

STRATEGIC HRM, KNOWLEDGE RETENTION AND HUMAN CAPITAL IN AUSTRALIAN EXPORTING FIRMS

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This study explores the extent to which Australian exporting firms linked their human resource (HR) practices with their organisational structures in the early stage of internationalisation. We propose that the export intensity of Australian manufacturing firms is predicted by strategic HRM, human-capital-enhancing HR practices, degree of knowledge retention, and decentralisation of decision-making processes. There are two major findings. First, there is a strong level of inter-correlation between the HRM variables, while export intensity is correlated with selective staffing HR practices. Second, the regression analysis shows that the adoption of selective staffing together with the decentralisation in decision-making predicts export intensity. The result implies that as the level of export intensity increases, Australian firms adopt selective staffing practices to enhance the human stock required to engage in internationalisation. Decision-making is decentralised to line managers to allow them to deal with strategic and operational issues resulting from increasing internationalisation.

Introduction

Despite the growing literature in the field of international management and global strategy (see the review by Chng and Pangarkar, 2000), surprisingly little is known about how MNCs manage their human resources (HR), particularly across national borders (Ferner, 1994; Welch, 1994). Human resource issues in an international context have often been acknowledged as important, despite the lack of inclusion of HR in investigations of international management (Schuler, Dowling and De Cieri, 1993). Several criticisms of the area, as well as the overall lack of inclusion, are addressed in the study, for example the inclusion of decentralisation. This study aims to examine the nature of the management of human capital in firms at various stages of exporting—often the first steps toward internationalisation.

In our current study, internationalisation is defined as the process of increasing involvement by organisations in cross-border activities, including both inward and outward activities, a definition similar to that used by scholars such as Johanson and Vahlne (1990), Luostarinen and Welch (1990), and Melin (1992). The process of internationalisation is an evolutionary process whereby organisational commitment to foreign activities builds up on a sequential basis.

Within the internationalisation process, exporting is the most common foreign market entry mode (Luostarinen and Welch, 1990), particularly due to minimised business risks, the low resource commitment and high flexibility (Young et al., 1989). The process models of internationalisation, especially the cumulative models such as that of Bilkey and Tesar (1977), emphasise exporting as the vehicle for accumulating knowledge of, and experience in, international business. That is, exporting, as the critical first stage(s) of the internationalisation

process, allows the firm to accumulate international business experience and knowledge, which may or may not lead to increasing internationalisation.

From the perspective of international business, increasing complementarity among technology, capital and location has forced organisations to look for new forms of competitive edge. HR has been proposed as one of the most important sources of competitive advantage in this global environment (Barney, 1991). It is crucial to consider the importance of achieving competitive advantage by ensuring people management issues are considered in the management processes of the international firms (De Cieri and Dowling, 1999; Schuler, Dowling and De Cieri, 1993; Welch and Welch, 1997).

The strategic management of manufacturing firms has been the topic of many recent studies (Craig, 1999; Dow, 2000; Industry Commission, 1998; Orr, 1999; Thirkell and Dau, 1998). There is also increasing focus on the internal structures of manufacturing firms, specifically the linkage between manufacturing strategies and HR practices (MacDuffie 1995; Snell and Dean 1992). Research has also shown that organisational structures are important in enhancing the intangible assets of the firm, but the relationship between internal structures for managing intangible assets and internationalisation has yet to be established. Furthermore, there is insufficient attention on the internationalisation of manufacturing firms; specifically, how these firms utilise strategic HRM to enhance the human stock as they become more involved in exporting. Therefore, in the current study we aim to address these gaps in the literature by examining the relationships among export intensity, strategic HRM, human-capital-enhancing HR practices, a firm's knowledge stability and the decentralisation of decision-making in Australian manufacturing firms.

The format of this paper is as follows: First, we review the literature to derive at the research questions. Second, we briefly outline the research context, by placing the study within the framework of Australia's manufacturing industry. After discussion of the research methods, in particular, the use of a survey of Australian manufacturing firms, the findings of the regression analysis are reported, together with a discussion of implications for theory and practice.

Strategic HRM and Human Capital in Internationalisation

The importance of managing intangible resources has been the subject of many authors from the field of strategic management. From the knowledge management literature, Sveiby (1997: 12) propose that intangible resources be categorised to include external structure (such as brands, customers and supplier relationships), internal structure (such as organisational management and attitudes), and individual competence (such as education and experience). Grant (1996) argues that the internal structures of the firm are important in enhancing and supporting the management of knowledge. The know-how of employees and the culture of the firm, among other factors, are critical in ensuring that the intangible resources of the firm—skills, abilities and capabilities—are managed strategically to achieve competitive advantage (Hall, 1993). From a knowledge management perspective, there is a relationship between a firm's intangible resources and its HR, because strategic people management practices can be used to enhance the individual competence of the firm's HR (Sveiby, 1997).

