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Abstract The aim of this research work was to analyse the role of human resource management in the development of organizational capabilities and its influence on the firm's performance from a resource-based view. Our results, from empirical research on a nation-wide sample of Spanish savings banks, suggest that human resource decisions, integrated in a human resource system, have an important influence on the development of organizational capabilities and on the firm's performance.

Keywords human resources; organizational capabilities; performance; resource-based view; competitive advantage

Introduction

In this research paper we shall investigate why human resource management (HRM) has an important influence on the development of organizational capabilities and on the firm's performance. Drawing on the theoretical insights of the resource-based view of strategic management, we shall try to explore the potential of an HR system to facilitate or inhibit the development and utilization of organizational capabilities, according to Lado and Wilson's (1994) work. We shall also try to describe why HRM decisions, embedded in an HR system, have an important influence on the firm's performance, following Wright *et al.*'s proposition that 'HR practices moderate the relationship between the human capital pool and sustained competitive advantage only when matched with appropriate HR practices that elicit productive employee behaviour' (1994: 320).

To achieve our goals, first we have proposed a resource-based framework to discuss the circumstances under which human resources can be a source of sustained competitive advantage and the role of HRM. Second, empirical research was developed to analyse relationships between HRM and organizational capabilities development and the firm's performance.

The strategic value of human resources: an integrative model from the resource-based view of the firm (RBV)

In a highly competitive economic context, characterized by such phenomena as the globalization of markets, changing customer demands and increasing product-market

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competition, people and the way they are managed acquire greater importance because many other sources of competitive success are less powerful. But, to achieve competitive success through people involves changing our way of thinking about employment relationships. It means successfully working with people, and seeing HR as a source of competitive advantage rather than as merely a cost (Peffer, 1994). From the RBV approach, we can consider that the human resource, or human capital, in which the firm invests has the potential to create superior performance. Thus, the RBV of the firm provides an important perspective on the debate about HRM and organizational success (e.g. Wright *et al.*, 1994, 1998; Lado and Wilson, 1994; Kamoche, 1996; Mueller, 1996; Boxall, 1996; Guest, 1997; Barney and Wright, 1998).

The RBV points out that firms can develop sustained competitive advantage only by creating value in a way that is rare and difficult for competitors to imitate (e.g. Barney, 1991, 1995; Grant, 1991; Peteraf, 1993; Teece *et al.*, 1997; Foss, 1997). Although traditional sources of competitive advantage can create value, the RBV argument is that bundles of resources, rather than the product market combinations chosen for their deployment, lie at the heart of a firm's competitive advantages. This approach requires that a firm be seen, not through its activities in the product market, but as a unique bundle of resources that are complex, intangible and dynamic. But, why is a resource unique? What makes it valuable? What allows it to maintain its value in the future? To answer these questions we should start from the resource and capabilities definitions. According to Amit and Schoemaker (1993), the firm's resources are defined as stocks of available factors that are owned or controlled by the organization. Resources are converted into final products or services by using a wide range of the firm's other assets and bonding mechanisms, such as technology, management information systems, incentive systems, trust between management and labour and so on. Thus, capabilities refer to a firm's capacity to deploy resources, usually in combination, applying organizational processes to effect a desired end. They are information-based, tangible or intangible processes that are firm specific and are developed over time through complex interactions among the firm's resources. Unlike resources, capabilities are based on developing, carrying and exchanging information within the firm's human capital.

However, a firm's having many resources and capabilities is not enough in itself to guarantee success. Competitive advantage emerges from distinctive resources or capabilities that firms control, that is, something that firms do particularly well in comparison with their competitors (Peteraf, 1993).¹ So, 'although traditional sources of competitive advantage such as natural resources, technology, economies of scale, and so forth, create value, the RBV argument is that these sources are increasingly easy to imitate, especially in comparison to a complex social structure such as an employment system' (Becker and Gerhart, 1996: 781). If that is so, a properly developed HR system may be an especially important source of sustained competitive advantage (Lado and Wilson, 1994; Pfeffer, 1994; Wright *et al.*, 1994).

Consistent with previous ideas, we propose a model whose main hypothesis suggests that human resources constitute a source of competitive advantage because they are a valuable, rare, inimitable and non-substitutable resource (Barney, 1992; Wright *et al.*, 1994, 1998). This model also considers that firms that know how to establish an HR system that incorporates HR policies and practices in order to create and maintain the strategic human capital could have a sustainable competitive advantage.

According to our model, the human resource meets the RBV conditions for being a source of competitive advantage. We can say that this resource adds value to organization because people differ in their capacities and abilities, and, therefore, in their contribution to the firm. Human resources are rare because it is difficult to find people

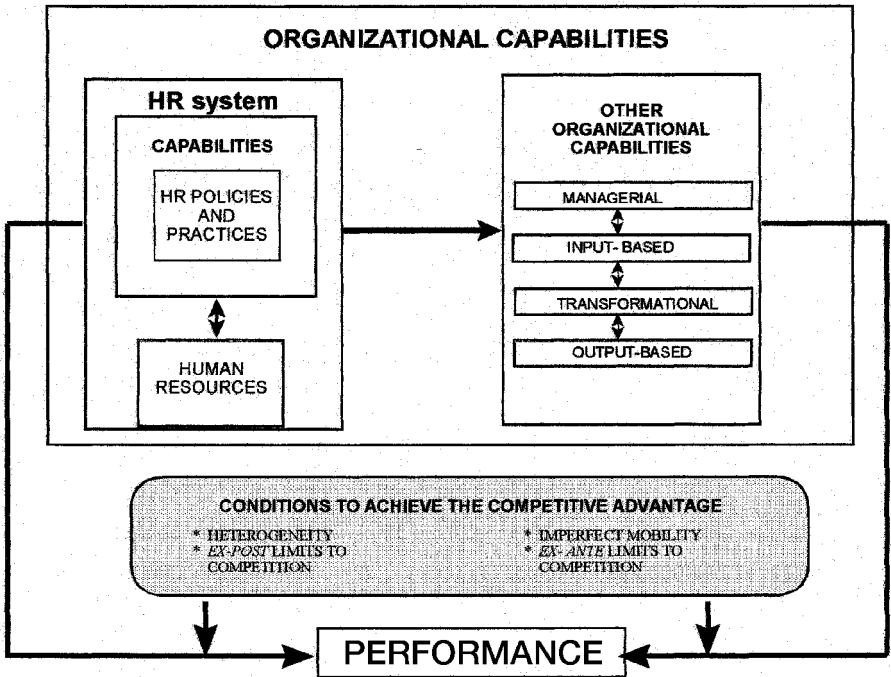


Figure 1 A strategic model of human resources

who guarantee high performance levels in the organization due to the labour market's heterogeneity. Their inimitability emerges from the difficulty in duplicating people's knowledge, abilities, experience and behaviour, at least in the short term. Moreover, the high transaction costs involved in people recruitment can be a significant obstacle to their mobility or acquisition. Finally, people are a resource difficult to replace because not everybody has the same capacity to adapt to the different environments and technologies, and those who are able to create value in one context may be unable to do so in others (Wright *et al.*, 1994; Dolan *et al.*, 1999).

