skills); third, internationalization; and lastly, competitive advantage.

*Human Capital* We would conceptualize human capital as consisting of the education, experience and skills at a given point in time (Boxall & Steeneveld, 1999). According to Castanias & Helfat (1991), the variation in employees' proficiency per skill would determine the outcomes of competitive advantage. A view supported by Peteraf & Barney (2003) that although proficiency is important, the firm whose employees have more proficient industry-specific skills has the advantage. Since lawyers have to undergo stringent proficiency training, this human capital is the professional firm's 'most important resource' (Hitt et al., 2001). Previously, Lepak & Snell (2002) have already tried to measure the distinctiveness of human capital for the commercial and public organizations, for educated employees (Cameli & Schaubbroeck, 2005). We will measure the perceived VRIO values of human capital and capabilities of professional service firms. It is because most human capital studies have focused on their impact on firm performance, in general service firms,

## Auw

and in the local context, when professional service firms still remain an under-researched organizational form (Malos & Campion, 2000). Next, we shall examine the importance of human capital/capabilities (skills) which enable firms to outperform rival firms.

*Capabilities (Skills)* A skill is a specific ability deriving from practice that allows organizations to perform certain tasks (Heugens, 2005). Much of a firm's learning opportunities are determined by its present stock of available skills and focusing on the improvement of existing skills, rather than on the acquisition of radically new skills (Teece et al., 1997). Ritzer & Stillman (2001) argue that 'most customer service jobs have (now) been deskilled, transforming into McJobs, which require little training and little skill to perform them. In the same way as technology removes workers' manual skills, so scripts usurp their verbal and interactive skills'. These latter skills are prevalent among law firms, especially in their international services. And some skills are important if firms want to tap into an unexplored market, like China, e.g. Cross-Border Skills.

*Internationalization* 'Internationalization' is defined as an incremental process of increasing experiential knowledge (Eriksson et al., 1997). Much of the previous studies on international business have been concerned with manufacturing, and only a paucity concerned professional service firms. These scholars have examined them in an unconnected approach, setting up different models, e.g. Ruzzier et al (2007), Jaw & Ling (2004). Some studies have also linked resources to competitive advantage, e.g. Newbert (2007; 2008), but there has been a gap in having a research linking up international capabilities (cross-border skills) to competitive advantage. So far, studies examining international human capital in non-U.S. work settings, such as Asia, are rare. It is also through our study that we are linking internationalized resources to competitive advantage.

*Competitive Advantages* So far, only Newbert (2008) has linked resources and capabilities to Competitive Advantage. According to Barney (1991), 'competitive advantage' is defined as 'a function of a set of firm-specific resources and capabilities that are Valuable, Rare, and Imperfectly imitable and for which there are no commonly available Substitutes' (VRIS). There are two kinds of competitive advantages: a) logistics-based competitive advantage (Porter, 1991) and b) resource-based competitive advantage (Barney, 1991). We will dwell upon Barney's RBV competitive advantage theory in this research. In research concerning capabilities, two theoretical approaches emerged: The first was Barney's VRIO

