

# Do Multinationals Adopt Different Human Resource Management Policies? Evidence From Firm Nationality\*

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## Abstract

In this paper we empirically analyze different human resource management practices used by multinational and non-multinational firms. We use a unique data set that consists on a sample of Spanish industrial establishments. We consider 38 different HRM practices in 7 different areas and find that multinational firms adopt different HRM practices in around 60 per cent of the cases. However, after allowing for relevant controls, this number is reduced to 35 per cent. When nationality is taken into account for the adoption of different HRM practices, the results obtained are very mixed and do not show a clear pattern.

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# 1 Introduction

One of the most recurrent issues in the literature on multinational companies is the question of whether multinational firms adopt different human resource management (HRM) practices than their local counterparts. To study the role that foreign ownership plays in the HRM practices that firms apply has become an object of research for a sizeable crowd of authors.

Even though the research has been considerable, the literature is far from having a unique view on the subject. Some recent examples show that while there are authors who consider that industrial and HRM practices of multinational companies bear a close resemblance to those of indigenous firms (see, for example, Turner et al., 1997), other consider that this is not the case (see, for example, Ferner and Quintanilla, 1998; Ferner et al., 2001; Geary and Roche, 2001; McGraw and Harley, 2003; or Walsh, 2001). And some other authors claim that the result depends on the nationality of the multinational (see, for example, Guest and Hoque, 1996).

Trying to add more evidence to the debate, in this paper we empirically analyze different HRM practices among multinational and non-multinational firms. Both type of firms can differ in their HRM practices. The goal of this paper is to understand how much they differ and to provide explanations for the possible reasons behind the differences.

In order to fulfill our goal, we use a unique data set that consists on a sample of Spanish industrial establishments.<sup>1</sup> The data set contains 965 plants. Of those, 27 per cent are multinationals. In the data set, explicit information on firm's HRM practices such as wage-setting practices, incentive provision, promotion, or training (including type of courses provided), among others, is available. This is an important feature of the data because, in the existing literature, the data sets used only contain information on workers wages, promotions, and training periods and therefore the actual firm's practices have to be inferred from these observations. Instead, in this paper we directly observe firm's practices and therefore we can analyze them in a straighter manner, overcoming some usual unobserved heterogeneity problems present in individual workers' data.

Other information contained in the data set relates to the production process, technology, industrial relations, the organization of the firm, relationships with suppliers and customers, quality management, and the product market in which the firm operates. Some of these are

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<sup>1</sup>We use the words establishment and plant interchangeably.

important aspects because they can shape several human resource management practices of firms. Multinational and non-multinational firms differ substantially across these factors. Therefore we will exploit their variation to understand the differences in HRM practices among multinational and non-multinational firms.

Finally, the data set also contains information on the nationality of the ownership of the multinational firms. There are establishments belonging to German, American, British, French, and Japanese multinational groups, among others. Given this information, we will also exploit the nationality of the multinational firms in order to detect differences in the behavior of firms that could be originated by the different managerial practices that are observed in those countries.

The empirical strategy of the paper is as follows. We first investigate over a broad set of HRM practices whether Spanish and foreign firms undertake different practices, distinguishing by firm nationality. The next step is to analyze further those HRM practices for which Spanish and foreign firms have a different strategy. We estimate different models to understand if these differences remain after controlling for different firm's characteristics including sectorial and regional indicators. Finally, for those HRM practices for which Spanish and foreign firms have a different strategy even after controlling for several firm's characteristics, we further investigate the multinational dimension by carefully looking at the different nationalities of firms. In the end, we are able to say that Spanish and foreign firms have a different strategy in some HRM practices and that this difference is mainly driven by firms of a certain nationality.

The rest of the paper is organized as follows. In the next section we carefully describe the data used. First we concentrate in the construction of our survey and then we describe all the variables used in our analysis. Section 3 describes the empirical strategy followed in the paper. Sections 4 and 5 contain the descriptive analysis and the results respectively. Both sections report the information differentiating between multinational and Spanish firms, and the nationality of the multinationals studied. The last section is devoted to our conclusions.

