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**THE DIFFUSION OF INCENTIVE PAY ACROSS
OCCUPATIONS**

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Abstract

We investigate the association in the adoption of incentive pay systems between occupational groups of workers. In order to do so, we use data from a newly created sample of Spanish manufacturing establishments. Our results show that the application of variable pay schemes for operative workers, top executives, professionals, administrative employees, middle managers and sales workers is significantly correlated. Moreover, the size of the establishment and the existence of a human resource department shape the diffusion of variable pay across occupations.

INTRODUCTION

Work organisation in firms is a dynamic process. The approaches to human resource management and the employment practices adopted by employers change with time, as the circumstances that surround organisations evolve. In recent years, firms are facing an increasingly global and competitive business environment, as well as unpredictable and rapidly changing product markets. Hence, they need to look for strategies of human resource management that, on the one hand, are innovative and provide them with a source of competitive advantage and, on the other, leave scope for flexibility in order to adapt to changing circumstances. As a result, certain human resource management practices are gaining popularity among employers. One of these practices is incentive pay, which is considered to improve organisational performance by enhancing employee motivation and identification with the objectives of the firm, and by promoting the sense of fairness among employees (see Pfeffer, 1998). Performance pay also provides flexibility to the rewarding systems of firms, making it easier to adapt to changing circumstances when needed.

When designing their human resource systems, organisations have to decide not only which practices they are going to adopt, but also how they are going to implement them. One of the dimensions of the process of implementation of employment practices concerns their diffusion among different occupational groups of workers. The diffusion of human resource practices among occupations is an underdeveloped issue, although it has been indirectly tackled in the past. Hence, most studies on human resource systems assume that work practices are uniformly applied to the entire workforce within an organisation (see, for example, Becker and Gerhart, 1996; or Ichniowski et al., 1996). There are also analyses that focus on the examination of the implementation of these practices for a certain occupation, being the "core" or largest occupational group within the organisation frequently considered (see, for example, Batt, 2002; or Forth and Millward, 2004). However, in the last years it has emerged a body of research that advocates the differential application of human resource practices to different types of jobs. This line of investigation maintains that the specific contributions of different groups of employees to the objectives of the firm result in variability in the application of human resource practices among them. Regarding the diffusion of pay practices, the existent literature has focused on analysing the consistency of wage levels across different types of jobs within companies. This literature suggests that employers apply a consistent pay standard to its entire workforce, paying either high or low wages to every occupation (see, for example, Groshen and Krueger, 1990; Bronars and Famulari, 1997; Cardoso, 2000; Gerlach and Stephan, 2006).

We want to contribute to the analysis of the diffusion of pay practices across groups of workers by assessing the stability in the use of incentive payment. In order to do so, we raise the following questions.

First, to what extent is the adoption of incentive pay plans spread over occupations in the manufacturing industry? There are different ways of linking pay to performance, which depend on the objectives pursued by employers and the conditions and features of the organisation. These objectives and characteristics vary, in turn, from one occupation to another, since each job category performs different tasks and contributes in a different way to organisational performance. Hence, for those groups whose output can be evaluated on an individual basis, it is likely that variable pay schemes linked to individual performance are established. On the contrary, there are occupations whose output depend on the co-operation and co-ordination among the members of a work team and, consequently, are rewarded using group performance measures. Moreover, the performance of certain workers is highly related to the results of the whole organisation, so they commonly receive variable pay that is linked to firm output. In order to get a global picture of the use of incentive pay in recent times, we will examine the use of compensation linked to individual, group and plant or firm

results for six occupational groups of workers: operative workers, top executives, professionals, administrative employees, middle managers and sales workers.