Having pointed out the importance of HR in the creation of firm-specific competitive advantage, the question then is whether, or how, firms can capitalize on this potential source of profitability. Our argument now centres on HR strategy that involves the integration of the HR generic functions: selection, appraisal, promotion and compensation (Tichy *et al.*, 1992). According to Bailey (1993), managers can use HR practices, such as the development of selection, appraisal, training and compensation systems, to attract, identify and retain high-quality employees. Thus, a firm which develops a valid selection system and has attractive HR programmes, such as higher than normal compensation packages and numerous development opportunities, can attract, select and maintain the highest quality resource pool (Wright *et al.*, 1994). Also, reward systems, communication systems, training programmes and socialization systems that encourage employees to act in the interests of the firm can be developed (Shuler and MacMillan, 1984). Thus, HR practices influence employee skills through the acquisition and development of a firm's human capital. Recruiting procedures that provide a large pool of qualified applicants, coupled with a reliable and valid selection regimen, will

have significant influence over the quality and type of skills that new employees possess. Providing formal and informal training, such as basic skills training, on-the-job experience, coaching and so on, can further influence the employees' development. As Boxall points out, 'by hiring and developing talented staff and synergising their contributions within the resource bundle of the firm, HRM may lay the basis for sustained competitive advantage' (1996: 66). Then, organizational HR practices can, if properly shaped, provide a direct and economically significant contribution to the firm's performance (Huselid, 1995; Huselid *et al.*, 1997). So, a firm which creates an effective HR system incorporating HR practices to exploit the potential for synergies among such practices has the capability to recognize the intrinsic value of HR in developing new strategies before its competitors (Barney, 1992; Collis, 1994; Boxall, 1996; Mueller, 1996). Thus, for the purposes of this article, an HR system is defined as 'an organizational capability which involves the strategic integration of the set of HR activities, functions and processes: selection, training, appraisal, promotion and compensation, carried out to attract, develop and maintain the strategic HR that allow the firm to achieve its goals' (De Saá, 1999).

Although HR management is not a sufficient condition in itself for competitive advantage, it can still play a necessary role in stimulating change and 'start a process that results in a more extensive tapping of the organization's hidden reservoir' (Mueller, 1996: 777). Thus, strategic HRM can lead to competitive advantage only if effective resource mobility barriers exist. Thus, from the RBV, and according to Becker and Gerhart (1996), a properly developed HR system is an 'invisible asset' (Itami, 1987) that creates value when it is so embedded in the operating systems of an organization that it enhances the firm's capabilities. An HR system deeply embedded in the organization is difficult to imitate because, first, it is difficult to identify the precise mechanisms by which HR practices interact and create value. To imitate a complex system, it is necessary to understand how the elements interact. Without being able to understand how an HR system works, it is impossible to imitate it (by, for instance, reverse engineering it). It is even difficult for a competing firm to imitate a valuable HR system by hiring away one or a few of the top executives because the understanding of the system is an organizational capability that is spread across not just a few but many people in the firm. Second, these HR systems are path dependent. They consist of policies that are developed over time and cannot simply be purchased in the market by competitors. A competitor, although able to understand that a system is valuable, is precluded from immediate imitation by the time required to implement the strategy fully (assuming the system could be understood). Furthermore, there may be limits to the management's ability successfully to reproduce socially complex elements, such as interpersonal relationships and culture.

The RBV also suggests that HR systems can contribute to sustained competitive advantage through facilitating the development of other capabilities that are firm specific, produce complex social relationships, are embedded in a firm's history and culture and generate tacit organizational knowledge (Reed and De Fillippi, 1990; Barney, 1992; Wright and MacMahan, 1992). Drawing on the theoretical insights of the RBV, Lado and Wilson (1994) explore the potential of an HR system to facilitate or inhibit the development and utilization of organizational capabilities (managerial, input-based, transformational and output-based).² These capabilities may be expanded, upgraded and maintained through an HR system that emphasizes: hiring employees for the organization as a whole (Bowen *et al.*, 1991), extensive socialization of newly hired employees (Wanous, 1992), developmental performance appraisal (Murphy and Cleveland, 1991), a skill-based compensation strategy (Lawler, 1992) and comprehensive

training and development to provide new knowledge, skills and abilities, which are needed to achieve long-term productivity (Wexley and Latham, 1991). Conversely, these organizational capabilities can depreciate through, among other things, lack of congruence of values between the focal employees and the organization (Argyris, 1957), ethically ambivalent HR (Jansen and Von Glinow, 1985), assignment of employees to jobs with low perceived significance and meaningfulness (Hackman and Oldham, 1976), and other organizationally induced physical and emotional problems of the employees (Ordione, 1984). Thus, as Lado and Wilson (1994) suggest, the firm's HR system can contribute to organizational capabilities development. More specifically:

H1: Firms with an appropriate HR system will have a greater likelihood of facilitating the development and exploitation of managerial, input-based, transformational and output-based capabilities.

