Causal relationship between HRM policies and organisational performance: Evidence from the Greek manufacturing sector

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Summary Blending insights from the contingency theory, the resource-based view, and the AMO theory, the purpose of this paper is to investigate the HRM-performance causal relationship in the Greek context. The empirical research is based on a sample of 178 organisations operating in the Greek manufacturing sector. Using structural equation modelling the results of the study revealed that the ability to perform (resourcing and development), motivation to perform (compensation and incentives), and opportunity to perform (involvement and job design) HRM policy domains are moderated by business strategies (cost, quality, innovation), and additionally, the motivation to perform is further moderated by managerial style and organisational culture. Further, the results indicate that the impact of HRM policies on organisational performance is fully mediated by employee skills, attitudes, and behaviour. The paper concludes that although the motivation to perform HRM policy domain causes organisational performance, through employee attitudes, it may be supported that organisational performance positively moderates the effectiveness of this HRM policy domain, raising thus the question of reverse causality.
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Introduction

Even though steps have been made in identifying the HRM — performance relationship over the past decade or so, serious gaps in our knowledge still remain (Purcell et al., 2003). Spe-

cifically, analysing the literature on the HRM-performance relationship, Wright et al. (2005) concluded that although positive relationships have been reported between HRM and performance, the causal ordering of the variables integrated in these relationships was not convincing. This conclusion was based on the observation that the design of the research with respect to the method of data collection and the nature of the mediating variables indicated was not

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compelling. Specifically, whilst in all of the 66 studies reviewed there was at least one positive relationship between HR practices and performance, the design used was not ''predictive'' (i.e., HR practices were not measured before the performance period). On the contrary, in most studies the design were either ''post-predictive'' (i.e., HR practices were measured after the performance period), ''contemporaneous'' (i.e., HR practices were measured contemporaneously with performance), or ''retrospective'' (i.e., HR practices were measured back-ward looking the performance period). Thus, these data designs produced mixed results.

Additionally, whilst it was assumed that effectively implemented HR practices will ''cause'' higher performance, it was supported that it is more important to see ''how'' something is done compared to just ''what'' has been done (Paul and Anantharaman, 2003), it was further argued that it is important to consider the intervening steps in the HRM-performance relationship, or to consider the variables mediating or moderating the endpoint variables (Becker and Gerhart, 1996). The HRM-outcomes categorised as ''employee skills'' (employee competences, cooperation), ''employee attitudes'' (motivation, commitment, satisfaction) and ''employee behaviour'' (retention, presence), were the usually employed sets of mediating variables (Paauwe, 2004; Lepak et al., 2006). However, the studies considering HRM-outcomes as mediating variables also produced mixed results with respect to causation (Wright et al., 2005).

Boselie et al. (2005), analysing further the literature of 104 studies on the HRM-performance relationship, reported wide disparities in the treatment of the components emphasising the so-called ''black box'' stage between HRM and performance. They indicated three theoretical frameworks that dominate the field: the ''contingent framework'', i.e., HRM influences performance in relation to contextual factors from the external environment such as business strategies (Schuler and Jackson, 1987), the ''resource-based view'', i.e., HRM influences performance according to the human and social capital held by the organisation (Barney, 1991), and the ''AMO theory'', i.e., HRM influences performance in relation to employees' 'ability', 'motivation' and 'opportunity' to participate (Appelbaum et al., 2000).

Specifically, the theoretical frameworks used for explaining the HRM-performance relationship did not provide a specific structure that defines the precise mechanisms through which HRM policies influence business performance (Wright and Gardner, 2003). These precise mechanisms could be considered to outline what is taking place in the ''black box'' between HRM policies and business performance (Purcell et al., 2003). However, the usual research design in investigating the effect of HRM policies on business performance was to statistically test whether individual HRM policies or systems have a significant impact on business performance (Becker and Gerhart, 1996). This research design did not consider the intervening steps, or the mediating variables, between HRM policies and business performance. The mediating variables, shaping the ''black box'' in the HRM-performance relationship, were considered to constitute one or more smaller boxes in a linear causal process from HRM to performance (Wright and Gardner, 2003). Numerous models have been proposed suggesting mediating variables between the two end-points in the HRM-performance relationship. Becker and Huselid (1998), for example, suggested that HRM policies shape employee behaviours that consequently have an impact on business performance. Wright and Snell (1998) suggested that HRM policies improve employee skills that affect employee behaviours, which in turn have an impact on business performance. Similarly, Becker et al. (1997) suggested employee skills, employee attitudes and employee behaviours to form discretionary effort, which in turn affects business performance. However, the influence of HRM policies on business performance directly or indirectly through HRM outcomes (employee skills, attitudes, and behaviours) are not necessarily mutually exclusive, but on the contrary, they can be complementary (Youndt et al., 1996; Purcell and Hutchinson, 2007).

Moreover, considering that there was no consensus on the HRM practices, policies, and systems measured, and accordingly the constructs developed, Boselie et al. (2005), Lepak et al. (2006), and Wright et al. (2005) argue that the results derived in these studies were not comparable. In fact, although there were attempts to produce 'HRM checklists', these lists were not generally accepted due to the different context and concept of HRM employed by the authors of the studies. The incomparability of the results was additionally assured by the different specification of the models used, in terms of the inclusion or not of relevant contingency variables as moderators and controls. Actually, a miss-specified model either due to a missing relevant variable or due to the inclusion of an irrelevant variable will produce, by definition, erroneous results.

Summarising, Wright and Gardner (2003, cited in Purcell and Kinnie, 2007) indicate ''While evidence mounts that HR practices are at least weakly related to firm performance, significant methodological and theoretical challenges exist ... Methodologically, there is no consensus regarding which practices constitute a theoretically complete set of HR practices; how conceptually categorize these practices; the relevance of business strategy; the appropriate level of analysis; or how HR performance and firm performance are to measured ... Theoretically, no consensus exists regarding the mechanism by which HR practices might impact on firm outcomes''.

Considering the presentation thus far referring to the study designs (variables, constructs, data) and the theoretical frameworks (causation, components of the 'black box') it was suggested the need for further research because, ''The most convincing causal evidence comes not from one study but from a body of research and a multitude of type of evidence ...'' (Harter et al., 2002, p. 276, cited in Wright et al., 2005), and because, ''10 years on, the 'Holy Grail' of decisive proof remains elusive'' (Boselie et al., 2005). Furthermore, although it was accepted that HRM is positively related to organizational performance, there was a great need for additional evidence to support the HRM-performance relationship from different contexts. Gerhart (2005, p. 178) makes an appropriate comment in this regard: ''This is a concern because it seems unlikely that one set of HR practices will work equally well no matter what context.''

Specifically, while a few investigations have been initiated in other parts of the world such as in emerging markets and in transitional countries, the literature highlights that

most of studies examining the relationship between HRM and organisation's performance have been conducted in the United States and to a lesser extent in the United Kingdom. Therefore, the question that arises is whether the US/UK-oriented models, however appropriate they might be for US/UK, hold in other contexts (Boselie et al., 2003). To fill this gap and to further examine the process through which HRM policies impact organisational performance, it is important to conduct analysis in non-US/UK context. This paper investigates how HRM influences organisational performance in the Greek manufacturing context. Greece is a peripheral country in the European Union that is influencing and being influenced by the Balkan and the Black Sea countries. The Greek, and the Balkan and Black Sea countries, context is rather different from the West European countries context. Therefore, it would be interesting to push forward the debate on the HRM's role in improving organisational performance to countries such as Greece. The remaining paper is structured as following. Next we present the operational model and the hypotheses to be tested. This is followed by a discussion on the methodology adopted for this study. The next sections concentrate on the key results, discussion, and practical implications of the study. Finally, we summarise the main conclusions of the study and highlight the main contributions, limitations of the analysis and propose directions for further research. Thus, bearing in mind the HRM-performance literature boundaries we hope the findings in this study would clearly contribute to this literature.