Similarly, HRM researchers such as Wright and his colleagues (Barney and Wright, 1998; Wright, McMahan and McWilliams, 1994) adopt a resource-based view of the firm in explaining the importance of strategic HRM practices so that HR is used to enhance and sustain the competitive advantage of the firm. These researchers all focus on the internal aspects of the firm, such as skills, experience and knowledge, known as human capital (Davenport, 1999; Parnes, 1984), and which contribute to the value of the firm (Schultz, 1961).

Specific HR practices may be used to enhance the human capital of employees, which, in turn, means that the HR practices are indicators of the firm's investment in its HR (Snell and Dean, 1992). With an increasing focus on the management of knowledge as a source of competitive advantage, the human capital approach provides the opportunity for emphasising the intellectual aspects of a firm's capital (Petty and Guthrie, 2000; Sveiby, 1997; Zack, 1999). Others, such as Jayaram, Droge and Vickery (1999) and Rowden (1995), also conclude that the strategic HRM practices are related to a firm's performance in the manufacturing industry. Specifically, HR practices can be used to enhance the competitiveness in manufacturing firms in relation to the four quality indicators of quality, flexibility, cost and time (Jayaram, Droge, and Vickery, 1999).

There is then a need for the development and maintenance of managers who are able to add value by determining the scope, direction of growth and opportunities for growth of the organisation in international business operations (Buckley, 1993). To increase productivity through human capital, the firm needs to harness the potential contribution of the employees and this human capital must then be developed and managed as a core competence of the firm, treating employees as a source of competitive advantage (Barney, 1991).

A key mechanism for harnessing the human capital is by using appropriate HR practices (Youndt et al., 1996). Indeed, the importance of HR practices in international business operations and the importance of understanding the differences in employment relations cannot be underestimated (Bamber and Lansbury, 1993). The volatility of the international business environment also requires the internal operations of a firm to be flexible (Buckley and Casson, 1998). Internationalised firms face a number of pressures in the international business environment, such as the need to achieve coordination and the decentralisation of organisational practices and cross-cultural management issues (De Cieri and Dowling, 1999; Taggart, 1992).

HR practices can also be used to match the firm's HR characteristics with the specific stage of internationalisation. As argued by scholars such as Bilkey and Tesar (1977), exporting is generally used as a vehicle for manufacturing firms to accumulate knowledge of, and experience in, international business. Organisations can put in place internal structures to encourage and enhance the accumulation of knowledge. Empirical research (Snell and Dean, 1992; Youndt et al., 1996) has demonstrated that human-capital-enhancing HR practices are important in this aspect.

Snell and Dean (1992) find that human-capital-enhancing HR practices are positively correlated with the adoption of advanced manufacturing technologies. For instance, the adoption of HR practices which focus on selective staffing is shown to contribute towards the development and maintenance of employees who are able to adapt to the demands and pressures of internationalisation. This finding is supported by Youndt et al., (1996).

Manufacturing strategy has been described as the match between employee competencies and the extent of competitiveness in the market (Corbett and Wassenhove, 1993). This definition requires emphasis to be placed upon the effectiveness of strategic HR practices and human-capital-enhancing HR practices. The knowledge required to conduct export activities is a dimension of the firm's HR (Andersen, 1993). The level of knowledge acquired would, in part, rely on the types of HR practices used to enhance learning. This notion of a match between HR and a firm's internal and external structures is consistent with the literature on strategic HRM (Schuler, Dowling and De Cieri, 1993). Therefore, it is expected that organisations will adopt strategic HR practices and human-capital-enhancing HR practices as they become involved in internationalisation:

Hypothesis 1: The adoption of strategic HRM is positively related to human-capital-enhancing HR practices in manufacturing firms.

However, the effectiveness of the match between strategic HRM and human-capital-enhancing HR practices requires the retention of knowledge within organisations. If complementarity between HR practices is not in place, then firms may have to incur higher costs in replacing those who leave the organisations. Replacement of new recruits who have specialised knowledge is expensive for the firms. As predicted by Snell and Dean (1992), firms place more emphasis on selective tests and other human-capital-enhancing HR practices as a means to minimise the mismatch between individuals and objectives of the firm (as indicated by staff turnover).

Sveiby (1997) argues that effectiveness in knowledge enhancement relies on the extent to which internal processes, such as the retention of knowledge, have been put in place by the HR function. Research from the field of marketing also shows that there is a positive relationship between export performance, and training and management of knowledge (Thirkell and Dau, 1998). However, knowledge creation takes time and it may impact on the competitiveness of these firms. Therefore, it is expected that there is a positive relationship between strategic HRM, HR practices and the degree of stability in retaining knowledge:

Hypothesis 2: The adoption of HRM (both strategic and human-capital-enhancing HR practices) is positively related to the degree of stability in retaining knowledge within manufacturing firms.