The theoretical model we have just proposed also suggests that the behaviour of employees within firms has important implications for organizational performance. These HRM practices embedded in a firm's HR system can affect individual employee performance through their influence on employees' skills and motivation (Wright *et al.*, 1994, 1999). If this is so, a firm's HR policies and practices should be related to at least two dimensions of performance (Huselid, 1995). First, if superior HR practices increase employees' discretionary effort, we would expect their use to directly affect intermediate outcomes, such as turnover and productivity, over which employees have direct control. Second, if the returns from investments in superior HR practices exceed their true costs, then lower employee turnover and greater productivity should in turn enhance corporate financial performance. In this way, RBV also provides an alternative approach to the question of HRM and organizational performance, sustaining an important line of research that focuses very directly on estimating the causal impact of HRM decision on objective measures of business performance (e.g. Arthur, 1994; Huselid, 1995; MacDuffie 1995; Delaney and Huselid, 1996; Delery and Doty, 1996; Koch and McGrath, 1996; Youndt *et al.*, 1996; Huselid *et al.*, 1997). These works have consistently found a statistically significant relationship between HRM decisions and firm performance, making an important contribution to the progress of the field, although more conceptual and empirical work is needed to develop and test a more sophisticated theory of HRM (Becker and Gerhart, 1996; Guest, 1997). Thus, and in order to follow this line of contributions, our second hypothesis can be stated as follows:

H2: Firms with an HR system that properly combines their HR practices to create and develop strategic human capital will have better organizational performance.

Methodology

Industry context

The setting for this study is the Spanish savings bank industry. The choice of this industry is due to some fundamental structural changes that have diverted the competitive emphasis from being largely market based to being more resource based. In this sector there have been tremendous changes in recent years, brought about by the forces of deregulation, technological developments and globalization. These changes have provided much greater opportunities for competitive differentiation and have led to a significant increase in the degree of competition in this previously regulated and

largely uniform industry. Along with the increase in the intensity of competition, there has been a concomitant shift in the nature or the basis of the competition. While competition previously focused on pre-emptive entry into key geographical or product markets to establish advantage, it now focuses more on developing key organizational resources and capabilities, such as innovation, a strong, good service culture, highly qualified personnel, etc. This shift in competitive emphasis has occurred because the regulatory protection and other collective imperfections which previously provided sustainable advantage in this industry are slowly dying out. Consequently, market participants increasingly deem the accumulation and development of valuable resources, such as HR, to be the most durable source of competitive advantage in the banking industry.

Sample and data collection

The data collection process began in the summer of 1997 with an initial round of interviews with leading academics and professionals in the field. At these preliminary interviews, discussions centred on exploring particular aspects of human resource management in the industry. Basing our views on the input from these experts, as well as from a review of literature, we developed a structured questionnaire that was pre-tested before being sent to every savings bank's human resources manager between February and June 1998. We also obtained secondary data about performance from the Central Bank of Spain (Banco de España) and the Spanish Association of Savings Banks (CECA).

Since the target population was fifty savings banks, we decided to send the questionnaires to all of them. Thirty valid responses were obtained, yielding an overall response rate of 60 per cent. So, the final sample totals assets of more than 30,000 billion pesetas (66.3 per cent of the industry's total assets), generates sales of 2,000 billion pesetas (66.3 per cent of the industry's total revenues) and employs almost 60,000 employees (65 per cent of the industry's workforce).

Measurement

HR practices In this research, we have adopted those HR practices most consistent with prior theoretical and empirical work (Arthur, 1994; Lado and Wilson, 1994; Wright *et al.*, 1994; Dyer and Reeves, 1995; Huselid, 1995; MacDuffie, 1995; Becker and Gerhart, 1996; Koch and McGrath, 1996; Ulrich, 1997). These practices included aspects like personnel selection, performance appraisal, incentive compensation and so on. Thus, we tried to analyse, among other aspects, the manner in which candidates were attracted (internal/external recruitment), the selection criteria used (general/specific knowledge and skills), training and career development, the main characteristics of the pay system, whether or not there was an established system for assessing performance, etc. Therefore, using a 7-point Likert scale, respondents were asked to indicate the importance their firm attached to eighteen of these HR practices. Cronbach's alpha for this scale was 0.59. To uncover the underlying factor structure associated with these practices and their synergies, from a system perspective (Lengnick-Hall and Lengnick-Hall, 1988), we factor-analysed each item's standard score, using principal component extraction with varimax rotation. Eight significant factors emerged from the analysis, explaining 79.8 per cent of total variance (see Table 1).

Once the factors that define savings banks' HR practices had been established, the next step was to identify which savings banks followed each practice. Thus, the second step consisted of performing a cluster analysis using the components resulting from the

Table 1 Factor analysis

<i>Factors</i>	<i>Eigen value</i>	<i>COM.</i>	<i>C.F.</i>
<i>FACTORS OF HR PRACTICES</i>			
<i>Alpha = 0.59</i>			
Proportion of variance accounted for = 79.8%			
<i>F1A Internal development of personnel</i>	3.5		
V12 Periodical employees' appraisal		0.88	0.82
V13 Promotion according to assessment		0.77	0.69
V9 On-the-job training		0.77	0.68
V7 Retaining socialized personnel		0.53	0.48
<i>F2A Planning of internal development of personnel</i>	2.4		
V20 Careers plans		0.75	0.70
V4 Candidates' recruitment and selection according to the firm's culture		0.67	0.76
<i>F3A Promoting an internal labour market</i>	2.1		
V14 Promotion vs external hiring for important positions		0.82	0.83
V8 Continuous training		0.85	0.77
<i>F4A Strategic importance of specific human capital</i>	1.8		
V10 Specific skills and knowledge development		0.82	0.83
V3 Strategic importance of HR aspects		0.75	0.63
<i>F5A Public and collective incentives</i>	1.6		
V11 Public criteria for promotion		0.88	0.89
V19 Collective salary incentives		0.82	0.79
<i>F6A Compensation not subject to collective agreement,</i>	1.2		
V15 Collective agreement on general compensation ^a		0.88	0.91
V6 Loss of qualified personnel		0.81	0.57
V16 Collective agreement on variable compensation ^a		0.70	0.51
<i>F7A Target incentives for executives only</i>	1		
V17 Variable target compensation		0.83	0.85
V18 Salary incentives at all levels		0.85	-0.44
<i>F8A Selection of qualified personnel</i>	0.9		
V5 Selection of qualified personnel		0.85	0.91

Note

^a Item was reverse-coded.

factor analysis as input. A K-means clustering algorithm was used and four clusters were considered (see Table 2).