## **Auw**

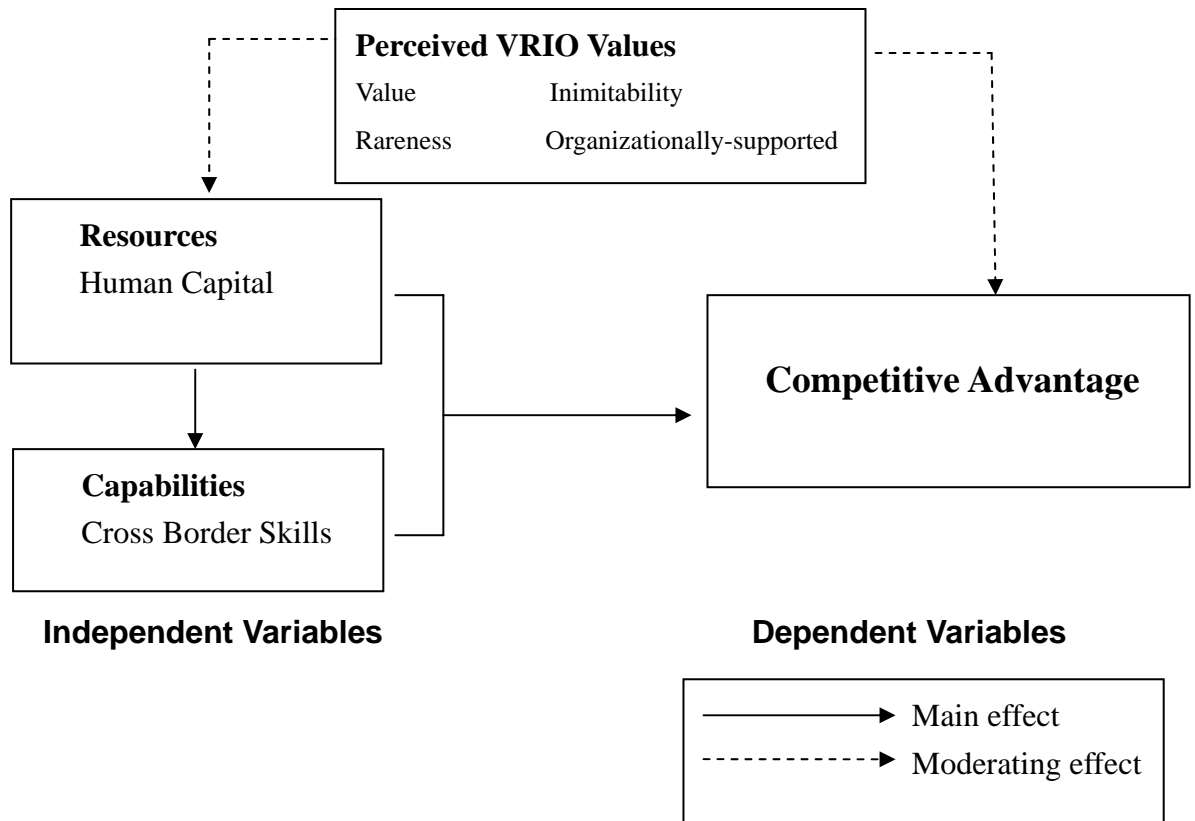
framework (Barney, 1997; Barney & Mackey, 2005; Barney & Hesterly, 2006) and the second was Teece, Pisano, & Shuen's (1997) dynamic capability. This is where our study will supplement the RBV research, by examining capabilities (skills), to overcome some of competitive advantage's weaknesses of being inferred, abstract rather than practical knowledge (Thompson et al., 2001). Thus, we will measure the perceived VRIO values of human capital and capabilities (skills), using a Five-Point Likert-scale, thus, contributing to filling the gap in the literature on the applicability of the RBV to Cross-Border human capital of the professional service firms.

In summary, our literature review has revealed that prior research has stopped short of direct measurement of competitive advantage; capabilities (skills), studies on internationalization concerning professional service firm have been few, and studies linking internationalization to competitive advantage have been sporadic. Thus, this study will fill these gaps in the literature by proposing a human capital (skills) framework.

### **Conceptual framework**

Based on Ruzzier et al.'s (2007) international human capital framework and a literature review, we have developed a Cross-Border Skills' conceptual framework, as shown in Figure 1. This framework incorporates the different factors that typically influence a cross-border human capital strategy, particularly those that concerned Cross-Border Skills, as moderated by the perceived VRIO values.

Figure 1: A Cross-Border Skills' Conceptual Framework



### 3. Methodology and Research Design

Data will be collected by questionnaires and standardized quantitative measuring instruments. The survey will be back-translated (Brislin, 1986): our English version will be translated into Chinese and then back-translated into English by a Language Service Company until there is agreement among the translators that both the English and Chinese versions are comparable (Ralston et al., 1993) Back-translation and pretesting will resolve any inconsistencies in the two versions, and eliminating measurement errors due to language differences (Yiu et al., 2005). We will conduct a pilot study with six-ten CEOs/senior partners of law firms to ascertain the validity and reliability of the survey instrument. Alterations and clarifications would be made to the questionnaire items based on responses and input from the pilot study. Questions for both the pilot and main studies would be based on five-point Likert scales, and the pilot study firms would not be included in the sample of the main study (Jackson, 2000). Data used in the empirical analysis will be drawn primarily from the responses to the questionnaire and will be frequently updated, based on the follow-up telephone interviews. Any firm that does not provide all of the data necessary to construct the variables used in the study would be dropped (Hatch & Dyer, 2004).