There are also a number of organisational-level constraints on the adoption of a human-capital-focused, strategic, people management practice. There is a need for MNCs to maintain a balance between coordination, control and autonomy to ensure international competitiveness (Bartlett and Ghoshal, 1987). As organisations grow and become more international in outlook, control systems must be put in place to ensure the various parts of an organisation are integrated. These "structural" factors have been said to be one of the fundamental issues in the management of MNCs (Taggart, 1992).

The impact of the development of human capital or the degree of coordination and control reflected in an exporting firm's structure could both be affected by the extent of decentralisation in decision-making. Exporting firms have minimum presence and control in the overseas market as they employ the services of overseas intermediaries and distribution agents (Buckley, Pass and Prescott, 1992). The extent to which an export firm decentralises its decision-making at corporate head office or at the line would influence its flexibility in meeting the challenges of internationalisation. Firm size has also been found to be associated with export intensity, although the relationship is often inconsistent (Bonaccorsi, 1992). Size has been typically seen to be either input-oriented, in terms of number of employees, or output-oriented, in terms of overall revenue (Beamish et al., 1999). Therefore, the adoption of strategic HRM, human-capital-enhancing HR practices, and extent of decentralisation, together with a firm's degree of stability in retaining knowledge would predict export intensity in manufacturing firms:

Hypothesis 3: Strategic HRM, human-capital-enhancing HR practices, the degree of stability in retaining knowledge and the extent of decentralisation in decision-making are positively related to export intensity in manufacturing firms.

Methods

Research context

One of the objectives of government policy in Australia since the mid-1980s has been to increase and diversify Australia's exports earnings (Department of Industry, Technology and Commerce 1991). As with the international manufacturing industry, for example in the USA (Dertouzos, Lester and Solow 1990), there has been a general decline in the international competitiveness of the industry between the late 1980s and early 1990s. With the adoption of industry-wide microeconomic reforms, Australia's exports of manufacturing goods and services have been growing for the last decade after a period of relative stability (Australian Bureau of Statistics 1999). In the ten-year period between 1987-88 and 1997-98, Australia's income-based measure of gross domestic product increased at an average of 6.5 per cent and exports increased at a rate of 8 per cent per year. The increase in manufactured goods exports averaged 14 per cent over this period. Most of these exports were to countries such as Japan, the United States, the Republic of Korea, New Zealand, and the ASEAN countries. Export, as a particular phase of international business operations, is perceived to be the most common way of doing business internationally (Luostarinen and Welch, 1990). It is an important component of Australia's international balance of payment and there is an increase in the number of Australian firms involved in international activities, especially in exports (Commonwealth of Australia 1995; Productivity Commission 1999).

Historically, the level of productivity within the Australian manufacturing industry has been low in comparison with high-income countries such as Japan, United States, Canada, and the United Kingdom (Productivity Commission, 1999: 33). Reasons contributing to this include the low level of industrial climate and poor workplace practices (Australian Manufacturing Council/McKinsey and Co., 1990). As a result, there was a tripartite agreement among the unions, management and government to adopt microeconomic reforms as a means of making the industry more competitive. Improvements include the adoption of lean production techniques such as just-in-time, quality circles and other advanced manufacturing techniques (Shadur, Rodwell and Bamber, 1995; Sohal and Egglestone, 1994), workplace reform strategies such as training and development (Kane, Callender and Davis, 1994; Sohal and Marriott, 1993), job redesign and other industrial relations strategies (Morehead et al., 1997; Productivity Commission, 1999).

Sample

We conduct a survey of manufacturing firms in Australia in order to understand the relationship between the independent variables and export intensity. Due to the effect of foreign ownership on the adoption of HRM (Ferner, 1997), we control for ownership by only surveying Australian-owned manufacturing firms. The sample is drawn from a Dun and Bradstreet list of all of the companies in the selected industries that have more than fifty employees, with the contact details of the senior managers. The survey is typically sent to the Managing Director or General Manager. Our research design follows that of other international management researchers such as Leong and Tan (1993) and Peterson et al. (1996). In this study, we rely on the self-typing approach by a single respondent (in this case, the most senior executive) and this is typical in most international management research due to the difficulty of gaining a high response rate by matching the responses from multiple respondents.

All of the companies used in the analyses below have more than fifty employees and are in the following manufacturing industries (as selected at the two-digit Standard Industry Classification/SIC level): printing, publishing and allied manufacturing (27), chemical

manufacturing (28), primary metal manufacturing (33), fabricated metal manufacturing (34), and industrial machinery and computer manufacturing (35). All of the selected firms have their company headquarters in Australia. Overall there are 196 responses, representing a response rate of 27 per cent, after excluding the more than 25 per cent of the list from Dun and Bradstreet that are incorrect by telephone checks. This response rate is comparable with other studies conducted in the manufacturing industry (for example, Fisher, Dowling and Garnham, 1999).