Operational model and hypotheses

Figure 1 depicts an operational model linking HRM to organisational performance. The model is adapted from Paauwe and Richardson (1997), Purcell et al. (2003), Boselie et al. (2005), Lepak et al. (2005), and Purcell and Hutchinson (2007), and it is blending insights from the theories of contingency, resourced-based view and AMO into an overall theory of HRM (Boselie et al., 2005).

Although it seems to be a general belief that the HRM-performance relationship depends on contextual factors such as business strategy, there is little empirical evidence to support this belief (Wright and Gardner, 2003; Godard, 2004; Gerhart, 2005). ''If studies of the HR-performance relationship continue to find no evidence that context matters, either the contingency theory central to strategic HR is flawed or the methodology'' (Gerhart, 2005, p. 178). Following this belief we advocate that an

organisation's set of HRM policies will be effective if it is consistent with other business strategies (Gomez-Mejia and Balkin, 1992), suggesting that business strategies are followed by HRM policies in determining business performance (contingency perspective). Porter's (1985) generic business strategies of cost reduction, quality enhancement and innovation, for an organisation to gain and retain competitive advantage, may be employed for a number of reasons. First, it has been shown to be a relatively powerful predictor of organisational effectiveness (Youndt et al., 1996). Second, scholars (see Schuler and Jackson, 1987; Schuler, 1989) highlight its implications for an organisation's HRM policies. Third, the theory has been commonly used in the SHRM literature (Guest, 1997). Based on these three business strategies, scholars offered a list of options positively linking business strategies with human resource management policies (see Schuler and Jackson, 1987; Youndt et al., 1996). Particularly, with respect to the relationship between resourcing policies and business strategy, not many differences exist. In general, the emphasis organisations put on recruitment in order to acquire the proper mix of employees is equally important and thus does not depend on business strategy. Organisations that put less emphasis on employee training and development are those that follow a cost strategy. This is because training and development of employees includes costs. In contrast, organisations with an innovation strategy put more emphasis in training and development due to the fact that they need to develop not only the knowledge and skill of their employees, but also attitudes in order to encourage creativity, flexibility, propensity to take risks and the co-operation that this strategy requires to be implemented with success (Sanz-Valee et al., 1999). Organisations with a quality strategy also pay extensive attention on training and development in order to stimulate co-operation and obtain the continuous improvement that quality implies (Sanz-Valee et al., 1999). More differences between the types of strategies exist with respect to employee rewards. Organisations with an innovation strategy afford higher rewards due to their ability to attract the qualified flexible, creative and skilled people necessary for their development. Organisations that follow innovative or quality enhanced strategies put more emphasis in promotion arrangements, in comparison to organisations that follow a cost strategy, because they have more need of a longer-term orientation of employees (Schuler and Jackson, 1987). On the contrary, organisations with a cost strategy do not afford higher rewards or promotion arrangements, because they try to keep
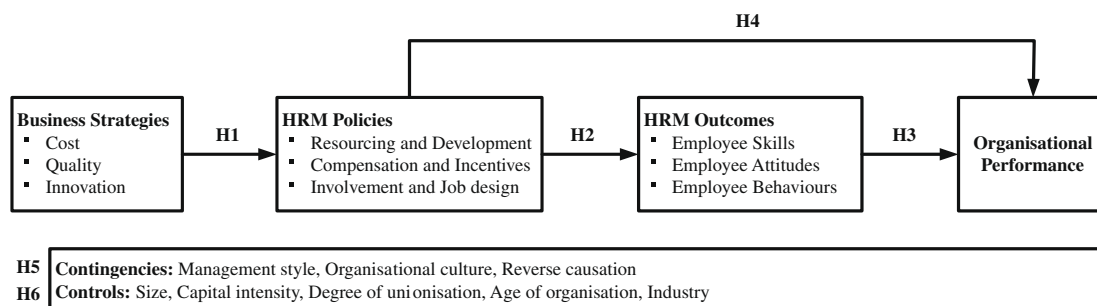

Figure 1   The operational model for the HRM-performance relationship.

costs al low levels. Generally, the emphasis of the HRM policies with respect to the innovation strategy facilitate cooperative, interdependent behaviour that is oriented toward the longer term, and foster exchange of ideas and risk taking. The emphasis of the HRM policies with respect to the quality strategy facilitate quality enhancement by helping to ensure highly reliable behaviour from individuals who can identify with the goals of the organisation. Finally, the emphasis of the HRM policies with respect to the cost strategy maximize efficiency by providing means for management to monitor and control closely the activities of employees (Schuler and Jackson, 1987).

Thus, between the two fundamental approaches in the HRM-performance debate, i.e., the 'best-practices stream' and the 'best-fit stream', we are focusing on the second approach as being preferable (Boselie et al., 2003). This approach has been also followed in the models of Becker et al. (1997) and Guest (1997) where ''vertical 'fit' is a necessary condition for success, represented by the link between strategy and design of HRM systems or HRM practices'' (Paauwe, 2004, p. 58). Furthermore, ''we argue that infusing the strategy construct into the research stream can aid in understanding both the determinants of HR practices and also how an alignment of HR practices with strategy can provide a significant incremental effect on performance'' (Wright and Gardner, 2003, p. 315). Therefore, considering that it is an important task to further explore the strength and nature of the contingency perspective, in terms of business strategies affecting HRM policies, we hypothesise that:

Hypothesis 1: Positive relationships of different strength exist between business strategies and HRM policies.

Considering that business strategies determine HRM polices (Wright and Gardner, 2003), we further argue that HRM policies may play an important role in building the organisation's human capital pool by developing its rare, inimitable and non-substitutable internal resources (resource-based view perspective). The core philosophy of the resource-based view perspective suggests that HRM policies have a direct impact on employee skills, motivation and behaviour, which are subsequently translated into improved organisational performance (Boxall and Steeneveld, 1999), and it further advocates that the potential for competitive advantage of an organisation is based on its ability to exploit the inimitable characteristics of its pool of resources and capabilities, supporting thus, that differences in business performance can be ascribed to the inimitable features of its resources and capabilities (Barney, 1991) and not just to the HRM policies themselves since they are easily copied (Wright et al., 2003). However, Guest (1997) assumes that only when all HRM outcomes, such as skills, attitudes, and behaviour, are achieved we can expect higher organisational performance. This assumption may be important in terms of further exploring the existence, nature, and strength of the mediating variables in the HRM-performance relationship (Wright and Gardner, 2003).

However, theoretical and empirical work in the field of HRM suggests that there are several major mechanisms through which three systems of HRM policies shape individual and aggregate employee characteristics that influence organisational performance (Purcell et al., 2003; Lepak et al., 2006): (a) the HRM system that directly influences employees' ''ability to perform'', (b) the HRM system that influences employees' ''motivation to perform'', and (c) the HRM system that influences employees' ''opportunity to perform'' (AMO perspective). The HRM policies that constitute these systems are not considered to be ''bundles'' of HRM policies that the best practice approach advocates, but they are just HRM policies that put up the conditions of the ''black box'' (Purcell et al., 2003; Harney and Jordan, 2008).