## 2 The Data

In this paper, we use a unique data set that contains plant level information on several firm's practices.<sup>2</sup> The data were gathered in a very careful manner. All surveyed firms are involved with production processes within the manufacturing sector. Regarding HRM practices, the survey refers to the blue-collar workers in each plant (that is, workers involved directly in the production process). Overall, we obtain a very homogenous type of information for every surveyed plant. At the same time, a wide scope of different firms within the manufacturing sector are included in the survey. In what follows we carefully describe the characteristics of the survey and concentrate in the variables that we are going to use in our analysis.

### 2.1 Survey's Description

In order to analyze the role that foreign ownership plays in the HRM practices that firms apply, this paper draws from a unique survey of establishments across the Spanish manufacturing sector. These data were collected in 1997 with the aim of researching several aspects of organizational change in HRM and other areas such as quality and technology management.

The manufacturing industry was chosen as the scope of the research for several reasons. First, it is a sector in which heterogeneity is limited if compared, for example, to other sectors like services where very different kinds of firms can be found. Second, in spite of constraining the scope of the analysis, manufacturing is an industry with a very important weight in the economy of a country. This allows to draw more general conclusions applicable to a wider range of firms. Moreover, in manufacturing companies it is easier to measure variables such as technology, a key element in the development of the research. Regarding HRM practices, the survey refers to the blue-collar workers in each plant (that is, workers involved directly in the production process). Finally, having chosen a wide scope of activities within the manufacturing sector allows to obtain fairly general conclusions while omitting the problems of too general heterogeneous data sets (see Ichniowski and Shaw, 2003).

The concept of manufacturing industry is clearly defined in the *Clasificacion Nacional*

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<sup>2</sup>This data set has also been used to study incentives (see Bayo-Moriones and Huerta-Arribas, 2002, and Bayo-Moriones et al., 2004) and HRM practices (see Bayo-Moriones and Merino-Diaz de Cerio, 2002), among other issues.

*de Actividades Economicas* (National Classification of Economic Activity, CNAE, equivalent to ISIC rev.3 activity classifications), which includes all the manufacturing industries (from code 15 to code 37) with the exception of oil refining and the treatment of nuclear fuel (code 23).

In the survey design, it was decided that information should be collected at the plant level. One reason behind this decision is that plants can be considered the business units in which manufacturing firms are divided in order to introduce the practices object of our study. HRM practices are adopted at the plant level and, as a consequence, it is at this level of the firm where they should be studied. Furthermore, the answers of the respondents are expected to be more reliable if they are taken at the plant. Plant managers have a great knowledge of the day-to-day reality of the company, in contrast to managers that work in the headquarters of the firm, perhaps several hundreds of miles far from the establishment.<sup>3</sup>

Another feature of the research scope to be decided was the size of the plants to be analyzed. The sample includes information about establishments that employ at least fifty workers. This limit has been used in other similar studies (see, for example, Osterman 1994) and it serves to cover a wide spectrum of the population employed in the Spanish industry, if compared to a lower number of employees limit. In addition, this threshold helped to improve the quality of the fieldwork. Obtaining a reliable directory for small plants is very difficult in the Spanish case. The reason is that it is in this group of factories where more changes in the population take place due to new openings and closures. Once the target population was clearly defined, the sample was designed through a stratified procedure that took into account both industry and size. Larger plants were overrepresented to get more representative statistics of this group of factories and to incorporate a larger number of multinational companies, usually bigger in size.

For the aim of the research, a questionnaire was developed. It was validated through a pre-test to several plants. After that, the preliminary version was modified incorporating some new questions, changing others and eliminating some other in order to get the final version of the questionnaire for the fieldwork. The different questions were clustered in several areas: general characteristics of the establishment, technology and quality management, human resource management, work organization, relationship with customers and suppliers, and

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<sup>3</sup>As Osterman (1994) states: “The great advantage of surveying establishments, as opposed to firms, is that the respondent in an establishment is likely to know the facts” (page 174).

information on the firm.

The questions referring to the HRM practices of the establishment are referred just to blue-collar workers. Although, this focus could cause some problems in terms of the generalization of the results to other professions, it was considered that concentrating just in this occupation would make comparisons between plants more reliable, since companies might have different HRM practices for different groups of workers. Moreover, the group of blue-collar workers is the most numerous occupational group in the surveyed establishments.