The responses used in the analysis below are constrained according to the parameters of the current investigation, based on information obtained from demographic questions in the survey; that is, only Australian-owned companies, with more than fifty employees, and involved in exporting are analysed. After further exclusion of those cases with missing data, the final sub-sample used in the analyses contain seventy-three cases.

Variables

A questionnaire survey is used to identify the HR practices adopted by Australian organisations in building human capital. The *Strategic HRM* index consists of seven items based on Huselid (1995) and has a Cronbach alpha (α) of 0.85. The *human capital HR practices* that support and develop the firm's human capital are assessed using three of Snell and Dean's (1992) scales. Specifically, the human capital measures used are *selective staffing* (seven items, $\alpha=0.71$), *comprehensive training* (eight items, $\alpha=0.88$) and *equitable reward systems* (eight items, $\alpha=0.45$). The overall scale scores are constructed following Snell and Dean (1992).

A key and popular indicator of a firm's ability to retain knowledge is the *Rookie ratio*, which can be regarded as a measure of organisational stability and efficiency (Sveiby, 1997: 177) as it focuses on the extent to which new members (or rookies) have stayed on in the organisation. The Rookie ratio is obtained by asking respondents to "estimate the number of your employees with less than two years' tenure at your organisation" and dividing the number obtained by the overall number of full-time equivalent staff.

Export performance measures are constructed following standard international business practice (Zou and Stan, 1998). The firms are asked to provide their overall revenue for the prior year and their export revenue for the previous year. Foreign sales are a meaningful first-order indicator of a company's involvement in international business (Sullivan, 1994). The *degree of export intensity* is obtained by calculating the proportion of overall revenue that is obtained from exports.

The structure of the organisation is examined by measuring *decentralisation*, based on the eight-item scale from Delaney and Huselid (1996), although the anchors have been changed to those of Miller and Droge (1986). The decentralisation scale examines decision-making authority for the eight decisions and each item is scored from zero (0), "the decision is made at the level of the board", through to five (5) "the decision is made by operatives on the shop-floor". The scale has a Cronbach alpha reliability coefficient of 0.87.

Results

The impact of strategic HRM, human-capital-enhancing HR practices, the status of knowledge stability, and structure variables on export intensity are examined by using multiple regression. All analyses are obtained using the Statistical Package for the Social Sciences.

Table 1 reports the correlations between the variables of interest. Strategic HRM and human-capital-enhancing HR practices are also correlated, thus supporting hypothesis 1. The human-

capital-enhancing HR practices are often significantly related to each other, although only selective staffing is significantly correlated with export intensity. None of the variables are significantly correlated with the Rookie ratio. Therefore, hypothesis 2 is only partly supported.

Table 1: Intercorrelations between Variables and Level of Significance with Export Intensity in Australian Exporting Firms

Variable	Export intensity	1	2	3	4	5
1. Rookie ratio	-0.193					
2. Selective staffing	0.340**	-0.019				
3. Comprehensive training	0.046	0.032	0.455***			
4. Equitable reward systems	0.115	0.100	0.295*	0.231*		
5. Strategic HRM	-0.077	-0.036	0.413**	0.505**	0.236*	
6. Decentralisation	0.226	-0.044	0.136	0.219	-0.144	0.042

Note: ^a After \log_{10} transformation, similar-sized results are found, with selective staffing remaining as the only significant correlation.

* $p < .05$

** $p < .01$

*** $p < .001$.

After checking the assumptions of the multiple regression, the export intensity variable is transformed using an absolute of the \log_{10} of the original intensity score. The results of the regression are presented in Table 2.

Table 2: Regression of Variables on Export Activity

Predictor variables	b	β	Partial Correlation
Selective staffing	-0.039	-0.343*	-0.308
Comprehensive training	-0.0001	-0.001	-0.001
Equitable reward systems	0.008	0.059	0.060
Strategic HRM	0.014	0.105	0.097
Decentralisation	-0.026	-0.244*	-0.251
Rookie ratio	0.007	0.129	0.142
Constant	1.957		

$R=0.45$

$R^2=0.20$

$R^2_{adj}=0.13$

$F(6, 66) = 2.75^*$

Note: $p < .05$.

Selective staffing and *decentralisation* are significant predictors of export intensity. The negative signs on their Betas indicate a positive relationship between the variable and increasing export intensity (after allowing for the absolute \log_{10} scoring). That is, as *selective staffing* and *decentralisation* increase, so too does export intensity. The stability of the results is checked by running the regression without the *equitable reward systems* variable (due to its low Cronbach alpha) and the results remain consistent. This indicates that there is only partial support for Hypothesis 3.

Conclusion

The aim of this study is to examine the relationship between strategic HRM, human-capital-enhancing HR practices, status of firm's knowledge stability, and decentralised decision-making, with the export intensity of Australian manufacturing firms. The following discussion outlines the implications of the findings in relation to theory and practice for international management, strategic HRM, and human capital theories.