The first cluster includes five 'savings banks with contradictory HR practices' (one small, with fewer than fifty employees; three medium size, between fifty and 2,000 employees; and one big, with more than 2,000 employees). These savings banks have been characterized as contradictory because, although they seemingly have an HR strategic vision according to the high score they give to this factor, the practices they implement do not seem the appropriate ones to create and develop a strategic HR base. This is so because, among other things, candidates' skills and knowledge are not

Table 2 *Cluster analysis*

<i>Factors</i>	<i>Cluster 1</i>	<i>Cluster 2</i>	<i>Cluster 3</i>	<i>Cluster 4</i>	<i>F</i>	<i>p</i>
● F1A: Internal development of personnel	0.63	-1.51	0.63	-0.15	5.90	0.00
● F2A: Planning of internal development of personnel	0.00	-0.60	-0.40	0.26	1.10	0.40
● F3A: Promoting an internal labour market	-0.05	-1.71	0.42	0.18	4.98	0.00
● F4A: Strategic importance of specific human capital	0.87	-0.09	-1.21	0.19	7.40	0.00
● F5A: Public and collective incentives	-0.97	-0.34	-0.38	0.51	4.70	0.00
● F6A: Compensation not subject to collective agreement, and loss of qualified personnel	-1.01	0.33	0.08	0.22	2.40	0.00
● F7A: Target incentives for executive only	0.02	-0.05	-0.23	0.10	0.16	0.92
● F8A: Selection of qualified personnel	-0.74	0.39	0.60	-0.06	2.05	0.13

considered in selection processes, internal HR development is not planned and training and promotion are not used to create an internal labour market.

The second cluster encompasses three 'savings banks with precarious HR practices' (one organization has fewer than 500 employees and the other two have nearly 2,000). With regard to the HR practices followed in this cluster, the companies do not have a defined posture regarding the strategic importance of personnel. In fact, these companies gave very high negative scores to the main HR factor analysed. Thus, as the data show, these organizations have not established periodical employees' appraisal systems, use closed subjective promotion criteria, their employees' careers are not planned and training is not appropriate to the business. These and other aspects reflect the minor importance these savings banks give to HR as a strategic resource.

The third cluster contains six 'savings banks with an effective HR policy although not strategically planned' (two small and four medium size). This cluster is characterized by being the one which best carries out HR practices to create and develop a strategic HR base, although they explicitly recognize that they do not have a strategic HR vision. Thus, as we can see, they are savings banks which have a selection system based on candidates' skills and knowledge, they have: employees' periodical appraisal systems, which are considered in internal promotion decisions, continuous on-the-job training, which allows specific human capital creation, and compensation practices which help to retain qualified and socialized personnel.

Finally, the fourth cluster encompasses sixteen 'savings banks with a strategically coherent HR policy' (one is small, ten are of medium size and five are big). This cluster seems to have a better concept of the strategic role of human capital as a key resource. As the data reflect, albeit in a moderate way, these firms are the ones which carry out the HR practices most coherent with the creation of a strategic HR base. Thus, they ensure the candidates' adaptation to the whole organization, not only in the selection process, but also in their career planning, and they also use training, appraisal and promotion systems that promote the creation of a qualified HR base. In sum, they plan the internal development of their strategic HR.

Table 3 Factor analysis

Factors	Eigen value	COM.	C.F.
<i>Factors of HR policy</i>			
<i>Alpha = 0.73</i>			
Proportion of variance accounted for = 72.7%			
<i>F1B Informal control by means of good internal communication</i>	3.6		
V25 Informal control		0.71	0.80
V30 Free access to information		0.62	0.73
V31 Open and informal communication		0.69	0.73
V29 Consultation		0.64	0.63
V23 Decision making in expert hands		0.55	0.55
<i>F2B Non-formalized procedures</i>	2.5		
V27 Non-formalized learning of tasks		0.87	0.89
V26 Autonomy in operational decision making		0.83	0.81
V31 Possibility of changing established procedures when necessary		0.81	0.80
<i>F3B Gathering of ideas and criticism</i>	1.6		
V21 System that encourages contribution of new ideas		0.84	0.86
V22 System of gathering criticism		0.87	0.85
<i>F4B Long-term orientation and teamwork</i>	1		
V32 Long-term orientation		0.69	0.70
V28 Encouraging teamwork		0.54	0.63

Organizational policies In order to know the aspects of the general organizational policy that contributes to the strategic development of HR, we asked a second question. This question comprised twelve items measuring whether the HRM encourages commitment instead of control; the participation of employees in decision making; a long-term orientation; and free and open communication (Arthur, 1994; Lado and Wilson, 1994). All these aspects are very important in order to explore the potential of the HR system to facilitate or inhibit the development and utilization of organizational capabilities (Lado and Wilson, 1994).

Therefore, using a 7-point Likert scale, respondents were asked to indicate the importance their organizations attached to the twelve items. Cronbach's alpha for this scale was 0.73. These items were factor analysed in order to transform them into a reduced number of components. Four significant factors emerged from the principal component extraction with varimax rotation analysis, explaining 72.78 per cent of total variance (see Table 3).

Organizational capabilities Lado and Wilson (1994) proposed a widely accepted definition of organizational capabilities: managerial, input-based, transformational, output-based. Thus, to measure them, we used a multi-item scale based on Lado and Wilson's (1994) work, in which respondents were asked to indicate how these items have changed (increasing or decreasing) over the last three years. Cronbach's alpha for this scale was 0.75. To uncover the underlying factor structure associated with these aspects, we factor analysed each item's standard score, using principal component extraction with varimax rotation. Four significant factors emerged from the analysis,

Table 4 *Factor analysis*

<i>Factors</i>	<i>Eigen value</i>	<i>COM.</i>	<i>C.F.</i>
<i>Factors of organizational capabilities</i>			
<i>Alpha = 0.75</i>			
Proportion of variance accounted for = 87.5%			
<i>F1C Output-based capabilities</i>	2.9		
V38 Good relationship with clients, suppliers, public institutions, etc.		0.81	0.92
V39 Good corporate image		0.91	0.79
<i>F2C Managerial capabilities</i>	1.4		
V37 Degree of commitment and involvement of personnel		0.91	0.94
V33 Importance of HR aspects in strategic decisions		0.84	0.80
<i>F3C Input-based capabilities</i>	1.2		
V35 Training of firm-specific human capital		0.85	0.84
V34 Incentives and motivation of specific human capital		0.89	0.72
<i>F4C Transformational capabilities</i>	0.7		
V36 Encouraging creative and innovative ability in the employees		0.91	0.89

explaining 87.5 per cent of total variance, and coinciding with the four capabilities defined theoretically (see Table 4).