Specifically, the HRM system, or HRM policy domain, that involves the traditional HRM areas of resourcing and development directly influences employees' ability to perform by improving their knowledge, skills, and abilities. The HRM system involving the HRM areas of compensation and incentives directly influences employees' motivation to perform by shaping their attitudes of motivation, commitment, and satisfaction. The HRM system including the HRM areas of involvement and job design directly influences employees' opportunity to perform by shaping their behaviours such as employee retention (counterpart of turnover) and presence (counterpart of absenteeism). However, each of these three HRM systems may influence all the three HRM outcome categories of employees' skills, attitudes, and behaviours and not just the one as has been indicated above. Therefore, it may be important to further explore the relationship and the strength between the HRM policy systems or domains and the HRM outcomes (Lepak et al., 2006).

Thus, these HRM policy domains may influence organisational performance either directly or indirectly through the skills, attitudes, and behaviours of the organisation's human capital pool. Therefore, the philosophy of the AMO perspective is that it encompasses mediating changes in employees' abilities, motivations, and opportunities to participate that positively influence organisational performance, colouring hence the ''black box'' in the HRM-performance relationship. However, the influence of HRM outcomes such as employee skills, attitudes, and behaviours on organisational performance may be both directly and indirectly, from skills through attitudes and then through behaviours (Purcell and Hutchinson, 2007). It is argued that employee characteristics, such as employee skills, do not provide value to the organisation unless they are embedded through proper employee attitudes (Wright et al., 1994), and furthermore, it is the employee attitudes that determine to what extent employees are prepared to use effectively their various capabilities for the benefit of the organisation (Schuler and Jackson, 1987). Moreover, it is argued that in order to bring lasting and better results and to significantly contribute to the success of their organisation, employees must be motivated, committed, and satisfied (Paul and Anantharaman, 2003; Paauwe, 2004). Additionally, it is accepted that unless the organisation is able to retain its employees, it will not be able to capitalize on the human assets developed within the organisation. Thus, employee retention and employee presence may have a positive impact on organisational effectiveness (Boselie et al., 2003).

According to the discussion thus far we may highlight the following questions (Lepak et al., 2006):

1. Which of the three HRM systems of resourcing and development (ability), compensation and incentives (motivation), and involvement and job design (opportunity) is most influential in realizing the HRM outcomes of employee skills, attitudes, and behaviours?
2. Are HRM systems associated with more than one HRM outcome category?
3. Which specific practices are most influential in realizing the objectives of the three HRM policy domains?
4. Which of the three HRM outcomes is most influential in mediating the HRM — performance relationship?
5. Are the influences of the three HRM systems on organisational performance fully or partially mediated by the three HRM outcomes?

In order to answer to these questions, we may hypothesise as follows:

Hypothesis 2: Strong and positive relationships exist between HRM systems (ability, motivation, opportunity) and HRM outcomes (employee skills, attitudes, behaviours).

Hypothesis 3: Improvements in HRM outcomes positively mediate the relationship between HRM systems and organisational performance.

Hypothesis 4: Positive relationships exist between HRM systems and organisational performance.

Although in the discussion thus far we have implicitly assumed that HRM policies lead to performance, such a one-way line of causation may be unsatisfactory (Edwards and Wright, 2001). The usual key criticism in the HRM-performance relationship is that, rather than HRM policies leading to high performance, it is the highly performing firms that can afford costly HRM policies (Huselid, 1995; Ichniowski et al., 1997; Gerhart, 1999). Thus, we may suppose that high performance may moderate the extensive use of HRM policies. Furthermore, management style may also be considered as a moderator in the extensive use of HRM policies, because different styles of management may have influences on workers (Boxall and Purcell, 2003; Becker and Huselid, 2006; Purcell and Hutchinson, 2007). Additionally, the culture of the organisation with respect to the task-oriented forms followed may moderate the HRM-performance relationship by affecting the organisational and psychological climate (Lepak et al., 2006). Thus, apart from the business strategies, according to the contingency approach in the proposed model, we hypothesise that:

Hypothesis 5: Organisational context factors (management style, culture, reverse causality) moderate the HRM-performance relationship.

Without incorporating relevant controls (and contingencies) as moderators in the HRM-performance relationship into the research designs the results of the analyses may be erroneous (Boselie et al., 2005). The typical controls used are size, capital intensity, age of organisation, degree of unionisation, and industry. Hence, following again the contingency approach in the proposed model, it is hypothesised that:

Hypothesis 6: Controls (size, capital intensity, age of organisation, degree of unionisation, industry) moderate the HRM-performance relationship.

Summarising, although it is well accepted that there is a serial positive association between HRM policies, HRM outcomes, and organisational performance (Guest et al., 2003), the proposed model based on the contingency perspective is trying to explore the strength and the nature of this association.

Methodology

Sample

A large questionnaire survey in a possible 23 industries in the Greek manufacturing sector was carried out. A sample of 600 organisations was used from the main Greek directory — *ICAP*. The sample was obtained by employing the stratified methodology. The strata were the 23 manufacturing sector industries including organisations with more than 20 employees. Twenty percent of the approximately 3000 organisations were randomly chosen from each stratum of the directory. Using personal connections-samplers, the questionnaires were taken personally to most organizations. One hundred and seventy eight (178) usable questionnaires were received, a response rate of approximately 30%. The distribution of the sample organisations was similar with the distribution of the population organisations. Specifically, the distribution of the sample organisations was as follows: food products (17.4), beverages (5.6), textiles and textiles products (6.7), linen (1.1), wearing apparel (11.2), footwear (1.1), leather products (1.1), wood and cork (1.1), pulp and paper (1.1), petroleum products (1.1), chemicals (5.1), pharmaceuticals (3.9), rubber and plastic products (6.2), non-metallic mineral products (11.8), basic metal industries (1.7), metal products except machinery (6.7), machinery and equipment (3.4), office machinery and computers (4.5), electrical equipment (1.7), electrical machinery (1.1), motor and other transport equipment (1.7), furniture (3.4), other (1.7).

The breakdown of company size with regard to number in the labour force is as follows: from 20 to 100 (41.5%), from 101 to 200 (25.5%), and more than 200 (33.0%). Additionally, the vast majority (96.6%) of the sample organisations were private organisations and only 3.4 were state owned or trust/friendly society/co-operative organisations. Furthermore, 68.5% of the sample organisations were private organisations not belonging to any wider group of organisations, 24.7% were belonging to a Greek group of organisations, and only 6.8% were belonging to a foreign group of organisations.

Most of the questions for the survey were drawn from existing international HRM surveys such as the Price Waterhouse Cranfield Project Survey (Brewster and Hegewisch, 1994). The questionnaire was originally developed in English, then, it was translated into Greek, and finally translated back from Greek to English. The translated questionnaire was piloted in 10 organisations, and it was handed to the CEO, or Personnel Officers, or Financial Officers of the sample organisations. The survey questionnaire, were completed by one person responsible in each firm for the HRM

function. We acknowledge this as a limitation, considering that it is not how many people respond to a survey that is critical but who responds to the survey that is most important (Lepak et al., 2006). However, the application of Harman's single factor test (Harman, 1967) to all the relevant variables in the model, using the eigenvalue greater than one criterion, revealed seven factors, and not just one. Thus, we believe that the common method bias in the data was relatively limited.