Our findings support those of Snell and his colleagues (for example, Snell and Dean, 1992; Youndt et al., 1996). The level of significant correlation between all HR practices (both strategic and human capital) implies that exporting firms have adopted a strategic HRM approach to people management. This is not a surprising finding because the experience of the Australian manufacturing industry is similar to manufacturing firms from the UK (Lowe, Delbridge and Oliver, 1997) and the USA (Snell and Dean, 1992), as Australian firms have undergone a period of managerial reforms. As noted in the report by Australia's Productivity Commission (1999), manufacturing firms have adopted a number of strategies such as just-in-time and other advanced manufacturing techniques to become more competitive in the international market. Researchers such as Snell and Dean (1992) conclude that the adoption of these strategic initiatives is related to the adoption of strategic HRM and those practices that focus on the creation of human capital required for mastering the new production techniques. From an international management perspective, Thirkell and Dau (1998) also find that skills and market knowledge (that is, components of human capital according to Parnes, 1984) are important elements in enhancing export performance.

Based on the result of the regression analysis, our second finding shows that only selective staffing practices and decentralisation of decision-making best predict export intensity. Despite the strong correlations between the variables, as the level of export intensified, firms tend to focus more on using selective staffing practices to buy skills, rather than developing their own human capital. In addition, the decision-making process is decentralised to line managers in order for them to deal with strategic and operational issues resulting from increasing internationalisation. This finding is consistent with the general trend observed within Australia (Morehead et al., 1997; Productivity Commission, 1999).

The regression analysis also shows that a firm's degree of knowledge retention does not predict export intensity. This is a surprising finding as the degree of retaining knowledge within an organisation (in the form of the *Rookie ratio*) and its relationship with export intensity has practical and theoretical implications. From a practical perspective, the finding implies that the microeconomic and workplace reforms are strongly entrenched within the Australian manufacturing industry. As such, the retention of knowledge within exporting firms is already in place due to the industry, union and government initiatives put in place to improve the competitiveness of the manufacturing industry (for example, award restructuring and multi-skilling). As noted in the report, the Productivity Commission (1999) states that workplace flexibility practices, such as teamwork and multi-skilling, are commonly used in Australia.

From a theoretical perspective, the above findings are consistent with the literature on international management, knowledge management, and strategic HRM. Results from the regression analysis provide support for the internationalisation thesis put forward by Johanson and Vahne (1990) and international strategic HRM scholars (Ferner, 1997; Schuler, Dowling and De Cieri, 1993; Welch and Welch, 1997).

First, the above findings highlight the importance of achieving a match between the firm's mode of international business operations and its people management function (for example, Welch

and Welch, 1994). As these firms become more experienced in international business, they place more emphasis on using their international HR function to achieve success in their international strategies. This particular style of relationship with the adoption of HR practices is consistent with the evolutionary process of internationalisation, according to the intensity in exporting activities and experience in internationalisation. In this instance, sophisticated selective staffing practices have been used to ensure that human capital is selected to add value to the firms' quest for international market share.

Second, the predictability of decentralisation and selective staffing practices for export intensity provides support for what Sveiby (1997) terms 'internal structure' in knowledge management. Together with the current level of emphasis on knowledge retention, our finding indicates that there is some evidence that knowledge management practices are in place in these firms. These practices are useful for enhancing the skills, experience and knowledge, or human capital (Davenport, 1999; Parnes, 1984).

Our findings support the Uppsala Internationalisation Model proposed by Johanson and Vahlne (1990). The evidence suggests that, as export intensity increases, Australian firms emphasise the buying of skills, experience and knowledge through selective staffing. It suggests that HR decisions in Australian manufacturing firms tend to follow the degree of international involvement. Knowledge development and the creation of an appropriate structure required to support internationalisation are implicit in this incremental model of internationalisation (Johanson and Vahlne, 1990: 11).

This finding is therefore consistent with the internalisation theory of management as proposed by Buckley (1993), as it highlights the major role played by management during the process of internationalisation. In addition, the incorporation of a within-firm relationship variable (Buckley, 1993: 203), such as the knowledge retention variable using the *Rookie ratio*, is a way of improving the internalisation model. Therefore, our model of export intensity provides an improvement to the internalisation approach.

Implications for Future Research

Our research design is consistent with previous research in international management (for example, Leong and Tan, 1993; Peterson et al., 1996). Reliance on the self-typing approach by a single respondent from each organisation has a number of limitations in organisational research (cf. Snow and Hambrick, 1980). However, it is typical in most international management research due to the difficulty of gaining a high response rate. In the current study, we minimise this limitation by following the procedures in previous research (for example, De Cieri and Dowling, 1997; Leong and Tan, 1993) and we sought the cooperation of respondents prior to sending out the survey. In addition, we incorporate follow-up procedures to ensure an acceptable response rate.