## 4. Discussion of Hypotheses

We would discuss about the following hypotheses:

### *Human capital and Competitive Advantage*

Human capital is found to be a source of higher performance in local authorities (Carmeli & Tishli, 2004). Those local authorities carrying out strategic human resource management practices that result in organization-specific educated and trained employees outperforming those that do not implement such practices (Huselid, 1995; Huselid, Jackson, & Schuler, 1997), which strengthens the premise that people are a valuable organizational resource (Collis & Montgomery, 1998; O'Reilly & Pfeffer, 2000; Pfeffer, 1994). Other researchers also advocate that, with the rise of Asian multinationals, an asset-augmenting or asset-seeking perspective has been used to explain how firms are using international expansion as a way to seek resources and overcome their competitive disadvantages (Makino et al., 2002; Mathews, 2002, Child & Rodrigues, 2005). For example, in China, the pool of managers who have previously worked in the government setting lacks the corporate mindsets and incentives to trade in market-oriented activities or create the resources and capabilities for their changing environment. These top managers may even lack the knowledge and skills necessary to use correctly those resource and capabilities even if they are developed (Zahra et al., 2000; Yiu et al., 2005). This management void can be filled in by the professionals from Hong Kong, if they have the required skills, which can affect a firm's competitive advantage. This leads us to our first hypothesis that:

Hypothesis 1A: Firms' Human capital will be positively-related to its competitive advantage

Firms with higher level of human capital tend to be more efficient in utilizing the knowledge they acquire (Variyam & Kraybill, 1993). Thus the scarce strategic resource that allows one company to surpass its competitors is the quality of its employees (Bartlett & Ghoshal, 1993; Hendry & Pettigrew, 1995; Garavan, Morley, Gunnigle, & Collins, 2001; Chen & Lin, 2003; Firer & Mitchell, 2003), especially those employees that possess international human capital (cross-border skills), which Saffo

(2009) says are moving home-grown Americans abroad, in what could become a huge shift in the world economic order. We therefore hypothesize that:

Hypothesis 1B: Firms with better international human capital are more likely to generate competitive advantage at a higher rate than their counterparts

### *Capabilities and Competitive Advantage*

Past theorists have only discussed about 'skills in the light of 'complementary skills' (Storey, 1995), 'personal skills' (Piazza-Georgi, 2002), 'talents' (Chen & Lin, 2003), or just 'skills' (presumably normal working skills) (Edvinsson & Malone, 1999; Pennings Lee, & Van Witteloostuijn, 1998; Youndt, Subramaniam, & Snell, 2004). Recently, McCann (2004), Ian Mitroff (2002), and Rosabeth Kanter (2003) have specifically brought up the word 'skills' again in 2002, 2003, and 2004, calling it 'the required new skills', because they saw the fresh need for something that could suit the occasion, not the mundane, ordinary skills that normal staff would possess in themselves. Especially in the case of CEPA, Trade Development Council's (2005) survey has also supported their call for 'the required skills', in order for certain professions to excel in a foreign market. Jaw & Ling (2004) called these skills the 'cross-border international capital', of which we would redefine as 'the cross-border skills'. Skill set required would be dependent upon the service range in a particular firm and the scale and scope of their marketing plan into China. The Cross-Border Skills for Hong Kong lawyers would be: expertise in handling cross-border mergers and acquisitions (M&A), advising Mainland clientele on international capital markets, commercial litigation, international arbitration/mediation, corporate law and intellectual property issues (TDC Survey, 2005). These capabilities would enable firms to have quick access to resources to cushion the sudden impact of forceful random events, to offset opponents' sudden attacks, or to build rapid momentum for new strategic shifts (Quinn, 1980). The Cross-Border Skills for lawyers in China are: to engage foreign lawyers, to contact and liaise with decision-makers for business, management & coordination for cross-border projects, to make mergers & acquisitions (M&A) deals, to manage Intellectual Property (IP) work, and to launch Initial Public Offerings (IPOs) in both China and the neighbouring markets (TDC Survey, 2005). Cross-Border Skills are important in international trading, as experienced by the Chinese managers, who still have a talent-development problem, because they find it hard to deal with the increasingly sophisticated global context by just emphasizing the improvement of technical/core skills (Joerss & Zhang, 2008). In absence of the Cross-Border Skills it would take three years for a Chinese team to get oriented to and acquainted with a foreign territory, on acquisition of a foreign company. Therefore, in preparation for successful cross-border transactions, Cross-Border Skills are necessary in order to