Performance variables Multiple measures of performance have been used in some of the recent savings banks studies (Flavián *et al.*, 1998). *Profitability* is the performance variable used in this work and it has been obtained by dividing the operating margin (net interest income) by the average assets. This ratio was calculated as the interannual average variation for the years 1995, 1996 and 1997, and not only for the year when the study was carried out, in order to avoid any bias due to extraordinary events and to consider a period of time similar to the one used to analyse the organizational capabilities development.

Results

HRM and organizational capabilities development

To test our first hypothesis, we used the Pearson correlation coefficient (*r*) in order to establish the degree of association between the HR practices and policies factors and the organizational capabilities factors, since we are dealing with interval or ratio scales. The results are given in Table 5.

We also carried out an analysis of the relationship between the clusters and each capability using the *eta* and *eta*² statistics. To find out whether or not there were significant differences in the scores for each of the savings bank clusters in relation to the organizational capabilities development, a one-way analysis of variance, with the help of Snedecor's *F* statistic, was also carried out. Finally, we used the *t*-test for paired clusters and the Tukey and Sheffé test to identify which pairs of clusters were the most different from the point of view of the creation of the development of organizational capabilities (see Table 6).

Table 5 Correlation between HR factors and organizational capabilities (Pearson's *r*)

Factors	Capabilities			
	Managerial	Input/ based	Transformational	Output/ based
● F1A: Internal development of personnel	-0.10	0.01	0.27	0.34 [†]
● F2A: Planning of internal development of personnel	0.39*	0.40*	0.17	0.09
● F3A: Promoting an internal labour market	0.22	0.35*	0.27	0.22
● F4A: Strategic importance of specific human capital	0.33 [†]	-0.04	0.25	0.17
● F5A: Public and collective incentives	0.08	0.13	0.18	0.10
● F6A: Compensation not subject to collective agreement, and loss of qualified personnel	-0.44*	0.13	0.00	-0.02
● F7A: Target incentives for executive only	0.08	0.13	-0.21	0.05
● F8A: Selection of qualified personnel	-0.25	0.23	0.21	-0.01
<i>Factors of HR policy</i>				
● F1B: Informal control by means of good internal communication	0.23	0.12	0.29	0.00
● F2B: Non-formalized learning of tasks	-0.21	-0.12	0.10	-0.36*
● F3B: Gathering of ideas and criticisms	0.23	-0.16	0.53*	-0.18
● F4B: Long-term orientation and teamwork	0.25	0.39*	0.29	0.25

Notes[†] $p < 0.10$.* $p < 0.05$.

Reading the results of these analyses led to the following conclusions regarding each of the organizational capabilities studied.

1) Concerning the generation of managerial capabilities, the factors that appeared to be fundamentally important are those related to the strategic role of HR, where the HR manager may develop his capabilities, especially with regard to reinforcing the creation of specific human capital and planning the development of this resource. It is also important to point out that strengthening this type of capability seems to be directly related to the implementation of a national pay agreement. This result is quite interesting because, as we know, the role of savings banks HR managers in collective bargaining is fundamental since they play an important part in the co-ordination of this strategic view, especially concerning profit sharing where the concept of the appropriateness of the resource-based company takes on great relevance (Grant, 1991; Kamoche, 1996). On the other hand, the results also seem to show the existence of significant differences ($p \leq 0.01$) between savings banks, especially those in groups 1 and 2 and those in groups 2 and 4. These results are interesting because it is precisely groups 1 and 4 that attach a greater strategic importance to HR within the organization and, as a consequence, will have a greater tendency to generate this type of capability.

Table 6 *Correlation between the savings banks and organizational capabilities*

<i>Relationship</i>	<i>Cluster</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>eta</i>	<i>eta</i> ²	<i>F</i> (<i>p</i>)	<i>Tukey/</i> <i>Sheffé</i>	<i>t</i> (<i>p</i>)
Savings banks' managerial capabilities	1	5	0.82	0.83	0.54	0.29	3.60 (0.02)	1-2	1-2 2-4 3.76 (0.00) -2.71 (0.01)
	2	3	-1.05	0.09					
	3	6	-0.40	1.25					
	4	16	0.22	0.79					
Savings banks' input-based capabilities	1	5	-0.13	1.17	0.32	0.10	1.04 (0.38)	NS	2-3 -2.35 (0.05)
	2	3	-0.81	0.76					
	3	6	0.24	0.58					
	4	16	0.20	1.05					
Savings banks' transformational capabilities	1	5	-0.38	0.79	0.37	0.14	1.40 (0.25)	NS	2-4 -1.79 (0.09)
	2	3	-0.98	0.85					
	3	6	0.18	0.93					
	4	16	0.18	1.09					
Savings banks' output-based capabilities	1	5	0.28	0.68	0.33	0.11	1.10 (0.36)	NS	NS
	2	3	-0.99	1.86					
	3	6	-0.07	0.82					
	4	16	0.06	0.99					

Note

NS: not significant.

2) The results also seem to show that, in order to create an HR-based capability like input, it is necessary to have an HR policy that plans the internal development of staff, paying attention to the candidate selection process as well as their internal development by means of career plans. It must also promote the creation of an internal labour market in which the priorities are the continuous training and the internal promotion that lead to company-specific human capital and strengthen teamwork and the long-term vision, as the theoretical approach of Lado and Wilson (1994) suggests. Besides this, we were also able to confirm that the savings banks that clearly supported this type of policy were those that strengthened the creation of this type of capability (group 3) as opposed to those that did not (group 2).

Consequently, from these findings, the importance of HR as a key strategic resource (input) stands out, as do HR policies and practices as strategic capabilities for generating organizational capabilities that are sources of competitive advantage.

3) The results regarding transformational capabilities seem to indicate that the most significant factor in the creation of this type of capability is based on a system of communication that takes in the ideas and criticisms of the workers. This is a reflection of an innovation-based culture that values the creative ideas of the employees. The results also show, albeit to a lesser degree, how teamwork, good internal communication and the internal development of qualified personnel are all essential to the creation of this type of capability, as Lado and Wilson (1994) suggest. A difference was also noticed in the generation of this type of capability between groups 2 and 4, characterized by different HR policies regarding the creation and development of strategic human capital, as we have already shown.

4) Finally, concerning the creation of output-based capabilities, the results seem to show, although not strongly, that the creation of capabilities that reflect the company's good image and reputation are significantly linked to an HR policy that promotes the

internal development of staff, thus giving a boost to their image among internal interest groups, and consequently among external interest groups. Then, we must not forget that savings banks in particular, being in the service industry, project an image that is largely determined by the image of its employees. However, we must point out that the results did not support the approach of Lado and Wilson (1994) that this type of capability would be without the formalization, routinization and standardization of the work operation. To our understanding, this may be due to the fact that, in the context in which the research was carried out, formalized procedures are necessary in order to offer a good customer service.