Second, to what extent is the implementation of incentive pay systems correlated between different occupational categories? We identify two streams of research that could contribute to understand the association in the use of incentive pay among occupations. On the one hand, the best practices approach, the internal pay equity argument introduced by Bewley (1999), the positive effects brought by economies of scale or the bargaining theory support the existence of a significant connection in the application of incentive pay systems across different types of jobs. On the other hand, the line of investigation followed by authors such as Lepak and Snell (1999 and 2002), Melian-Gonzalez and Verano-Tacoronte (2004 and 2006) and Lepak et al. (2007) provides evidence in favour of the idea that the use of variable pay for different jobs depends on their specific contribution to the objectives of the organisation. We will carefully analyse the correlation coefficients between pairs of occupations in order to better understand the diffusion of variable compensation across job categories

Finally, is the association between groups in the use of incentive pay influenced by factors such as the size of the establishment and the presence of a human resource department? The recent literature on the determinants of the use of incentive pay identifies certain internal variables that influence the implementation of variable compensation. Until the moment, research in this field has centred on the analysis of the factors that determine the use of incentives for a particular occupation or for the whole workforce within an organisation. We think that, in order to get a global picture of the implementation of incentive pay for the different occupational levels that compose an industrial establishment, a joint and comparative analysis of the factors that influence the diffusion of variable pay across categories of workers is required. Therefore, the third step in our analysis will consist of examining how the size of the establishment and the existence of a human resource department shape the correlation pattern in the use of incentive pay systems across occupations

The analysis is based on a newly created Spanish data set on human resource management practices, which had its origin on a survey conducted in 2006 for a representative sample of Spanish manufacturing establishments. The data constitutes a unique source of information about diverse employment practices in Spanish organisations, and about incentive pay diffusion in particular.

We think that this work is of great value for various reasons. First, it might help to understand the implementation process of a work practice frequently adopted by employers in recent times. Establishments are increasingly resorting to the development of incentive pay schemes in order to reward their workforce. Given the wide range of variable pay systems that establishments have at their disposal, and the complexity of their functioning, investigation on the process of implementation of these systems is undoubtedly required. In addition, this analysis might contribute to the research on the factors that determine the use of incentive pay by making it possible to directly compare how relevant variables contribute to explain the association in the adoption of incentive pay systems among occupations. Moreover, our work could boost the investigation on the use and diffusion of human resource management practices for different groups of workers within organisations. This is an underdeveloped issue that is beginning to be taken into consideration in recent times.

The paper is organised as follows. The next section examines the theoretical arguments that shed some light on the correlation of the implementation of incentive pay systems for different occupational groups of workers. Then, the results of the empirical exercise are depicted. Finally, we summarise the main conclusions of the analysis.

THEORETICAL APPROACHES TO THE DIFFUSION OF INCENTIVE PAY ACROSS OCCUPATIONS

Despite the lack of work on the topic, we can gain an insight into the diffusion of human resource management practices through the examination of related bodies of research. Hence, some theoretical approaches to human resource management suggest that work practices are uniformly applied to the entire workforce within organisations.

One of these perspectives is the *best practices approach*, which defends the universality of high-involvement practices (see Becker and Gerhart, 1996). According to this literature, there exist a set of practices whose adoption generates benefits for organisational performance with independence of the particular characteristics of the firm, being pay linked to performance one of these practices. From this perspective, it can be inferred that incentive pay will be homogeneously implemented across groups of workers. The argument of *internal pay equity* considered by Bewley (1999) also helps us to shed light into the diffusion of pay practices within firms. The author considers that employees take their colleagues' pay into consideration when demanding their wages, which results in firms imposing internal equity pay structures. These structures consists of "both uniformity in the application of rules setting pay and a set of beliefs about fair relations between pay and its determinants" (Bewley, 1999, p. 70), and result in an enhanced employee morale. An *economies of scale* point of view can also help us to understand the pattern of incentive pay use within establishments. The adoption of variable pay systems implies the assumption of implementation fixed costs. If these systems are applied to more than one group of workers, the fixed costs can be spread over more employees. Therefore, it is plausible to think that establishments may be more inclined to adopt an incentive pay scheme if they can apply them to various occupations. Similarly, establishments that have already carried out a variable pay plan for an occupation will find it easier to extend it to other groups of workers (see Jirjahn and Stephan, 2004). According to the *bargaining theories* of wage determination, if an organisation generates rents and employees possess some bargaining power, they can fight for a share of those rents. As stated by these theories, it is possible that the worker's power to appropriate firm rents leads to a high correlation in the level of wages between occupations. This may be due, for example, to the fact that the bargaining power of workers is uniform across job categories, or that employees join together in order to exert more pressure on the employer (see Groshen, 1991). This argument makes us think that, in those workplaces where workers exert some degree of bargaining power, it will be more likely that incentive pay schemes are homogeneously applied across occupations.