## **Auw**

have a successful internationally-oriented team. Our argument is that China is a huge market to be tapped, and to take advantage of this valuable CEPA opportunity, firms must be equipped with the cross-border skills, despite Birkinshaw & Hood's (1998) argument that even within globalizing industries, a firm's capabilities tend to reflect home country expertise. Hence, we propose the following four hypotheses:

Hypothesis 2A: The degree to which firms' human capital is enhanced by its international capabilities (Cross-Border Skills) will be positively related to its competitive advantage.

Hypothesis 2B: Firms with international capabilities (Cross-Border Skills) are more likely to generate competitive advantage at a higher rate than their counterparts

## **5. Conclusion**

This study aimed to bridge the gap between strategic human capital (skills) management and internationalization, achieving competitive advantage, an area which has not been widely researched in human resources management, studies concerning services, nor competitive advantage. The findings hopefully will shed lights on CEO's perceptions towards the VRIO evaluation of cross-border skills in the Pan-China region, affecting competitive advantage, and how different patterns arising from the evaluations of local and foreign firms. Efforts towards this direction may remind the CEOs of the importance of the possession of cross-border skills for successful cross-border transactions in the Asia-Pacific region.

## **References**

- Barney, J.B. 1991. 'Firm resources and sustained competitive advantage', *Journal of Management*", vol. 17, pp. 99-120
- Barney, J.B. 1997. *Gaining and sustaining competitive advantage*, Addison-Wesley, Reading, MA
- Barney, J.B. & Mackey, T.B. 2005. 'Testing resource-based theory.', in Ketchen, D.J. & Bergh, D.D. (Eds.), *Strategy and Management*, vol. 2, Elsevier, Greenwich, CT, pp. 1-13
- Barney, J.B. & Hesterly, W.S. 2006. *Strategic management and competitive advantage – concepts and cases*, Pearson Prentice Hall, pp. 95-108
- Bartlett, C.A. & Ghoshal, S. 1993. "Beyond the M-form: toward a managerial theory of the firm", *Strategic Management Journal*", vol. 14, pp. 23-46