It was not possible to obtain significant results that established differences between savings banks regarding the creation of this type of capability. This result could be partly due to the fact that, given the nature of this sector, the commitment to reputation and image, the quality of service offered and customer loyalty are objectives set by all the organizations, irrespective of whether they later deployed the HR practices needed to implement them.

Therefore, we can conclude that the savings banks with an HR system that properly combines their HR policies to create and develop strategic human capital are the ones that have facilitated the development of organizational capabilities.

Performance

As we have argued, HRM practices embedded in a firm's HR system can affect individual employee performance through their influence over employees' skills and motivation (Huselid, 1995). Thus, our second hypothesis attempts to prove the relationship between a firm's HR policies and practices and its performance.

With the aim of examining the level of association and relationship between savings banks and performance, two types of analysis were carried out: *eta* and *eta*² statistics. A one-way analysis of variance, with the help of Snedecor's *F* statistic, was also carried out to identify the existence of significant differences in the scores for each of the savings banks clusters in relation to performance. Moreover, we used the *t*-test for paired clusters and the Tukey and Sheffé tests to identify which pairs of clusters differed most from the point of view of their performance (see Table 7).

The results shown in Table 7 suggest not only a significant relationship between profitability and savings banks clusters, but also the existence of significant differences ($p \leq 0.01$) between cluster 2 (savings banks with a precarious HR policy), cluster 3 (savings banks with an effective HR policy, although not strategically planned) and cluster 4 (savings banks with a strategically coherent HR policy). Therefore, and as the HRM literature suggests, the behaviour of employees in the organization has great impact on the performance of the company (e.g. Ulrich, 1997; Guest, 1997). The policies and practices of HR management play an important role in this behaviour, since it can affect individual employees' achievements both by its influence on their ability

Table 7 Correlation between savings banks and performance

Relationship	Cluster	<i>n</i>	Mean	<i>SD</i>	<i>eta</i>	<i>eta</i> ²	<i>F</i> (<i>p</i>)	Tukey/ Sheffé	<i>t</i> (<i>p</i>)	
Profitability	1	5	-0.0004	0.0001				2-4	2-4	2-3
	2	3	-0.0033	0.0027	0.651	0.425	6.405		-2.79	-3.73
	3	6	0.0018	0.0015			(0.00)	2-3	(0.01)	(0.00)
	4	16	0.0000	0.0017						

and motivation and through the structures that lead them to higher achievements in their jobs. Moreover, if the returns from investing in superior HR management exceed their real cost, then profitability increases (Huselid, 1995; Huselid *et al.*, 1997).

These results suggest that those organizations that wish to improve their relationship with their HR, and so convert their employees into strategic assets, will have to: 1) give specific human capital the strategic importance and value it deserves and 2) promote HR policies and practices that enhance the personnel's internal development (e.g. Bailey; 1993; Lado and Wilson, 1994; Wright *et al.*, 1994; Ulrich, 1997).

In accordance with these results and those obtained before, we can conclude that the savings banks with HR systems that properly combine their HR practices to create and develop a strategic human capital are the ones that have facilitated the development of organizational capabilities and have better performance.

Conclusions

The purpose of this research was to analyse the role of human resource management in the development of organizational capabilities and its influence on the firm's performance from a resource-based view. The results provide some evidence to support both hypotheses. Thus, differences found in organizational capabilities development and in performance between savings banks could be explained partly by their HR policies.

The results obtained in this research indicate that HR practices and policies have a significant positive influence on the development of organizational capabilities, as Lado and Wilson (1994) argued. Thus, managerial capabilities are influenced by the existence of an HR policy which encourages specific human capital creation through strategic planning of the personnel's internal development. Input-based capabilities are positive and significantly influenced by the HR practices that promote internal labour-market development, HR internal development planning and long-term and team orientation. Transformational capabilities are encouraged mainly by the existence of a system where ideas and criticism are collected. Finally, output-based capabilities are influenced by the HR practices which encourage the personnel's internal development. Therefore, we can conclude that the savings banks with an HR system that properly combines their HR policies to create and develop strategic human capital are the ones that have facilitated the development of organizational capabilities.

Consistent with the theoretical propositions, this work also shows that firms which better combine their HR practices to create and to develop a strategic human capital pool have shown better levels of organizational performance. This is so because, among other things, the way an organization manages its HR has a direct effect on its behaviour and, therefore, on the profitability of the organization. Moreover, these practices, which are difficult for competitors to copy or imitate, may facilitate or inhibit the development and utilization of other organizational capabilities (Lado and Wilson, 1994; Kamoche, 1996). Thus, our findings add to previous works that have contributed to enhancing the impact of HRM on organizational performance (Arthur, 1994; Huselid, 1995; McDuffie, 1995; Delery and Doty, 1996; Koch and McGrath, 1996; Youndt *et al.*, 1996; Huselid *et al.*, 1997; Wright *et al.*, 1999; Fey *et al.*, 2000; Khatri, 2000).

This research has, therefore, important practical and academic implications for HR management. So, from a practical point of view, the main conclusions of this work concern the manner in which savings banks must face the relationship with their personnel *vis-à-vis* the future, a future that will be marked by strong competition and the need to make important strategic changes, where HR policy may figure as a determining factor in competitive differential. We must, therefore, support the argu-

ments of authors such as Lado and Wilson (1994), Pfeffer (1994), Wright *et al.*, (1994, 1999) and Ulrich (1997), among others, that those organizations that wish to succeed will have to improve their relations with HR to convert them into strategic assets, promoting the deployment of HR policies and practices to attract, develop and retain them.

From an academic standpoint, this work contributes to HR literature, since, from the point of view of strategic management researchers, the RBV provides a conceptual framework in which to examine the role of HR as a source of competitive advantage. While, traditionally, the costs associated with the development of HR strategy have been regarded as an operating expense, if, in fact, human resources are a source of sustained competitive advantage, then these costs would be better considered as an investment in capital assets (Pfeffer, 1994). The empirical results of our research also suggest that the way an organization manages its HR has a perceptible significant relationship with the organization's results, a revelation that supports the RBV, where business competitiveness is related, at least in part, to the investments in company-specific assets.