A contrasting point of view advocates the differential application of human resource practices to different groups of workers. This line of investigation maintains that the specific contributions of groups of employees to the objectives of the firm result in variability in the application of human resource practices within organisations. Among the existent studies on this field, it is worth mentioning the work by Lepak and Snell (1999). These authors made use of the human capital theory, the resource-based view of the firm and transaction costs economics to support the idea that the practices of human resource management applied to a group of employees depend on the particular features of the group. Their argument is explained as follows. The human capital of an organisation can be classified depending on their value and uniqueness to the firm. This results in the establishment of different employment modes within the organisation, each on them being associated with a particular type of employment relationship. Accordingly, organisations apply specific human resource practices to each group of employees within the firm depending on the employment mode and employment relationship established between the group and the employer. In line with this argument, Baron and Kreps (1999) defended the need to design appropriate compensation systems for the different occupational groups of workers present within organisations. The authors stated that the determination of the level, basis, distribution

and form of compensation often involves formal job analysis and evaluation, because each job is characterised in terms of various common dimensions and distinctions, such as the types and complexity of knowledge required, the number of employees supervised, the amount of capital overseen, the type and unpleasantness of working conditions, and so on. Overall, this stream of research suggests that we might find differences in the implementation of incentive pay systems across occupational groups of workers due to their different contributions to establishment performance and their specific attributes and functions within the organisation.

Concerning the influence of the size of the establishment and the presence of a human resource department, past work has shown that the two factors are important determinants of the employer's decision to adopt incentive pay plans. First, the size of the establishment is considered to exert an impact on the use of incentive pay by organisations, although there is no consensus on the direction of this influence. On the one hand, the fixed costs of implementing a variable pay system are spread over more employees when the size of the establishment increases. On the other hand, monitoring worker effort is more difficult in large workplaces than in establishments of a small size, which might complicate the correct functioning of certain incentive plans. Regarding the effect of this variable on the correlation between groups of workers, it is important to notice that in large establishments occupational groups are larger too. This might facilitate the adoption of incentive pay within each of these groups, since the fixed costs of the implementation of variable pay can be spread over more employees (see Brown and Heywood, 2002). Moreover, the possibility of spreading the fixed costs of implementing a compensation system among a high number of workers within a certain group could promote that large establishments manage each occupation individually, giving rise to differences in the pay practices adopted across groups. Second, the presence of a specific department in the organisation that deals with personnel issues captures the existence of a strategic approach to human resource management. By strategic human resource management we refer to the idea that an organisation recognises that human resource policies are vital for organisational performance. The focus of this managerial strategy is on value creation: human resources contribute to the consecution of the objectives of the firm. The literature on human resource management has found evidence in favour of the idea that the managerial strategy of an organisation is related to its compensation structure design (see Long and Shields, 2005, among others). In particular, the existence of a human resource department might facilitate the adoption of sophisticated human resource practices (see Shaw et al., 1993). More precisely, it could contribute to the success of incentive pay through the establishment of close employer-employee relationships. Alternatively, the presence of such department might imply the adoption of a particular managerial approach for each occupational group that is adapted to their particular endowments and needs. This makes us think that, on the one hand, the use of variable compensation schemes will be more likely in those establishments where a department dealing with human resources issues is present. On the other hand, the correlation between groups could diminish where such department is present due to the fact that organisations adapt their compensation practices to the particularities of each occupation.

Taking into account the evidence presented so far, we turn to the empirical part of our investigation.

RESULTS AND DISCUSSION

In order to perform the empirical analysis, we select six different occupations that are representative of the hierarchical structure of the Spanish manufacturing establishment. More precisely, and as it has been previously mentioned, the considered groups are operative workers, top executives, professionals, administrative employees, middle managers and sales workers. The incentive variables capture

whether most of the employees of the occupation into consideration received incentive pay in 2005.