Measures

All variables used in the study are presented in column one of Table 1. Specifically:

Organisational performance variables

We used multiple organisational performance variables (Chenhall and Langfield-Smith, 2007) which were measured under the philosophy of a perceived rating of the organisation's performance on a five-point scale ranging from 1 = very bad to 5 = very good. Recognising the potential problems with self-report measures, to ensure the reliability and the validity of the indexes and to minimize random fluctuations and anomalies in the data the respondents were asked to report performance over the past 3 years.

HRM policies

The precise evaluation of the HRM-performance relationship requires reliable and valid assessment of HRM policies

Table 1 Variables of the survey instrument.

Variables/constructs	Cronbach alpha	Percent of variance explained
HRM policies		
Resourcing and development		
Recruitment, selection, separation, flexible work arrangements, training and development, monitoring training and development, careers, performance appraisal	0.896	61.26
Compensation and incentives		
Job evaluation, compensation, promotion, incentives, benefits	0.866	69.27
Involvement and job design		
Work design, participation, involvement, communication, health and safety	0.853	68.15
HRM outcomes		
Employee skills		
Competence, cooperation with management, cooperation among employees	0.913	90.47
Employee attitudes		
Motivation, commitment, satisfaction	0.910	89.37
Employee behaviours		
Retention, presence	0.849	89.74
Business strategies		
Cost reduction, customer service, distribution channels, quality enhancement, brand image, innovation, improvement of existing products, wide range of products	0.772	52.55
Organisational performance		
Effectiveness, efficiency, development, satisfaction, innovation, quality	0.929	80.81
Contingencies		
Management style, organisational culture, reverse causation	0.616	70.03
Controls		
Degree of unionisation, age of organisation, capital intensity, size, industry	0.618	82.33

(Gardner et al., 2001; Harney and Jordan, 2008). The accurate measurement of the HRM policies will feed the ''blackbox'' in the HRM-performance relationship. Thus, respondents were not asked about the presence or not of the HRM policies but about the effectiveness (measured on a five-point scale, where 1 = not at all effective to 5 = highly effective) of the used HRM policies, as it refers to ''how well the HR practice is performing'' (Huselid et al., 1997). However, we assume that effectiveness of an HRM policy is not reached instantly but it is rather developed over a number of years. Thus, we asked the respondents about ''the number of years (from 0 to 6 = more than 5 years) since when the organisation started using systematically the HRM policies''. Although we acknowledge that this construct is skewed to the left due to level ''6 = more than 5 years'', we still believe that this construct gives an indication of the mean value of the years (3.8652 ± 0.2550) since organisations started systematically using the HRM policies. Additionally, the Pearson's correlation coefficient ($r = 0.628$, $p = 0.005$) shows that there exists a strong correlation between the mean effectiveness values of the HRM policies and the mean years of their systematic use. Therefore, we may suppose that the HRM policies data refer either to the same performance period (contemporaneous design) or the period just before the performance period (predictive design).

HRM systems

For the classification of the HRM systems we followed the methodology of Lepak et al. (2006), indicating sets of HRM policies according to the HRM policy domains of ''resourcing and development'' aiming at employees' ''ability to perform'', ''compensation and incentives'' aiming at employees' ''motivation to perform'', and ''involvement and job design'' aiming at employees' ''opportunity to perform''.

HRM outcomes

According to the HRM policy systems, three types of HRM outcomes have been indicated (measured on a five-point scale, where 1 = very bad to 5 = very good): employee skills (competence, employees cooperation with management, cooperation among employees), employee attitudes (motivation, commitment, satisfaction), and employee behaviours (retention, presence). We have included employees cooperation in the skills construct following Batt (2002, p. 587) who suggests that employees ''use their skills in collaboration with other workers'', and arguing that although competencies are assumed to be foundational to all performance improvement, they are not sufficient for improving organizational performance unless employees are cooperated (Lopez et al., 2005).

Business strategies

For an organisation to gain and retain competitive advantage, we used Porter's (1985) generic business strategies of cost reduction, quality enhancement and innovation, which they were measured by 8 items on a five-point scale, ranging from 1 = not very important to 5 = totally essential (Snell and Dean, 1992).

Contingencies

Causality is usually investigated using time-series, or longitudinal data. However, we tried to investigate 'reverse causality' (Boselie et al., 2005) by asking the respondents to indicate their level of agreement (1 = strongly disagree to 5 = strongly agree) to the statement ''it is higher business profits that determine changes in the functions of the HRM department and not the opposite''. Additionally, considering that 'managerial style' may affect the effectiveness of the HRM functions, we asked respondents to describe the management style in the organisation (1 = heavily centralised to 5 = heavily decentralised). Although we acknowledge that the notions of centralization and decentralization refer more to structure and organisation than management style, the way the question was put to the respondents, i.e., ''indicate which of the following comes closest in describing the *management style* of your organisation: 1 = heavily centralised to 5 = heavily decentralised'' was biased in favour of the management style notion and not in favour of the structure and organisation. Furthermore, '*organisational culture*', that may affect the climate of the organisation (Lepak et al., 2006), was measured as 1 = power-oriented (emphasis on hierarchy and orientation toward the person), 2 = role-oriented (emphasis on hierarchy and orientation toward the task), 3 = project-oriented (emphasis on expertise and orientation toward the task), 4 = fulfilment-oriented (emphasis on expertise and orientation toward the person).

Controls

Several control variables were included in the analysis, to capture other organisational and environmental forces that are related to both the adoption of HRM policies and organisational performance (Delaney and Huselid, 1996), because the choice of control variables in the analysis can have an important effect on the results (Guest, 2001). The control variables included in the analysis are as follows:

Size. To capture size and scale effects since large organisations may be more likely than small ones to have well-developed HRM policies. The size variable is referred as the natural logarithm of the number of total employees in the organisation so that few large firms would not affect the results disproportionately.

Age. Age is used to capture any founding values and maturity effects of the organisation. We also took the log of this variable so that few old firms would not affect the results disproportionately.

Unions. There is much evidence that unions affect firm performance. The degree of unionisation is examined at different levels, i.e., 0%, 1-25%, 26-50%, 51-75%, and 76-100%.

Capital intensity. Capital intensity is used to capture the variations in the amount of capital on performance. It refers to the natural logarithm of total assets by total employment.

Industry. Industry is used to capture all the other industry specific effects. In this study we classified 78 organisations as being ''*traditional*'' (food products, beverages, textiles and textile products, linen, wearing apparel, footwear, and leather products) because the primary inputs for their production come mainly from the agricultural sector, which still is the traditional sector in Greece. We classified the

rest of the sample organizations as being ''*non traditional*'' (chemicals, metal products, office machinery, electrical equipment, etc.) because the primary inputs for their production do not come from the agricultural sector.

Consistency of the survey instrument

Construct internal consistency was checked computing Cronbach (1951) alphas. The figures in Table 1 indicate that the survey instrument is a reliable instrument for checking the model presented in Figure 1, because all Cronbach alphas, except for the 'contingencies' and 'control' constructs, as it was expected, are much higher than 0.70 (Nunnally, 1978). Construct validity was examined by evaluating the percent of the total variance explained per dimension obtained by applying confirmatory factor analysis (CFA) using LISREL (Jöreskog and Sörbom, 2004). The percent of total variance explained values reported in Table 1, are much higher than 50.0% indicating acceptable survey instrument construct validity (Hair et al., 1995).