This study finds that the intensity of export activity is predicted by the adoption of selective staffing practices and the extent of decentralisation of decisions. That is, just as the process models of internationalisation emphasise accumulating experience in international business, firms increase their use of selective staffing practices which develop human capital as they become more active exporters. In addition, as firms intensify their exporting, they also decentralise the decision-making process.

The current research could be extended in several directions. First, with exporting activity typical of only the early phase of internationalisation, research could go on to examine the development of human capital across stages of increasing multinational activity. For example,

would new subsidiaries have a much higher focus on human capital than their local counterparts? Also important may be the extent of control and coordination by the head office (or parent company) on the decision-making process (see review by Ferner, 1994, and the work by Campbell, Goold and Alexander, 1995) in relation to the management of the firm's human capital.

Second, future research could examine the development of intellectual capital (including human, social and structural) across increasing levels of multinational activity. For example, would different levels of internationalisation have different levels of focus on intellectual capital? Following the research direction undertaken by other scholars (for example, Gomes and Ramaswamy, 1999; Zou and Stan, 1997), future studies could construct better variables to measure export performance.

Third, our current study does not adopt all the variables proposed by Sveiby (1997) to measure the internal structures of a firm's knowledge management capabilities. Variables that measure human, social and structural capital (see the review by Petty and Guthrie, 2000) could be integrated with knowledge management variables (Sveiby, 1997) so as to incorporate the relationship between internal and external structures with organisational performance in international activities.

Fourth, future studies should also consider the impact of unionisation as a moderating variable in predicting the adoption of strategic HRM and export intensity, due to the high level of unionisation within the manufacturing industry (MacDuffie, 1995; Morehead et al., 1997; Snell and Dean, 1992).

Lastly, the current study does not cover data from foreign-owned manufacturing firms. This is in order to control for ownership differences in the adoption of HRM (see Ferner, 1997). Future studies should expand the sampling frame to include both foreign- and Australian-owned manufacturing firms to identify whether ownership differences would change the relationship identified in the present study. It has been noted in the international management literature that the nationality origin of ownership could have an influence on export performance (Gomes and Ramaswamy, 1999).

In conclusion, our current study provides partial empirical support for the adoption of human-capital-enhancing HR practices in predicting the level of export intensity in the Australian context. We also find that the extent of decentralisation in decision-making explains the variances in export intensity. Our findings are also consistent with the literature on internationalisation and human capital. In our discussion we have considered the theoretical and practical implications of the present study. Finally, we have also identified several suggestions for other researchers to undertake in order to improve on our current study.

References

- Australian Bureau of Statistics (ABS) (1999), **Year Book Australia, 1999** (ABS Catalogue No. 1301.01). Canberra: Australian Bureau of Statistics.
- Australian Manufacturing Council/McKinsey and Company (1993), **Emerging Exporters: Australia's High Value-Added Manufacturing Exporters: Final Report of the Study**, Melbourne: Australian Manufacturing Council.
- Andersen, O. (1993), 'On The Internationalisation Process of Firms: A Critical Analysis', **Journal of International Business Studies**, 24: 209-231.

- Bamber, G.J. and Lansbury, R.D. (1993), **International and Comparative Industrial Relations: A Study of Industrialised Market Economies** (2nd ed.), St Leonards, NSW: Allen and Unwin.
- Barney, J. (1991), 'Firm Resources and Sustained Competitive Advantage', **Journal of Management**, 17: 99-120.
- Barney, J.B. and Wright, P.M. (1998), 'On Becoming a Strategic Partner: The Role of Human Resources in Gaining Competitive Advantage', **Human Resource Management**, 37: 31-46.
- Bartlett, C.A. and Ghoshal, S. (1987), 'Managing Across Borders: New Strategic Requirements', **Sloan Management Review**, 28(4): 7-17.
- Beamish, P.W., Karavis, L., Goerzen, A., and Lane, C. (1999), 'The Relationship Between Organisational Structure and Export Performance', **Management International Review**, 39(1): 37-54.
- Bilkey, W.J. and Tesar, G. (1977), 'The Export Behaviour of Smaller-Sized Wisconsin Manufacturing Firms', **Journal of International Business Studies**, 8: 93-98.
- Bonaccorsi, A. (1992), 'On the Relationship Between Firm Size and Export Intensity', **Journal of International Business Studies**, 23: 605-635.
- Buckley, P.J. (1993), 'The Role of Management in Internalisation Theory', **Management International Review**, 33(3): 197-208.
- Buckley, P.J. and Casson, M.C. (1998), 'Models of the Multinational Enterprise', **Journal of International Business Studies**, 29: 21-44.
- Buckley, P.J., Pass, C.L., and Prescott, K. (1992), 'The Internationalisation of Service Firms: A Comparison with the Manufacturing Sector', **Scandinavian International Business Review**, 1(1): 39-56.
- Campbell, A., Goold, A. and Alexander, M. (1995), 'The Value of the Parent Company', **California Management Review**, 38(1): 79-97.
- Chng, P. and Pangarkar, N. (2000), 'Research on Global Strategy', **International Journal of Management Review**, 2(1): 91-110.
- Commonwealth of Australia (1995), **Enterprising Nation**. Canberra: AGPS.
- Craig, J.F. (1999), 'The Foreign Market Servicing Behaviour of Multinational Corporations: An Empirical Investigation', **Annual Meeting of the Academy of Management Conference Best Paper Proceedings**, Briarcliff Manor, NY: Academy of Management.
- Davenport, T.O. (1999), **Human Capital: What It Is and Why People Invest It**, San Francisco, CA: Jossey-Bass.
- De Cieri, H. and Dowling, P.J. (1997), 'Strategic International Human Resource Management: An Asia-Pacific Perspective', **Management International Review**, Special Issue (1): 21-42.
- De Cieri, H. and Dowling, P.J. (1999), 'Strategic Human Resource Management in Multinational Enterprises: Theoretical and Empirical Developments', **Research in Personnel and Human Resources Management**, Supp. 4: 305-327.
- Delaney, J.T. and Huselid, M.A. (1996), 'The Impact of Human Resource Management Practices on Perceptions of Organisational Performance', **Academy of Management Journal**, 39: 949-969.
- Department of Industry, Technology and Commerce (1991), **Internationalisation of Australia's Service Industries**, Canberra: AGPS.
- Dertouzos, M.L., Lester, R.K., and Solow, R. (1990), **Made in America: Regaining the Productive Edge**, New York: Harper Perennial.
- Dow, D. (2000), 'A Note on Psychological Distance and Export Market Selection', **Journal of International Marketing**, 8(1): 51-64.
- Ferner, A. (1994), 'Multinational Companies and Human Resource Management: An Overview of Research Issues', **Human Resource Management Journal**, 4(2): 79-102.