Table 1 documents the incidence of the incentive pay systems analysed for each occupational category of workers. In the first column, we observe that sales employees is the group that more frequently receive variable pay, followed by top executives, middle managers and professional workers. Operatives and administrative workers close this classification. The use of incentive pay based on individual output reproduces the same pattern, with sales workers occupying the top position and administrative workers standing on the last place. Turning to the implementation of variable pay based on group performance, the ranking of employees receiving this type of incentives changes with relation to the previous scheme. In this case, the top executives occupation shows the highest frequency of incentive pay use. Our data reveal that the percentage of workplaces using group performance pay is quite similar for each occupation, with figures that vary between the 15.3 per cent for top executives and the 11.4 per cent for sales workers. An exception is constituted by the administrative workers category, which displays a very low diffusion of this type of scheme. As far as the plant or organisation incentive pay is concerned, we notice that the use of this system is greater for high-hierarchical occupations and diminishes for lower hierarchies of workers, matching the findings of O'Shaughnessy (1998). Top executives are the occupation with a higher incidence of this performance pay system, followed by professionals, middle managers and sales workers. At the bottom of the classification we find administrative workers and operatives.

Taking the influence of the size of the establishment into account, we observe that the use of incentive pay increases with the number of workers for every occupational category but sales employees. Analysing each incentive scheme separately, we detect that this same result is observed for plant or firm variable pay and for group incentives, with the particularity that, for the latter pay scheme, the use of performance pay for sales workers also raises with the size of the plant. In line with this result, Barth et al. (2008) found the existence of a positive effect of the size variable on the use of incentive pay in general as well as on the implementation of three particular performance pay plans: piece rates and commissions, profit sharing and group bonuses and individual bonuses and individual performance assessment. Our results show that the application of individual-based performance pay is positively related to the number of workers for operatives (see Heywood and Jirjahn, 2002), top executives and professionals. For the remaining three occupations, the use of this pay scheme increases in medium-sized plants with respect to those of a small size, and decreases again in plants with 500 employees or more. As for the effect of the existence of a human resource department in the establishment (see Table 2), we observe that the adoption of incentive pay is more frequent in those plants where such department is present. This occurs for every occupation, although the effect of the variable is stronger when we consider incentives based on collective results (i.e. group, plant or firm performance) in comparison with those linked to individual output.

In order to test if the use of incentive pay for each occupational group differs significantly on the size of the establishment and on the presence of a human resource department, we perform an analysis of variance (ANOVA). The resulting F-values reveal that the size of the establishment exerts a statistically significant influence on the use of incentive pay systems. This influence is particularly noticeable when we consider variable pay linked to collective results, i.e. group, plant or firm performance pay. For operatives, administrative workers and middle managers, our findings suggest that the number of employees of the establishment does not exert a significant effect on the use of incentives based on individual performance. Regarding the presence of a human resource department, its influence on the incidence of incentive pay is notable for most of the occupational categories and systems of compensation considered. Some exceptions to this result are found, which are the case of individual-performance pay for operatives and the cases of individual, group and plant or firm-related

Table 1: Percentage of establishments using incentive pay systems for each occupational group of employees. Distribution across size intervals

	Use of incentive pay for the majority of workers					Use of incentive pay based on individual performance for the majority of workers					Use of incentive pay based on group performance for the majority of workers					Use of incentive pay based on the plant or firm performance for the majority of workers				
	TOTAL	50 to 99 workers	100 to 499 workers	500 workers or more	F-value	TOTAL	50 to 99 workers	100 to 499 workers	500 workers or more	F-value	TOTAL	50 to 99 workers	100 to 499 workers	500 workers or more	F-value	TOTAL	50 to 99 workers	100 to 499 workers	500 workers or more	F-value
Operatives	31.0	25.7	35.6	40.4	6.28***	18.2	16.2	20.7	15.4	1.73	11.5	8.2	13.5	25.0	8.11***	9.7	6.5	12.4	15.4	5.71***
Top executives	54.9	42.6	64.7	77.6	29.10	32.8	23.9	40.6	42.9	15.73	15.3	11.4	17.7	26.6	7.03	27.2	19.0	32.9	49.0	17.76
Professionals	42.4	34.7	47.5	63.3	12.96***	24.7	20.8	27.5	33.3	3.87**	13.7	10.4	15.9	22.9	4.79***	17.7	11.7	21.1	37.5	14.40***
Administrative workers	25.0	19.8	29.4	32.0	6.32	14.2	12.4	16.1	14.0	1.30	6.9	4.9	6.5	12.0	3.37	10.2	6.4	13.0	20.0	8.17
Middle managers	44.0	37.8	49.1	52.0	6.08***	25.0	23.6	26.3	26.0	0.41	14.5	11.4	17.2	18.0	3.01*	16.2	10.9	20.0	26.0	8.34***
Sales workers	63.0	57.0	66.9	62.1	4.00	49.3	43.1	53.6	44.6	2.33	11.4	9.1	12.1	27.6	4.02	14.0	10.8	17.4	10.3	2.80
Q-value	419.30***	167.77***	240.89***	23.86***		373.66***	150.27***	216.50***	19.40***		43.81***	12.98**	27.48***	7.70		171.02***	56.37***	101.90***	16.59***	