Statistical analysis

To test the raised research questions of the proposed framework, the methodology of '*structural equation models*' (SEM) or '*latent variable models*' (Hair et al., 1995) was used, via LISREL and the maximum likelihood estimation (MLE) (see Jöreskog and Sörbom, 2004). SEM is effective when testing models that are path analytic with mediating variables, and include latent constructs that are being measured with multiple items (Luna-Arocas and Camps, 2008). We used MLE because tests of departure from normality, skewness and kurtosis for all variables used were (except for 'industry' and 'union intensity') within acceptable statistical limits. Furthermore, the sample size of 178 in this study is within the range of 100 to 200 for using MLE procedures.

We assessed the overall model fit following Bollen's (1989) recommendation to examine multiple indices, since it is possible for a model to be adequate on one fit index but inadequate on many others. We employed the chi-square and the normed-chi-square tests, the goodness of fit index (GFI), and examining the root mean squared error of approximation (RMSEA) (Jöreskog and Sörbom, 2004). A non-significant chi-square (i.e., $p > 0.05$) indicates that the proposed model is an adequate presentation of the entire set of relationships. However, in cases of significant chi-squares and high numbers of degrees of freedom, the value of the normed-chi-square (i.e., value of chi-square/degrees of freedom) should be used. The most flexible acceptance value of the normed chi-square must not be higher than 5, but to be more cautious it should not go above 3 (Pedhazur and Pedhazur-Schmelkin, 1991). The GFI should not go lower than 0.70 in the case of complex models (Judge and Hulin, 1993). The RMSEA considers the fit of the model to the population covariance/correlation matrix and a value of RMSEA less than 0.08 represents a good approximation, respectively. Furthermore, the normed fit index (NFI) (Bentler and Bonett, 1980) and the comparative fit index (CFI) (Bentler, 1990) are also used, for investigating the structure that best fits the empirical data. These indexes should not go lower than 0.90, but in complex models, the lowest acceptable level for the NFI and CFI is 0.80 (Hart, 1994).

Results

The means, standard deviations, and inter-correlations are presented in Table 2. The bivariate correlations indicate the basic relationships depicted in the hypotheses that accompany the model in Figure 1. However, due to the source of data (questionnaires) there may be a possibility the correlations to be more a reflection of the mental constructs of the respondents, than a reflection of reality. The estimated path diagram for the proposed HRM — performance link framework (presented in Figure 1) is presented in Figure 2. The boxes represent exogenous or endogenous observed variables and the circles represent the related latent variables. The light arrows indicate the observed variables that constitute the related latent variable and the bold arrows indicate the structural relationships between the corresponding variables. The numbers that are assigned to each arrow show the estimated standardised coefficients.

The goodness-of-fit indexes confirmed the validity of the operational model (Normed-Chi-Square = 2.92, RMSEA = 0.084, NFI = 0.91, CFI = 0.93, GFI = 0.68), although flexible levels for RMSEA and GFI were attained. We must note here that before we conclude at the results presented in Figure 2 we tried all possible paths for linking business strategies, HRM policies, HRM outcomes, organisational performance, and contingencies/controls but the results were not significant. As shown in Figure 2:

1. Business strategies have a strong, direct and different positive effect on resourcing and development (0.92), compensation and incentives (0.84), and involvement and job design (0.99), thus supporting hypothesis H1.
2. Resourcing and development has a direct positive effect on employee skills (0.36), compensation and incentives has a strong and direct positive effect on employee attitudes (0.94), and involvement and job design has a strong and direct positive effect on employee behaviours (0.97), thus supporting hypothesis H2.
3. Employee skills have a strong and direct positive effect on organisational performance (0.90), employee attitudes have a direct positive effect on organisational performance (0.48), and employee behaviours have a direct positive effect (0.44) on organisational performance, indicating thus that HRM outcomes mediate the relationship between HRM systems and organisational performance, hence, supporting hypothesis H3.
4. There is no direct significant effect between any of the three HRM systems and organisational performance, thus hypothesis H4 is not supported.
5. Contingencies have a weak and direct positive effect (0.17) on the HRM system of compensation and incentives only, hence, partially supporting hypothesis H5.
6. Controls have a rather weak and direct positive effect (0.34) on organisational performance only, thus partially supporting hypothesis H6.

Discussion

The presentation in this section follows the series of the hypotheses stated above. Thus, in terms of the business strategy contingency perspective, the results in Figure 2

Table 2 Correlations between HRM policies and organisational performance variables.

| Variable	Mean	Standard deviation	HRM1	HRM2	HRM3	HRO1	HRO2	HRO3	BS	OP	STYLE	REV
HRM1 Resourcing and development	3.2298	0.79581	1.000									
HRM2 Compensation and incentives	3.2000	0.79232	0.822**	1.000								
HRM3 Involvement and job design	3.4046	0.78472	0.797**	0.821**	1.000							
HRO1 Employee skills	3.4024	0.90111	0.748**	0.740**	0.719**	1.000						
HRO2 Employee attitudes	3.2974	0.95692	0.767**	0.807**	0.728**	0.855**	1.000					
HRO3 Employee behaviours	3.5030	0.95768	0.653**	0.652**	0.569**	0.726**	0.815**	1.000				
BS Business strategies	3.8438	0.64612	0.327**	0.301**	0.309**	0.227**	0.204*	0.089	1.000			
OP Organisational performance	3.6075	0.88104	0.728**	0.786**	0.751**	0.777**	0.788**	0.587**	0.251**	1.000		
STYLE Management style	2.8249	1.04873	0.454**	0.504**	0.470**	0.406**	0.428**	0.318**	0.117	0.417**	1.000	
REV Reverse causation	3.0562	1.13356	0.339**	0.309**	0.378**	0.330**	0.267**	0.287**	0.030	0.337**	0.353**	1.000

Note: Only the ordinal variables are reported.
* $p < 0.05$.
** $p < 0.01$.

indicate that the business strategies of cost reduction, quality (that is constituted by service, distribution channels, quality enhancement, brand image), and innovation (that is constituted by innovation, improvement of goods, wide range of products) have strong and positive and significant effects (Huselid, 1995) on the opportunity to perform HRM domain (involvement and job design), the ability to perform HRM domain (resourcing and development), and the motivation to perform HRM domain (compensation and incentives). Therefore, these results suggest that business strategies are followed by HRM policies in determining business performance. Furthermore, considering that the standardised coefficients of the business strategies-HRM policies link are very large, it seems that Porter's (1985) generic strategies used in the study are relatively powerful predictors of organisational performance (Youndt et al., 1996), and these strategies are expected to reinforce organisational performance (Snell and Dean, 1994; Youndt et al., 1996). Specifically, from the three generic strategies, it looks that the individual items that constitute the quality construct are the most influential in determining the HRM systems. Particularly, brand image is the most influential business strategy. Considering the Greek culture that assigns prestige to brand image, this result could be expected. In other words, organisations by following the brand image strategy are trying to exploit consumers who allocate social status to brand images, and accordingly shape both organisations' HRM policies and determine the final price of the product. In reality, this is expressed by the much higher prices of brand products in the Greek market compared to the prices of the same products in the other European countries.

In linking the three HRM policies domains of ability, motivation, and opportunity to perform (Lepak et al., 2006) with the three sets of HRM outcomes of employee skills (competences, cooperation), employee attitudes (motivation, commitment, satisfaction), and employee behaviours (retention, presence) (Guest, 1997), we found that ability is linked to skills, motivation is linked to attitudes, and opportunity is linked to behaviours. All other linkages among the HRM policies domains and the sets of HRM outcomes were found to be not significant. One could interpret this result as follows: Careful resourcing and development improve the necessary abilities of employees to do works, adequate compensation and incentives improve employees' attitudes to apply these abilities, and involvement and job design connect employees with decision-making so they stay with the organisation. All these HRM outcomes may be interpreted as engaging employees in discretionary behaviour that is translated to improved organisational performance (Purcell et al., 2003). However, interpreting these results with respect to the research questions set above (Lepak et al., 2006), we may say that the HRM systems of opportunity to perform and motivation to perform are much more influential in realizing HRM outcomes, than the HRM system of ability to perform. Furthermore, having found that ability is only linked to skills, motivation is only linked to attitudes, and opportunity is only linked to behaviours, we conclude that each HRM system is not associated with more than one HRM outcome category.