- Ferner, A. (1997), 'Country of Origin Effects and HRM in Multinational Companies', **Human Resource Management Journal**, 7(1): 19-37.
- Fisher, C., Dowling, P.J., and Garnham, J. (1999), 'The Impact of Changes to the Human Resources Function in Australia', **International Journal of Human Resource Management**, 10: 501-514.
- Golhar, D.Y. and Deshpande, S.P. (1997), 'HRM Practices of Large and Small Canadian Manufacturing Firms', **Journal of Small Business Management**, 35(3): 30-38.
- Gomes, L. and Ramaswamy, K., (1999), 'An Empirical Examination of the Form of the Relationship Between Multinationality and Performance', **Journal of International Business Studies**, 30: 173-188.
- Grant, R.M. (1996), 'Toward a Knowledge-Based Theory of the Firm', **Strategic Management Journal**, 17 (Winter): 109-122.
- Hall, R. (1993), 'A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage', **Strategic Management Journal**, 14: 607-618.
- Huselid, M.A. (1995), 'The Impact of Human Resource Management Practices on Turnover, Productivity and Corporate Financial Performance', **Academy of Management Journal**, 38: 635-670.
- Industry Commission (1998), **Microeconomic Reforms in Australia: A Compendium from the 1970s to 1997**, Canberra: AGPS.
- Jayaram, J., Droge, C., and Vickery, S.K. (1999), 'The Impact of Human Resource Management Practices on Manufacturing Performance', **Journal of Operations Management**, 18(1): 1-20.
- Johanson, J. and Vahlne, J. (1990), 'The Mechanism of Internationalisation', **International Marketing Review**, 7(4): 11-24.
- Kane, R., Callender, G. and Davis, D. (1994), 'Change and Staff Development in Australian Manufacturing Enterprises', **Industrial Management and Data Systems**, 94(10): 3-11.
- Leong, S.M. and Tan, T.T. (1993), 'Managing Across Borders: An Empirical Test of the Bartlett and Ghoshal (1989) Organisational Typology', **Journal of International Business Studies**, 24: 449-464.
- Lowe, J., Delbridge, R., and Oliver, N. (1997), 'High-Performance Manufacturing: Evidence From the Automotive Components Industry', **Organisation Studies**, 18: 783-798.
- Luostarinen, R. and Welch, L. (1990), **International Business Operations**, Finland: Helsinki School of Economics.
- MacDuffie, J.P. (1995), 'Human Resource Bundles and Manufacturing Performance: Organisational Logic and Flexible Production Systems in the World Auto Industry', **Industrial and Labor Relations Review**, 48: 197-221.
- Melin, L. (1992), 'Internationalisation as a Strategy Process', **Strategic Management Journal**, 13: 99-118.
- Miller, D. and Droge, C. (1986), 'Psychological and Traditional Determinants of Structure', **Administrative Science Quarterly**, 31: 539-560.
- Morehead, A., Steele, M., Alexander, M., Stephen, K. and Duffin, L. (1997), **Changes at Work: The 1995 Australian Workplace Industrial Relations Survey**, Melbourne: Longman.
- Orr, S. (1999), 'The Role of Quality Management in Manufacturing Strategy: Experiences from the Australian Wine Industry', **Total Quality Management**, 10(2): 271-279.
- Parnes, H.S. (1984), **People Power**, Beverly Hills, CA: Sage.
- Peterson, R.B., Sargent, J., Napier, N.K. and Shim, W.S. (1996), 'Corporate Expatriate HR Policies, Internationalisation, and Performance in the World's Largest MNCs', **Management International Review**, 36: 215-230.
- Petty, R. and Guthrie, J. (2000), 'Intellectual Capital Literature Review: Measurement, Reporting and Management', **Journal of Intellectual Capital**, 1: 155-176.
- Productivity Commission (1999), **Microeconomic Reforms and Australian Productivity: Exploring the Links**, Commission Research Paper Volume 1, Canberra: AGPS.