*** p<0.01, ** p<0.05, * p<0.10

Table 2: Percentage of establishments using incentive pay systems for each occupational group of employees. Distribution across establishments with and without a specific human resource department

	Use of incentive pay for the majority of workers				Use of incentive pay based on individual performance for the majority of workers				Use of incentive pay based on group performance for the majority of workers				Use of incentive pay based on the plant or firm performance for the majority of workers			
	TOTAL	No HHRR department	HHRR department	F-value	TOTAL	No HHRR department	HHRR department	F-value	TOTAL	No HHRR department	HHRR department	F-value	TOTAL	No HHRR department	HHRR department	F-value
Operatives	31.0	24.3	35.0	6.66	18.2	16.1	19.0	1.09	11.5	6.0	15.3	3.20	9.7	4.7	17.0	16.71
Top executives	54.9	39.3	61.1	38.50***	32.8	23.0	36.7	16.52***	15.3	6.3	19.0	24.16***	27.2	14.5	32.2	31.50***
Professionals	42.4	31.3	46.0	10.32	24.7	18.2	27.2	6.42	13.7	7.0	16.0	11.10	17.7	6.0	27.2	21.60
Administrative workers	25.0	20.2	26.9	4.60**	14.2	13.2	14.6	0.29	6.9	5.1	7.7	1.90	10.2	4.0	12.7	16.00
Middle managers	44.0	34.3	47.3	11.40	25.0	20.3	26.6	3.30	14.5	8.7	16.0	6.30	16.2	6.7	16.8	12.77
Sales workers	63.0	55.0	66.1	6.63**	49.3	42.7	51.8	4.12**	11.4	7.6	12.9	3.43	14.0	8.8	16.0	3.40*
Q-value	419.30	68.43	334.73		373.66	60.39	293.60		43.81	3.81	42.32		171.02	26.36	146.27	

*** p<0.01, ** p<0.05, * p<0.10

compensation for administrative workers. We also evaluate if the distribution of the use of incentive pay systems is statistically different among groups of workers by performing a Cochran's Q test. The Q statistics show that the means of the use of performance pay for the occupations analysed are significantly different from one another for both the general use of incentives and the three particular plans considered.

Regarding the association of the use of incentive pay between occupations, we find that the correlations are generally highly significant (see Table 3). However, their size varies between pairs of groups. Overall, the correlation coefficients are higher between groups of white collar workers, and lower between blue collars and the various white collar categories, which supports the existence of clusters of occupations that receive similar compensation systems (see Cardoso, 2000). Discerning among incentive pay plans, our results show that variable pay linked to the results of the plant or firm is the scheme that displays larger correlation coefficients among job categories, which suggests the existence of a high degree of uniformity in the implementation of this compensation system across groups of workers. This could be due to the fact that this type of pay system involves the assumption of important fixed costs, so that employers decide to adopt it when it is possible to apply it to different occupations.

Table 3: Bivariate correlations for the use of incentive pay systems.