It must also be pointed out that the results obtained support the idea put forward by authors such as Lengnick-Hall and Lengnick-Hall (1988), Wright and Snell (1991), MacDuffie (1995) and Becker and Gerhart (1996), among others, that it is necessary to use the different HR policies and practices in the architecture of the system as a more appropriate unit of analysis for the study of the relationship of these with the organization's performance since, then, many more aspects that may influence the employees' behaviour are included.

However, the results of this research must be viewed with caution since, although the response was quite high, we do not know whether the companies that did not respond behaved substantially differently from those that did. Moreover, using a sample from within only one industry is a potential limit to the generalizability of the results. Also, the relatively short period of time used to analyse performance may not have been long enough to explain the influence of certain practices with a long gestation period. It must also be borne in mind that we do not know whether those savings banks that obtained better results are those that can afford the designing and implementation of the proposed policies and practices, thus giving rise to the reverse causality problem. Also, the use of postal questionnaires to obtain information does not explain the facts as profoundly as do qualitative techniques (e.g. case studies),³ which develop more comprehensive and valid models and frameworks (Becker and Gerhart, 1996; Boxall, 1996). Hence, we suggest future qualitative research that would allow us to analyse the savings banks in greater depth and so corroborate the results obtained, since qualitative research also shifts the focus from content to process, which is consistent with the shifting focus of the HRM field from planning to strategy (Khatri, 2000).

It should also be kept in mind that many other factors besides HR practices could influence organizational performance. Also, it is possible that there are complex relationships between HR practices and other resources of the firm, such as technology that goes beyond the objectives of this work. Moreover, although in this initial study the external factors have not been borne in mind, we are aware of their influence on the firm's performance. For this reason, we suggest the carrying out of further investigations attempting to measure the comparative and complementary influence of internal and external factors on the firm's performance.

Finally, and as some authors suggest (e.g. Coff, 1997, 1999; Kamoche and Mueller, 1998), it would be helpful to continue the analysis of management dilemmas, such as rent sharing, associated with human assets that have not been fully articulated in the

human capital literature. Thus, future strategy-driven studies that integrate organizational behaviour, human resource management and organizational theory literature are recommended.

Notes

- 1 According to Peteraf (1993), four conditions must be met for a firm to enjoy sustained above-normal returns: 1) *Heterogeneity*: resource bundles and capabilities underlying production are heterogeneous across firms because they have intrinsically different levels of 'efficiency'. So, firms with superior resources will earn rents. 2) *Ex post limits to competition*: for heterogeneity to be preserved it should be difficult or impossible for competitors to imitate or substitute the resources or capabilities which generate rents. 3) *Imperfect mobility*: resources that are idiosyncratic to the extent that they have no other use outside the firm are perfectly immobile. Because immobile or imperfectly mobile resources are non-tradable or less valuable to other users, they cannot readily be bid away from their employer. 4) *Ex ante limits to competition*: prior to any firm's establishing a superior resource position, there must be limited competition for that position.
- 2 According to Lado and Wilson (1994), *managerial capacities* include 1) the unique capabilities of the organization's strategic leaders to establish a strategic vision, communicate that vision throughout the organization and empower organizational members to realize that vision, and 2) the unique ability to enact a beneficial firm-environment relationship. *Input-based capabilities* encompass the physical resources, organizational capital resources, human resources, knowledge, skills and capabilities that enable a firm's transformational processes to create and deliver products and services that are valued by customers. *Transformational capabilities* describe organizational capabilities required to convert inputs advantageously into outputs. *Output-based capabilities* include all knowledge-based invisible assets, such as corporate reputation or image, product or service quality and customer loyalty.
- 3 See the special issue of *Human Resource Management* (1999) entitled 'Strategic Human Resource Management in Five Leading Firms' for an overview.

References

- Amit, R. and Schoemaker, P.J. (1993) 'Strategic Assets and Organizational Rent', *Strategic Management Journal*, 14: 33-46.
- Argyris, C. (1957) 'The Individual and Organization: Some Problems of Mutual Adjustment', *Administrative Science Quarterly*, 25: 541-55.
- Arthur, J.B. (1994) 'Effects of Human Resource Systems on Manufacturing Performance and Turnover', *Academy of Management Journal*, 37: 670-87.
- Bailey, T. (1993) *Discretionary Effort and the Organization of Work: Employee Participation and Work Reform since Hawthorne*. New York: Columbia University working paper.
- Barney, J.B. (1991) 'Firms' Resources and Sustained Competitive Advantage', *Journal of Management*, 17: 99-120.
- Barney, J.B. (1995) 'Looking Inside for Competitive Advantage', *Academy of Management Executive*, 9: 49-67.
- 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.
- Becker, B. and Gerhart, B. (1996) 'The Impact of Human Resource Management on Organizational Performance: Progress and Prospects', *Academy of Management Journal*, 39: 779-801.
- Bowen, D., Ledford, G. and Nathan, B. (1991). 'Hiring for the Organization, not the Job', *Academy of Management Executive*, 5: 35-51.
- Boxall, P. (1996) 'The Strategic Human Resource Debate and the Resource-based View of the Firm', *Human Resource Management Journal*, 6: 59-75.
- Coff, R. (1997) 'Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-based Theory', *Academy of Management Review*, 22: 374-402.