Moreover, considering the values of the standardised coefficients, selection and separation are the dominant HRM policies in the key area of resourcing. This may mean
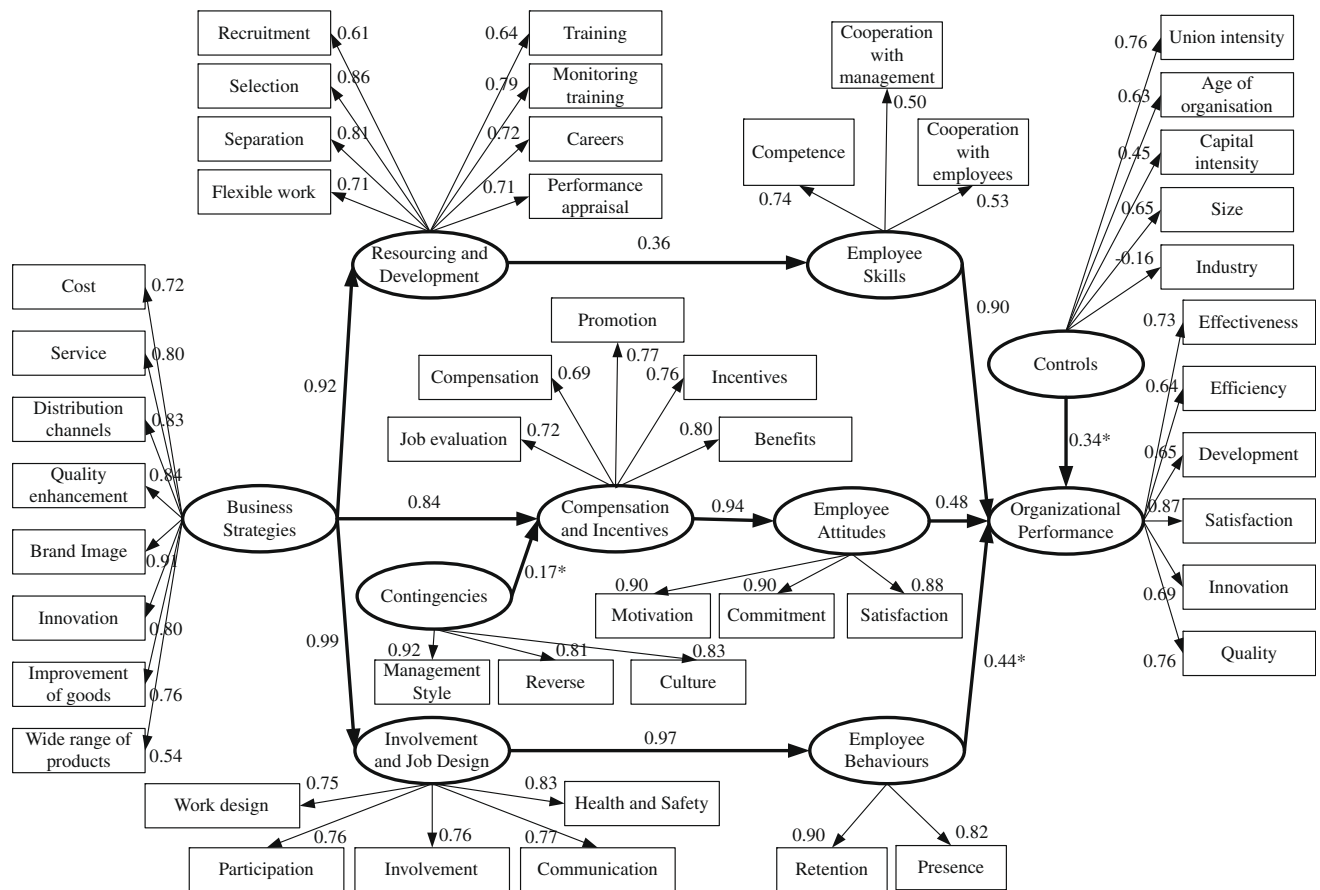
Chi-square = 3118.17 df = 1066 p-value = 0.000 Normed Chi-Square = 2.92 RMSEA = 0.084 NFI = 0.91 CFI = 0.93 GFI = 0.68 (* p<0.05, no star p<0.001)

Figure 2   The results of the operational model for the HRM-performance relationship.

that Greek manufacturing companies try to identify talented candidates so that only competent people get into the organization. The focus during the selection process is on the critical dimension of a candidate's ability to learn, and organizations see selection as an effective way to achieve 'human capital advantage' by selecting outstanding people and 'capturing a stock of exceptional human talent' as a source of sustained competitive advantage. Performance appraisal and training are the dominant HRM policies in the area of development. There is little doubt that there has been a growing recognition of the importance of training and development as a source of sustained competitive advantage as employers introduce more skill-specific forms of training and experience continuing skills shortage in some areas (Marchington and Grugulis, 2000). In fact it is the training process that can make the real difference in organizational performance, by producing highly trained and skilled people, in an uncertain economic environment, as is the case in Greece. In particular, the nature of skills that the Greek organisations are looking for may be traced from the training areas where at least one third of their staff has been trained. Regarding these training areas the sample organisations showed a higher preference to train their staff in the areas of staff communication methods (68.5%), motivation methods (57.3%), performance appraisal methods (53.9%), delegation methods (34.8%), team building methods (26.4%), and foreign languages (18.5%).

Additionally, benefits and promotion are the dominant HRM policies in the area of compensation and incentives. According to Pfeffer (1998), an emphasis on promotion from within a company will provide a sense of fairness and justice among the employees and they will feel more secure. The most common practice in Greek manufacturing organizations in filling their vacant positions is amongst current employees, and organizations show a clear preference for performance history. Specifically, the nature of motivational factors that the Greek organisations are interested may be traced from the means of assisting career development such as equal opportunity policies (62.7%), career counselling (40.4%) and formal career paths (34.8%), the average percentage of employees that are promoted annually that is equal to 20.1%, the reasons for using performance appraisal methods most regularly such as for salary decisions (79.2%), for promotion decisions (76.4%) and for training decisions (48.9%), and the incentive schemes that organisations usually offer such as fringe benefits (87.1%), merit/performance related pay (65.2%), sick pay schemes (53.4%), individual bonus/commission (38.2%) and employee share options (38.2%).

Furthermore, health and safety is the dominant HRM policy in the area of involvement and job design. This is possibly because in recent years it is believed that health and safety is one of the most essential HRM policies that any organization should use in Greece, in order to substantially

lower a rather high work accident rate. Many employers embrace the process of health and safety with enthusiasm, because they believe that these programs have a positive impact on organizational performance (Phillips, 1996). Besides, effective employee communication, involvement, and work design in decision-making will definitely send the message that employees are trusted and thus, create a co-operated and committed workforce which can deliver its full potential. Particularly, the mean percentage of employees whose jobs have been formally designed is equal to 73.3%, the proportion of employees involved under different participation schemes is equal to 64.9%, management showed a clear preference in using verbal methods (86.0%) and written methods (60.7%) of communicating their views to employees, and employees showed a clear preference in communicating their views to management though immediate superior (89.9%) and through regular workforce meetings (45.5%).