	Top executives	Professionals	Administrative workers	Middle managers	Sales workers
Operatives TOTAL	.161***	.223***	.290***	.290***	.117***
INDIVIDUAL	.081**	.098***	.179***	.153***	.068
GROUP	.056*	.156***	.167***	.163***	.128***
PLANT OR FIRM	.198***	.273***	.390***	.302***	.210***
Top executives TOTAL		.631	.432	.589	.540
INDIVIDUAL		.621***	.419***	.562***	.435***
GROUP		.574***	.396***	.507***	.434***
PLANT OR FIRM		.667***	.483*	.592***	.550***
Professionals TOTAL			.630	.701	.620
INDIVIDUAL			.599***	.694***	.459***
GROUP			.594***	.698***	.479***
PLANT OR FIRM			.693***	.773***	.726***
Administratives TOTAL				.619***	.396***
INDIVIDUAL				.596***	.387***
GROUP				.624***	.465***
PLANT OR FIRM				.698***	.583***
Middle managers TOTAL					.563***
INDIVIDUAL					.463***
GROUP					.503***
PLANT OR FIRM					.667***

*** p<0.01, ** p<0.05, * p<0.10

Turning to the influence of the number of employees and the presence of a human resource department on the degree of association of incentive pay among occupations, we start with the examination of the effects of the size variable. The most remarkable result regarding the effect of this factor is that, in large establishments, the correlation between occupations slightly diminishes with respect to smaller establishments (see Table 4). This matches our predictions concerning the influence of the number of employees on the degree of association between groups (see previous section). The effect that the size variable exerts on the correlation coefficients is particularly noticeable for certain pairs of workers. Hence, two groups deserve a detailed examination: operative and sales workers. As far as the sales workforce is concerned, the association coefficients with the remaining jobs in large establishments lose significance with respect to establishments of a smaller size. Regarding the operatives group, the influence of the size variable is also remarkable, supporting the argument that the policy of human resource management applied to this category differs notably from the one adopted for white-collar occupations. In particular, we observe that the correlation coefficients between operatives and top executives,

professionals and sales workers lose significance in establishments of a big size. On the contrary, the association between operatives and the middle managers and administratives categories remains significant.

Table 4: Bivariate correlations for the use of incentive pay. Influence of "Size"

	Top executives	Professionals	Administrative workers	Middle managers	Sales workers
Operatives TOTAL	,161	,223	,290	,290	,117
SMALL	,121**	,230***	,253***	,281***	,127**
MEDIUM	,177***	,207***	,291***	,274***	,094
LARGE	-,042 ^a	,076 ^a	,364** ^a	,319** ^a	,142 ^a
Top executives TOTAL		,631	,432	,589	,340
SMALL		,686***	,472***	,626***	,533***
MEDIUM		,560***	,398***	,562***	,540***
LARGE		,602*** ^a	,251* ^a	,451*** ^a	,542*** ^a
Professionals TOTAL			,636	,737	,526
SMALL			,617***	,753***	,520***
MEDIUM			,656***	,737***	,538***
LARGE			,531*** ^a	,608*** ^a	,486*** ^a
Administrative TOTAL				,619	,396
SMALL				,596***	,433***
MEDIUM				,636***	,360***
LARGE				,573*** ^a	,357* ^a
Middle managers TOTAL					,563
SMALL					,609***
MEDIUM					,526***
LARGE					,419** ^a

*** p<0.01, ** p<0.05, * p<0.10

^a Less than 60 observations

Finally, we examine the influence of the presence of a human resource department in the establishment (see Table 5). As we have already mentioned, the presence of such department reflects the adoption of a strategic approach to human resource management. The empirical analysis reveals that the correlation coefficients are slightly higher when this department is not present at the workplace, in line with the hypothesis stated in the previous section. Some exceptions to this result are found, which are the correlation between top executives and three other occupations (operatives, professionals and salesworkers) and by sales workers and professionals. From these findings we observe that the presence of a specific department that directly deals with human resource issues exerts a different influence on the diffusion of incentive pay depending on the occupational category that we consider. We can conclude, then, that the existence of a human resource department promotes the joint adoption of variable pay linked to individual results for certain pairs of workers, but not for all of them.