- Birkinshaw, J. & Hood, N. 1998. "Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies', *Academy of Management Review*", vol. 23, pp. 773-795
- Boxall, P. & Streeveneld, M. 1999. "Human resource strategy and competitive advantage: a longitudinal study of engineering consultancies', *Journal of Management Studies*", vol. 36(4), pp. 443-63
- Brislin, R.W. 1986. The wording and translation of research instruments, in W.J. Lonner & J.W. Berry (Eds.), *Field methods in cross-cultural research*, pp. 137-164, Beverly Hills, CA, Sage
- Carmeli, A. & Schaubroeck, J. 2005. "How leveraging human resource capital with its competitive distinctiveness enhances the performance of commercial and public organizations', *Human Resource Management*", Winter, vol. 44(4), pp. 391-412
- Carmeli, A. & Tishler, A. 2004. 'The relationships between intangible organizational elements and organizational performance', *Strategic Management Journal*', vol. 25, pp. 1257-1278
- Castanias, R.P. & Helfat, C.E. 1991. "Managerial resources and rents', *Journal of Management*", vol.17, pp. 155-171
- Cavusgil, E., Seggie, S.H. & Talay, M.B. 2007. "Dynamic capabilities view: foundations and research agenda', *Journal of Marketing Theory and Practice*", vol. 15(2), spring, pp. 159-166
- Chen, H.M. & Lin, K.J. 2003. "The measurement of human capital and its effects on the analysis of financial statements', *International Journal of Management*", vol. 20(4), pp. 470-8
- Child, J. & Rodrigues, S.B. 2005. "The internationalization of Chinese firms: a case for theoretical extension?', *Management and Organization Review*", vol.1 (3), pp. 381-410
- Edvinsson, L. & Malone, M.S. 1999 *Intellectual capital – How to measure the value of invisible assets in the Information Age*, translated by D.R. Lin, Taipei: Wheatland publication
- Eriksson, K., Johanson, J., Majkgard, A., & Sharma, D.D. 1997. "Experimental knowledge and costs in the internationalization process', *Journal of International Business Studies*", vol. 28(2), pp. 337-360
- Firer, S. & Mitchell, S.W. 2003. "Intellectual capital and traditional measures of corporate performance', *Journal of Intellectual Capital*", vol. 4(3), pp. 348-60
- Garavan, T.N., Morley, M., Gunning, P. & Collins, E. 2001. "Human capital accumulation: the role of Human Resource Development', *Journal of European Industrial Training*", vol. 25(2/3/4), pp. 48-68

## Auw

- Hatch, N.W. & Dyer, J.H. 2004. "Human capital and learning as a source of sustainable competitive advantage", *Strategic Management Journal*, vol. 25, pp. 1155-1178
- Hendry, C. & Pettigrew, A. 1995. "Human Resource management: An agenda for the 1990s", *International Journal of Human Resource Management*, vol. 1(1), pp. 17-43
- Heugens, P.P.M.A.R. 2005. *Environmental issue management: towards a multi-level theory of environmental management competence*, Business Strategy and the Environment, John Wiley & Sons, Ltd.
- Hitt, M.A., Uhlenbruck, K. & Shimizu, K. 2006. "The importance of resources in the internationalization of professional service firms: the good, the bad, and the ugly", *Academy of Management Journal*, vol. 49, no. 6, pp. 1137-1157
- Hong Kong Trade Development Council 2005. "Satisfying China's legal services needs: the Hong Kong services edge", TDC research
- Huselid, M.A. 1995. "The impact of human resource management practices on turnover, productivity and corporate financial performance", *Academy of Management Journal*, vol. 38, pp. 635-672
- Huselid, M.A., Jackson, S.E. & Schuler, R.S. 1997. "Technical and strategic human resource management effectiveness as determinants of firm performance", *Academy of Management Journal*, vol. 40(1), pp. 171-188
- Jackson, T. 2000. "Management ethnic and corporate policy: a cross-cultural Comparison", *Journal of Management Studies*, vol. 37, May Issue, pp. 340-369
- Jaw, B.S. & Ling, Y.H. 2004. "An empirical study on the relationships among Cross-Border human capital, global initiatives, and financial performance", *Institute of Human Resource Management*, doctoral dissertation, National Sun Yat-Sen University, Taiwan, June
- Joerss, M. & Zhang, H. 2008. "A pioneer in Chinese globalization: an interview with CIMC's president", *The McKinsey Quarterly*, May issue
- Kanter, R.M. 2003. "Leadership and the psychology of turnarounds", *Harvard Business Review*, June
- Lepak, D.P. & Snell, S.A. 2002. *Examining the human resource architecture: the relationships among human capital, employment, and human resource configurations*, Journal of Management, Sage Publications
- Makino, S., Lau, C.M. & Yeh, R.S. 2002. "Asset-exploitation versus asset-seeking, implications for location choice of foreign direct investment from newly-industrialized economies", *Journal of International Business Studies*, vol. 33(3), pp. 403-21