- Rowden, R.W. (1995), 'The Role of Human Resource Development in Successful to Mid-Sized Manufacturing Businesses: A Comparative Case Study', **Human Resource Development Quarterly**, 6: 355-373.
- Schuler, R.S., Dowling, P.J. and De Cieri, H. (1993), 'An Integrative Framework of Strategic Human Resource Management', **Journal of Management**, 19: 419-459.
- Schultz, T.W. (1961), 'Investment in Human Capital', **The American Economic Review**, LI(1): 1-16.
- Shadur, M.A., Rodwell, J.J., and Bamber, G.J. (1995), 'The Adoption of International Best Practices in a Western Culture: East Meets West', **International Journal of Human Resource Management**, 6: 735-757.
- Snell, S.A. and Dean Jr., J.W. (1992), 'Integrated Manufacturing and Human Resource Management: A Human Capital Perspective', **Academy of Management Journal**, 35: 467-504.
- Snow, C.C. and Hambrick, D.C. (1980), 'Measuring Organisational Strategies: Some Theoretical and Methodological Problems', **Academy of Management Review**, 5: 527-538.
- Sohal, A.S. and Marriott, F. (1993), 'Manufacturing Management in Australia: The Human Resource Management Implications', **International Journal of Manpower**, 14(9): 41-55.
- Sohal, A.S. and Egglestone, A. (1994), 'Lean Production: Experience Among Australian Organisations', **International Journal of Operations and Production Management**, 14(11): 35-51.
- Sullivan, D. (1994), 'Measuring the Degree of Internationalisation of a Firm', **Journal of International Business Studies**, 25: 325-342.
- Sveiby, K.E. (1997), **The New Organisational Wealth: Managing and Measuring Knowledge-Based Assets**, San Francisco, CA: Berrett-Koehler.
- Taggart, J.H. (1992), 'Coordination Versus Globalisation: The Multinational's Dilemma', **Multinational Business**, Summer (2): 1-12.
- Thirkell, P.C. and Dau, R. (1998), 'Export Performance: Success Determinants for New Zealand Manufacturing Exporters', **European Journal of Marketing**, 32: 813-829.
- Welch, D. (1994), 'HR Implications of Globalisation', **Journal of General Management**, 19(4): 52-68.
- Welch, D. and Welch, L. (1994), 'Linking Operation Mode Diversity and IHRM', **International Journal of Human Resource Management**, 5: 911-925.
- Welch, D. and Welch, L. (1997), 'Pre-Expatriation: The Role of HR Factors in the Early Stages of Internationalisation', **International Journal of Human Resource Management**, 8: 402-413.
- Wright, P.M., McMahan, G.C. and McWilliams, A. (1994), 'Human Resources and Sustained Competitive Advantage: A Resource-Based View Perspective', **International Journal of Human Resource Management**, 5: 301-326.
- Youndt, A.M., Snell, S., Dean Jr., J.W. and Lepak, P.D. (1996), 'Human Resource Management, Manufacturing Strategy, and Firm Performance', **Academy of Management Journal**, 39: 836-866.
- Young, S., Hamill, J., Wheeler, C. and Davies, J.R. (1989), **International Market Entry and Development**. Englewood Cliffs, NJ: Prentice Hall.
- Zack, M.H. (1999), 'Developing a Knowledge Strategy', **California Management Review**, 41(3): 125-145.
- Zou, S. and Stan, S. (1998), 'The Determinants of Export Performance: A Review of the Empirical Literature Between 1987 and 1997', **International Marketing Review**, 15: 333-356.

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Oppenheim, Rachel. (1993) "Performance Appraisal of Teams", *Human Resource Quarterly* 6,10 (October 1993): 39-54.
Silver, Mary. (1995) *The Management Challenge*. Melbourne: Hawthorn Press.
Thompson, Edgar (1995a) "The Chaos Principle and Management", in Joan Smith, ed., *Scientific Theories in the Social Sciences*. New York: Theoretical Publishers: 123-136.

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