Table 5: Bivariate correlations for the use of incentive pay. Influence of "Human resource department"

	Top executives	Professionals	Administrative workers	Middle managers	Sales workers
Operatives TOTAL	,161	,223	,290	,290	,117
NO HHRR DEPARTMENT	,117*	,280***	,359***	,346***	,187**
HHRR DEPARTMENT	,161***	,191***	,262***	,263***	,082*
Top executives TOTAL		,631	,432	,589	,340
NO HHRR DEPARTMENT		,619***	,465***	,583***	,473***
HHRR DEPARTMENT		,625***	,415***	,582***	,557***
Professionals TOTAL			,636***	,737***	,526***
NO HHRR DEPARTMENT			,663***	,753***	,485***
HHRR DEPARTMENT			,624***	,727***	,533***
Administrative TOTAL				,619	,396
NO HHRR DEPARTMENT				,653***	,427***
HHRR DEPARTMENT				,606***	,383***
Middle managers TOTAL					,563***
NO HHRR DEPARTMENT					,605***
HHRR DEPARTMENT					,542***

*** p<0.01, ** p<0.05, * p<0.10

CONCLUSIONS

In this study, we have analysed the diffusion of incentive pay systems across occupational groups of workers using a Spanish sample of manufacturing establishments. Taking advantage of the exhaustive information on incentive pay contained in the data set, we have been able to examine the incidence of variable pay based on individual, group and plant or firm performance for six different categories of employees: operatives, top executives, professionals, administrative workers, middle managers and sales employees. Moreover, we have explored the correlation of the use of each incentive pay system between groups, as well as the influence of the size of the establishment and the presence of a human resource department on the magnitude and significance of the correlation coefficients.

The analysis of the incidence of incentive pay reveals that sales workers are the occupation that most frequently receive contingent compensation, being generally rewarded according to their individual performance. For incentives based on collective results, and especially for incentives linked to plant or firm performance, top executives are on the top position. In global terms, the obtained findings show that individual pay is more widespread across Spanish establishments than the other two forms of compensation. Regarding the incidence of the size of the establishment and the presence of a human resource department, we observe that both variables generally exert a positive and significant effect on the adoption of incentive pay plans, specially when we look at performance pay linked to collective results.

As far as the association between groups is concerned, the correlation coefficients are mostly highly significant. These results do not match the findings of Melian-Gonzalez and Verano-Tacoronte (2004 and 2006), Lepak and Snell (2002) and of Lepak et al. (2007), who suggested that employers apply specific human resource practices to each occupational group of workers due to their different contributions toward the objectives of the organisation. Instead, our findings are consistent with the conclusions of the existent empirical literature on the uniformity of wage levels across occupations. More precisely, we observe the presence of two clusters of jobs that share certain similarities in their compensation strategies: operatives or blue-collar workers and the rest of occupations or white-collar employees. Regarding the differences among variable pay schemes, the results show that the uniformity in the use of incentive pay across occupations is higher when we look at variable pay based on plant or firm results. This could be due to the fact that this type of pay system involves the assumption of important fixed costs, so that employers decide to adopt it when it is possible to apply it to different occupations.

Turning to the examination of the effect of the size of the establishment and the presence of a human resource department on the correlation coefficients, we observe that they both exert an influence on the diffusion of incentive pay across groups of workers. On the one hand, the correlation coefficients between occupations slightly diminish when the size of the establishment increases. This result is consistent across worker groups, with the particularity that the decrease in the correlation coefficients is especially noticeable for operative workers. On the other hand, the influence of the presence of a human resource department in the establishment is not so clearly defined. The correlations between some occupations diminish with the presence of a human resource department, whereas for other groups the magnitude of the correlations increases.

To sum up, this study has served various purposes. First, it has pointed to the relevance of analysing the similarities and differences in the implementation of human resource practices across occupations. Second, it has broadened the scope of study of performance pay by making it possible to compare the incidence and diffusion of various incentive systems across occupations. Finally, we have contributed to the literature on the determinants of variable compensation using an approach to the question that has not been adopted in previous research. Hence, we have investigated

how relevant factors influence the correlation of the use of incentive pay between groups of workers. Further research is clearly required in order to examine the influence of other variables that have been proved to determine the implementation of performance pay systems, but we hope that this work serves to launch investigation on this topic and, more generally, on the diffusion of human resource practices across occupations.

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