- Coff, R. (1999) 'When Competitive Advantage Doesn't Lead to Performance: The Resource-based View and Stakeholder Bargaining Power', *Organization Science*, 10: 119–32.
- Collis, D.J. (1994) 'Research Note: How Valuable Are Organizational Capabilities?', *Strategic Management Journal*, 15: 143–52.
- De Saá, P. (1999) 'El Sistema de Recursos Humanos como Factor Determinante de la Competitividad de las Cajas de Ahorros Españolas: Una Aplicación de la Teoría de la Empresa Basada en los Recursos', doctoral thesis, Universidad de Las Palmas de Gran Canaria.
- Delaney, J.T. and Huselid, M.A. (1996) 'The Impact of Human Resource Management Practices on Perceptions of Organizational Performance', *Academy of Management Journal*, 39: 949–69.
- Delery, J.E. and Doty, D.H. (1996) 'Models of Theorizing in Strategic Human Resource Management: Tests of Universalistic, Contingency, and Configurational Performance Predictions', *Academy of Management Journal*, 39: 802–35.
- Dolan, S., Shuller, R.S. and Valle, R. (1999) *La Gestión de los Recursos Humanos*. Madrid: McGraw-Hill Interamericana de España.
- Dyer, L. and Reeves, T. (1995) 'Human Resource Strategies and Firm Performance: What Do We Know and Where Do We Need to Go?', *International Journal of Human Resource Management*, 6: 656–70.
- Fey, C.F., Björkman, I. and Pavlovskaya, A. (2000) 'The Effect of Human Resource Management Practices on Performance in Russia', *International Journal of Human Resource Management*, 11: 1–18.
- Flavián, C., Fuentelsaz, L. And Polo, Y. (1998) 'Comportamiento Estratégico y Rivalidad entre Cajas de Ahorros', *Empresa y Economía Institucional*. Las Palmas de Gran Canaria: ACEDE.
- Foss, N.J. (1997) *Resources, Firms, and Strategies*. New York: Oxford University Press.
- Grant, R.M. (1991) 'The Resource-based Theory of Competitive Advantage: Implications for Strategy Formulation', *California Management Review*, 17: 114–35.
- Guest, D.H. (1997) 'Human Resource Management and Performance: A Review and Research Agenda', *International Journal of Human Resource Management*, 8: 263–76.
- Hackman, R. and Oldham, G. (1976) 'Motivation through the Design of Work: Test of a Theory', *Organizational Behavior and Human Performance*, 16: 250–79.
- Hamel, G. and Prahalad, C.K. (1990) 'El Propósito Estratégico', *Harvard-Deusto Business Review*, 41: 75–90.
- Huselid, M.A. (1995) 'The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance', *Academy of Management Journal*, 38: 673–703.
- Huselid, M.A., Jackson, S.E. and Schuler, R.S. (1997) 'Technical and Strategic Human Resource Management Effectiveness as Determinants of Performance', *Academy of Management Journal*, 40: 171–88.
- Itami, H. (1987) *Mobilizing Invisible Assets*. Cambridge, MA: Harvard University Press.
- Jansen, E. and Von Glinow, M. (1985) 'Ethical Ambivalence and Organizational Reward Systems', *Academy of Management Review*, 10: 814–22.
- Kamoche, K. (1996) 'Strategic Human Resource Management within a Resource-capability View of the Firm', *Journal of Management Studies*, 33: 213–33.
- Kamoche, K. and Mueller (1998) 'Human Resource Management and the Appropriation-learning Perspective', *Human Relations*, 51: 213–33.
- Khatri, N. (2000) 'Managing Human Resource for Competitive Advantage: A Study of Companies in Singapore', *International Journal of Human Resource Management*, 11: 336–65.
- Koch, M.J. and McGrath, R.G. (1996) 'Improving Labor Productivity: Human Resource Management Policies Do Matter', *Strategic Management Journal*, 17: 335–54.
- Lado, A. and Wilson, M. (1994) 'Human Resource System and Sustained Competitive Advantage: Competency-based Perspective', *Academy of Management Review*, 19: 699–727.
- Lawler, E. (1992) 'Pay the Person, not the Job', *Industrial Week*, 7: 19–24.

- Lengnick-Hall, C.A. and Lengnick-Hall, M.L. (1988) 'Strategic Human Resources Management: A Review of the Literature and a Proposed Typology', *Academy of Management Review*, 13: 454–70.
- MacDuffie, J.P. (1995) 'Human Resources Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry', *Industrial and Labor Relations Review*, 48: 197–221.
- Mueller, G. (1996) 'Human Resources as Strategic Assets: An Evolutionary Resource-based Theory', *Journal of Management Studies*, 33: 757–85.
- Murphy, K. and Cleveland, J.N. (1991) *Performance Appraisal: An Organizational Perspective*. Needham Heights, MA: Allyn & Bacon.
- Odiome, G. (1984) *Strategic Management of Human Resources: A Portfolio Approach*. San Francisco, CA: Jossey-Bass.
- Penrose, E.T. (1959). *The Theory of the Growth of the Firm*. New York: Wiley.
- Peteraf, M.A. (1993) 'The Cornerstone of the Competitive Advantage: A Resource-based View', *Strategic Management Journal*, 14: 179–91.
- Pfeffer, J. (1994) 'Competitive Advantage through People', *California Management Review*, 36: 9–29.
- Reed, R. and DeFillippi, R. (1990) 'Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage', *Academy of Management Review*, 15: 88–102.
- Schuler, R.S. and MacMillan, I. (1984) 'Gaining Competitive Advantage through Human Resource Practices', *Human Resource Management*, 23: 241–56.
- Teece, D.J., Pisano, G. and Shuen, A. (1997) 'Dynamic Capabilities and Strategic Management', *Strategic Management Journal*, 18: 509–33.
- Tichy, N., Fombrum, C. and Devanna, M. (1982) 'Strategic Human Resource Management', *Sloan Management Review*, 23: 47–61.
- Ulrich, D. (1997) 'Measuring Human Resources: An Overview of Practice and Prescription for Results', *Human Resource Management*, 3: 303–20.
- Wanous, J.P. (1992) *Organizational Entry: Recruitment, Selection, Orientation and Socialization of Newcomers*, 2nd edn. Reading, MA: Addison-Wesley.
- Wernerfelt, B. (1984) 'A Resource-based View of the Firm', *Strategic Management Journal*, 5: 171–80.
- Wright, P.M. and McMahan, G.C. (1992) 'Theoretical Perspective for Strategic Human Resource Management', *Journal of Management*, 18: 295–320.
- Wright, P.M., McMahan, G.C. and McWilliams, A. (1994) 'Human Resources and Sustained Competitive Advantage: A Resource-based Perspective', *International Journal of Human Resource Management*, 5: 301–26.
- Wright, P.M., McMahan, G.C., McCormick, B. and Sherman, W.A. (1998) 'Strategy, Core Competence, and HR Involvement as Determinants of HR Effectiveness and Refinery Performance', *Human Resource Management*, 37: 17–29.
- Wright, P.M., McCormick, B., Sherman, W.A. and McMahan, G.C. (1999) 'The Role of Human Resource Practices in Petro-Chemical Refinery Performance', *International Journal of Human Resource Management*, 10(4): 55–7.
- Youndt, M.A., Snell, S.A., Dean, J.W. and Lepak, D.P. (1996) 'Human Resource Management Manufacturing Strategy, and Firm Performance', *Academy of Management Journal*, 39(4): 836–66.