From the discussion till now, it is well established that effective HRM policies will improve HRM outcomes. These results are very important — at least for the Greek manufacturing sector — because they indicate which of the HRM policies are the most influential in realizing the objectives of the three HRM policy domains (Lepak et al., 2006). In brief, selection is the influential policy from the ability to perform HRM domain, benefits from the motivation to perform HRM domain, and health and safety from the opportunity to perform HRM domain.

With respect to the HRM outcomes — organisational performance link, we found that all HRM outcomes are positively and significantly related with organisational performance. However, although the impact of the HRM outcomes on organisational performance is greater for employee skills, than for employee attitudes, and for employee behaviours, when it comes to apply the basic performance equation, i.e., ''performance = f (employees' ability, motivation and opportunity to participate)'' (Boselie et al., 2005), it is seen that the order is different, putting first the impact of compensation and incentives (0.4512) on organisational performance, second the impact of involvement and job design (0.4268), and third the impact of resourcing and development (0.3240). Therefore, we may conclude that motivation, commitment, and satisfaction are the most important drivers that encourage employees to exercise discretionary behaviour (Purcell and Kinnie, 2007), and that the HRM policies of benefits, promotion, incentives, job evaluation, and compensation are most likely to lead to positive outcomes (Purcell et al., 2003, 2004). Other drivers for encouraging employees to exercise discretionary behaviour are the development of their feelings for retention and presence in the organisation by employing HRM policies such as health and safety, communication, participation, involvement, and work design. A pleasant and safe working environment together with the opportunity of employees to get involved in decision-making has been recognised to reduce employee turnover and absenteeism (Purcell et al., 2003). Employee competence and cooperation of employees in the organisation, by means of effective resourcing and development, constitute drivers that lead to the improvement of organisational performance.

In tracing back the HRM-performance relationship we found that in the Greek context quality is the most influen-

tial business strategy that determines HRM policies. Similarly, selection is the most influential policy from the ability to perform HRM domain, benefits from the motivation to perform HRM domain, and health and safety from the opportunity to perform HRM domain. Furthermore, we found that competence is the most influential HRM output from employee skills, motivation and commitment from employee attitudes, and retention from employee behaviours, that determine organisational performance. Additionally, we saw that the Greek manufacturing organisations improve the skills of their employees by mainly training them in the areas of communication, motivation and performance appraisal methods. Moreover, they motivate their employees by mainly following equal opportunity policies, career counselling, performance appraisal methods for salary, promotion and training decisions, and offer their employees fringe benefits and merit/performance related pay. Besides, they retain their employees by formally designing their jobs, by allowing them to participate in the various activities of the organisation, and by encouraging them to freely communicate their views with management. Therefore, summarizing, we may say that these specific employee skills, attitudes and behaviours mediate the relationship between the HRM policies, moderated by the quality business strategy, and organisational performance.

Although the results in Figure 2 indicate that the three HRM policy domains affect organisational performance through HRM outcomes, we simultaneously tried to directly link HRM policies with organisational performance also. However, this analysis did not produce significant results indicating thus that the relationship between HRM policies and organisational performance is ''fully mediated'' by employees' skills, attitudes, and behaviour. In other words, this result supports Guest (1997) who assumes that only when all HRM outcomes, such as skills, attitudes, and behaviour, are achieved we can expect higher organisational performance. Furthermore, this finding coincides with Delery and Doty (1996) who argue that HRM policies influence organisational performance by creating a workforce that is skilled and has the right attitudes and behaviour. It also partially supports Guest (2001) for satisfaction and commitment and Boselie et al. (2003) for satisfaction and motivation. The result that HRM outcomes fully mediate the HRM-performance relationship is important because it indicates three things (Wright and Gardner, 2003): First, it assures the existence of this mediation. Second, it shows the nature of this mediation that is of the one-to-one type of relationship (i.e., ability to skills, motivation to attitudes, and opportunity to behaviours). Third, it indicates that the motivation-attitudes relationship has a greater impact on organisational performance, then the opportunity-behaviour relationship, and finally the ability-skills relationship. However, although this result makes logical sense, it does not necessarily exclude ''partial mediation'' of HRM outcomes in the relationship between HRM policies and organisational performance in other contexts. It is unlikely that the HRM-performance relationship will be the same no matter what context (Gerhart, 2005) and therefore, more causal indication should come from a multiple type of evidence (Harter et al., 2002). Then, we can safely accept the ''fully mediation'' concept of HRM outcomes in the HRM-performance relationship, excluding the comple-

mentarity of direct and indirect relationship between HRM policies and organisational performance (Youndt et al., 1996; Purcell and Hutchinson, 2007).

In investigating the HRM-performance relationship, scholars such as Gardner et al. (2001), and Purcell and Hutchinson (2007) argue that in the HRM-performance causal chain may exist a serial causation, from employee skills, to attitudes and then to behaviours that finally affect organisational performance. Moreover, it is argued that employee attitudes influence employees' discretion that is ultimately linked to organisational performance (Purcell et al., 2003). Thus, in order to improve organisational performance the levels of satisfaction, commitment and motivation should be improved. However, although many authors seek to count the number of HRM policies in place of each HRM policies domain (Guest, 2001), a crucial question raised is ''whether it is people who cause higher performance, or it is high-performing firms that afford people management''. In other words, if there exists a ''forward causality'' from HRM policies to performance, or if there exists a ''reverse causality'' from performance to HRM policies, or if there exists a ''bilateral causality''. Considering that most studies used cross-sectional data although this question can properly be investigated using time-series or longitudinal data, few studies addressed this question (Purcell, 1999; Wright et al., 2005).

With respect to causality the operational model in this study advocates two things. First, that HRM policies impact collective skills, attitudes, and behaviours, and thus, improve organisational performance. HRM policies relate significantly, positively and directly with HRM outcomes, and indirectly with organisational performance. Thus, a one-way causality from HRM policies to organisational performance, through HRM outcomes, is assumed. This indicates that there is a sequential link between HRM systems and organisational performance on the basis of a linear causal process (Wright and Gardner, 2003; Paauwe and Farndale, 2005). Second, although our data are cross-sectional we have included in our survey a variable that refers to the so-called 'reverse causality' (Boselie et al., 2005) by asking respondents to indicate the degree of their agreement with the one-way causality. The results in Figure 2 show that the reverse causality construct moderates the effectiveness of the motivation to perform HRM policy domain only, and thus employee attitudes and operational performance. Therefore, we may conclude that compensation and incentives HRM policies cause organisational performance, through employee attitudes, and organisational performance positively moderates the effectiveness of these HRM policies. However, this conclusion by no means provide any more support that performance causes HRM policies than HRM policies cause performance, but it just raise the question of investigating the true causal relationship (Guest et al., 2003; Wright et al., 2005).

Furthermore, Gardner et al. (2001) and Purcell and Hutchinson (2007) argue that it is the style of management that transforms indented HR practices to actual HR practices. Additionally, Purcell et al. (2003) and Purcell et al. (2004) support that it is the culture of the organisation and the management style in general (but especially of the immediate line managers and team leaders) that moderates the precise effects of the HRM policies. Besides the re-

verse causality construct, the other contingencies used in the study refer to the management style and culture. Although we tried to link the contingencies construct with all the other variables of the operational model, we found only one significant link, that of the direct link of contingencies with the compensation and incentives HRM policy, and therefore the indirect links with employee attitudes and organisational performance. Specifically, and although we acknowledge that there may be a problem with respect to this variable, because the notions of centralization and decentralization refer more to structure and organisation than management style, the results indicate that the more decentralised managerial style is, the more effective the HRM policies that constitute the motivation to perform HRM policy domain are, in shaping the employees' attitudes of motivation, commitment, and satisfaction, which in turn exercise discretionary behaviour that will improve organisational performance. Thus, we may conclude that the managerial style in applying HRM policies is important in sustaining the HRM — performance relationship (Purcell et al., 2003).