## Auw

- Malos, S.B. & Campion, M.A. 2000. "Human resource strategy and career mobility in professional service firms: a test of an options-based model", *Academy of Management Journal*", vol. 43(4), pp. 749-760
- Mathews, J.A. 2002. "Competitive advantage of the latecomer firm: a resource-based account of industrial catch-up strategies", *Asia Pacific Journal of Management*", vol. 19(4), pp. 467-488
- McCann, J. 2004. "Organizational effectiveness: changing concepts for changing environments, human resources", *Human Resource Planning*, New York, vol. 27(1), pp. 42
- Mitroff, I.I. 2002. *Crisis Learning: the lessons of failure*, The Futurist, Sept-Oct
- Newbert, S.L. 2007. "Empirical research on the resource-based view of the firm: an assessment and suggestions for future research", *Strategic Management Journal*", vol. 28, pp. 121-146
- Newbert, S.L. 2008. "Value, rareness, competitive advantage, and performance: a conceptual-level empirical investigation of the resource-based view of the firm", *Strategic Management Journal*", vol. 29, issue 7, pp. 745-768
- O'Reilly III, C.A. & Pfeffer, J. 2000. *Hidden value: how great companies achieve extraordinary results with ordinary people*, Harvard Business School Press: Boston, MA
- Pennings, J.M., Lee, K. & Van Witteloostuijn, A. 1998. "Human capital, social capital, and firm dissolution", *Academy of Management Journal*", vol. 41, pp. 425-440
- Peteraf, M.A. & Barney, J.B. 2003. "Unravelling the resource-based tangle", *Managerial and Decision Economics*", vol. 24, pp. 309-323
- Pfeffer, J. 1994. *Competitive advantage through people: unleashing the power of the work force*, Harvard Business School Press: Boston, MA
- Piazza-Georgi, B. 2002. "The role of human and social capital in growth: extending our understanding", *Cambridge Journal of Economics*", vol. 26, pp. 461-79
- Porter, M. 1991. "Towards a dynamic theory of strategy", *Strategic Management Journal*", vol. 12(S), pp. 95-117
- Quinn, J.B. 1980. *Strategies for change: logical incrementalism*, Irwin, Homewood, IL
- Ralston, D.A., Gustafson, D.J., Cheung, F.M., & Terpstra, R.H. 1993. "Differences in managerial values: a study of U.S., Hong Kong and PRC managers", *Journal of International Business Studies*", vol. 24(2), 26 pages
- Ritzer, G. & Stillman, T. 2001. "From person- to system-oriented service", in Study, A., Grugulis, I. and Willmott, H. (Eds), *Customer service: empowerment and entrapment*, London, Palgrave, pp. 102-16

## Auw

- Ruzzier, M., Antoncic, B., Hisrich, R.D., & Konecnik, M. 2007. "Human capital and SME internationalization: a structural equation modeling study", *Canadian Journal of Administrative Sciences*", vol. 24, pp. 15-29
- Saffo, P. 2009. "A looming American diaspora in Breakthrough ideas for 2009", *Harvard Business Review*", February issue, pp. 19-29
- Storey, J. 1995. *Human resource management: a critical text*, London: Routledge
- Teece, D.J. 1997. *Technological change and the nature of the firm. In the competitive challenge*, Teece D.J. (ed.), Harper Row, New York; pp. 256-281
- Thompson, P., Warhurst, C., & Callaghan, G. 2001. "Ignorant theory and knowledgeable workers: interrogating the connections between knowledge, skills and services", *Journal of Management Studies*", vol. 38(7), November
- Variyam, J.N. & Kraybill, D.S. 1993. "Small firms' choice of business strategies", *Southern Economic Journal*", vol. 60(1), pp. 136-45
- Youndt, M.A., Subramaniam, M. & Snell, S.A, 2004. "Intellectual capital profiles: an examination of investments and returns", *The Journal of Management Studies*", vol. 41(2), pp. 335-361
- Yiu, D., Bruton, G.D. & Yuan, L. 2005. "Understanding business group performance in an emerging economy: acquiring resources and capabilities in order to prosper", *Journal of Management Studies*", vol. 42(1), pp. 183-206
- Zahra, S.A., Ireland, D.R., Gutierrez, I. & Hitt, M.A. 2000. "Privatization and entrepreneurial transformation: emerging issues and a future research agenda", *Academy of Management Review*", vol. 25, pp. 509-24