Culture, is another variable that moderates the effectiveness of the policies in the motivation to perform HRM policy domain. The first two levels of the culture construct in this study put emphasis on hierarchy (power and role-oriented) and the other two levels put emphasis on expertise (project and fulfilment — oriented). This means that the effectiveness of the HRM policies increase when the emphasis moves from hierarchy to expertise, and consequently an improvement in the employees' attitudes of motivation, commitment, and satisfaction is reached. Thus, we may conclude that culture is important in influencing the HRM — performance relationship (Purcell et al., 2004).

With respect to the controls we found that organisational size, age and capital intensity positively affect organisational performance, indicating the impact of economies of scale by large and established resource-rich firms (Boselie et al., 2005). We also found that the degree of unionisation positively influences organisational performance (Huselid, 1995), and that the type of industry negatively affects organisational performance, indicating that traditional manufacturing firms in Greece perform better than non-traditional firms. This is something that we were expecting since production in traditional manufacturing firms is based on primary inputs that are produced cheaper in Greece, compared to the imported primary inputs in the production of the non-traditional manufacturing firms. However, although we were expecting to capture size (Huselid, 1995; Delbridge and Whitfield, 1999), capital intensity (Huselid, 1995) and age of organisation (Scholarios et al., 1999) effects in the HRM-performance relationship, since large and old organisations may be more likely than small and younger organisations to have well-developed HRM policies, we did not get such results. Similarly, although we were expecting union intensity (Delbridge and Whitfield, 1999) and industry (Scholarios et al., 1999) variables to influence the adoption of HRM policies and/or HRM outcomes, the results did not indicate such tendencies. Considering silent the influence of business strategies on HRM policies (Paauwe and Farndale, 2005), these findings may partially support the 'universalistic' view in terms of size, capital intensity, age of organisation, union intensity, and industry, which

supports that a specified set of HRM policies will always produce superior results whatever the accompanying circumstances (Huselid et al., 1997), because the rather weak and direct effect of these controls on organisational performance refers to influences that do not moderate the HRM-performance relationship.

Practical implications

This study has a number of clear implications for both managers and decision makers. Notably, the major implications of the study are as follows.

- It has been found in the Greek manufacturing context that organisational performance depends heavily on HRM outcomes such as skills, attitudes and behaviour. However, the HRM outcomes of competence for employee skills, motivation and commitment for employee attitudes, and retention for employee behaviours are critical, and have the biggest effect on performance.
- Organisations should require well-designed, consistent and suitable HRM policies for building its employees with the necessary ability, adequate motivation, and opportunity to engage in discretionary behaviour.
- Without marginalising other HRM policies (Boselie et al., 2005) it seems that careful employee selection and separation, training and careers development, benefits, incentives and promotion, and safety, communication and involvement (particularly in cases of decentralised decision-making), may constitute important determinants of the HRM strategy.
- Aligning HRM policies with business strategies will positively affect the effectiveness of HRM policies, and thus will improve organisational performance. Specifically, the brand image business strategy should be followed, since it is the most influential in Greece in determining social status.
- The effectiveness of HRM policies depends also on organisational culture. Therefore, managerial style must be more decentralised and more expertise oriented.

Conclusions

Although models explaining the mechanisms through which HRM policies have an impact on performance have been advanced, they have not been tested empirically, and moreover, research designs aiming at revealing causality did not have the necessary methodological rigour (Wright et al., 2005). However, substantial proportion of the literature which addresses the HRM — performance relationship were based on the philosophy that HRM policies impact on collective employees' ability, motivation, and opportunity to perform, and by shaping discretional behaviour influence organisational performance (Purcell et al., 2003; Purcell and Kinnie, 2007). Thus, one crucial factor in the HRM-performance relationship is how HRM policies shape discretionary behaviour. AMO theory is regarded to be the heart of strategic human resources management in the sense that organisations looking at improving performance develop HRM policies in the domains of ability (resourcing and development), motivation (compensation and incentives),

and opportunity (involvement and job design) to perform that are designated to positively shape discretionary behaviour (Boxall and Purcell, 2003). HRM outcomes such as employee skills (competences, cooperation), employee attitudes (motivation, commitment, satisfaction), and employee behaviours (retention, presence) mediate the three HRM policy domains and discretionary behaviour.

However, it is now well accepted that studies on just asking about the number and extent of HRM policies may not be adequate to understand the link between HRM policies and organisational performance (Purcell and Hutchinson, 2007). Therefore, the testing of which HRM policies constitute proposed HRM policy domains in new contexts is of much importance (Lepak et al., 2006). Although little is known about the so-called ''black box'' that lies between the two end points of the HRM-performance relationship (Wright and Gardner, 2003), i.e., HRM as input and performance as an output, this study treats the black box as a mediating stage in the HRM-performance relationship that is moderated by contingencies such as business strategies, managerial style and organisational culture. Although the research design of the study is blending insights from the contingency theory, the resource-based view, and the AMO theory (Boselie et al., 2005), the emphasis is on the AMO hypothesis. However, the AMO hypothesis is largely untested (Gerhart, 2007).

Considering that the HRM input is crucial in the HRM-performance relationship (resource-based view) that may be influenced by business strategies and other contingencies (contingency theory), we have employed the three HRM policy domains of ability to perform (resourcing and development), motivation to perform (compensation and incentives), and opportunity to perform (involvement and job design) (Appelbaum et al., 2000; Lepak et al., 2006) to predict employee skills, attitudes, and behaviours, that in turn, by exercising discretionary behaviour improve organisational performance (Purcell et al., 2003).

The results of the study revealed that HRM policies are moderated by business strategies (cost, quality, innovation), managerial style (degree of decentralisation), and organisational culture (hierarchy vs. expertise). Moreover, we concluded that HRM policies do not have a direct impact on organisational performance, but their impact is fully mediated by employee skills, attitudes, and behaviour. Additionally, we found that although compensation and incentives HR policies cause organisational performance, through employee attitudes, it may be supported that organisational performance may positively moderate the effectiveness of these HRM policies, raising thus the question of reverse causality.

All research has its limitations and ours is no different. In trying to investigate the causal relationship between HRM and organisational performance we indirectly claimed that our HRM policies data refer either to the same performance period (contemporaneous design) or the period just before the performance period (predictive design). However, for properly investigating causality time-series or longitudinal data should be employed. Furthermore, and due to the difficulty of collecting data from employees at lower managerial levels in Greek organisations, we did not consult the voices of employees who actually experience the HRM practices and are so intimately involved in translating practices

into performance. Thus, future research should not only consult the crafters of policies but it should also consider the voices of employees. Finally, considering that in the Anglo-Saxon context the HRM concept is usually based on notions of organisational independence and autonomy, whilst in most European countries organisational autonomy is constrained at the national level by culture and legislation, at the organisational level by patterns of ownership, and at the HRM level by trade union (Brewster, 1993; Paauwe, 2004), more research in different contexts could add to similar research carried out in the US/UK.

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