Information was gathered by means of a personal interview to a manager of the plant. The interview was conducted to either the plant manager or, in some other cases, to the operations or the human resource management manager of the plant. The personal interview was used, instead of other methods such as the postal survey, since it gives rise to a higher response rate.

The target population, i.e. Spanish manufacturing plants with at least 50 workers, was formed by 6,013 units in 1997. The goal for the fieldwork was to achieve a sample of one thousand units. The number of telephone calls made to arrange the appointments with the managers was 3,246. Among those, the number of valid interviews that finally were conducted was 965. For the purpose of this paper we use all the information available on the original sample.

## 2.2 The Variables

Tables 1a, 1b, 1c provide the definition and basic summary statistics of the variables used in our empirical analysis. We start by defining some basic characteristics of the plants (nationality of the ownership, size, age of the establishment, degree of unionization, degree of competition faced by the firm, type of strategy, and the sector and region the establishment belongs to). The survey also contains information on several HRM practices. These practices include 9 different areas: selection when hiring workers, training, promotion, wages, incentives, work organization, teams, job rotation, and employee involvement in the firm. In what follows, we describe the variables used.

[TABLES 1a, 1b, 1c HERE]

- Foreign

From the information contained in the survey, we are able to distinguish whether firms are multinationals or not. The key variable in our analysis is *FOREIGN* which takes value 1 if the plant is owned by a foreign firm and 0 if it is owned by a Spanish firm. Around 27 per cent of plants in the sample are multinationals. The survey also provides information regarding the nationality of multinational firms. From the whole sample, 4.5 per cent of plants are German; 4.6 per cent are French; 2.4 per cent are from the United Kingdom; 5.5 per cent are from the United States; and 1.6 per cent are Japanese. In order to take into account this information, we construct the dichotomous variables: *GERMANY*, *FRANCE*, *U.K.*, *USA* and *JAPAN*. In addition, since 5.8 per cent of the plants are from European countries other than Germany, France and United Kingdom; and 1.16 per cent are from other countries of the world other than the USA and Japan, we also construct two dichotomous variables containing this information: *OTHEREU* and *OTHERW*. Finally, 0.5 per cent of the plants are owned by firms from two different nationalities and 0.7 per cent of plants are owned by firms from three different nationalities. We construct the dichotomous variables *TWONAT* and *THREENAT* to be able to use this information. Overall, we have a very diversified sample in terms of nationality. We consider this as an additional justification for the analysis undertaken in this paper.

- Size

From the information gathered through the survey, we construct the following two variables: *SIZE1* and *SIZE2*. The first is a dichotomous variable and indicates whether the number of employees in the plant is between 200 and 499, whereas *SIZE2* indicates whether the level of employment is greater or equal than 500. Given that the minimum size of a plant in the data set is 50 employees, these variables allow us to distinguish between large, medium and small establishments.

- Age of the establishment

We construct another two variables regarding the age of the establishment: *AGE1* and *AGE2*. The variable *AGE1* indicates if the plant was founded in 1960 or before that year. The variable *AGE2* indicates if the plant was founded between 1961 and 1980. These variables allow us to distinguish between very old, old and young firms.

- Unionization

The variable *UNION* states the influence of unions in the life of the plant on a scale from one to five. The value one means a very low influence and the value five indicates a very

high influence of unions in the plant.

- Competition

The level of competition faced by the plant in the market is proxied by a dummy variable called *COMPETITION*. Firms are asked if there are many other firms, some, few or none that compete with them in the market in which they operate (whether it is regional, national, European, etc.). The variable *COMPETITION* takes value one if there are many firms operating in the same market and zero otherwise.

- Strategy

The variable *QUALITY* is a dummy variable that captures if the strategy followed by the plant is based on quality more than on cost. It takes value one if quality is more important than cost, and zero otherwise.

- Sector

In our data set we have information on the sector (CNAE, 3 digits). The sector indicators can capture the nature of the production process which can be important for the determinants of one HRM system or another (see, for instance, Ichniowski et al., 1997). According to the information available, we can distinguish among 12 sectors. Therefore we proceed to generate 12 variables, *SECTOR1* to *SECTOR12*, that take value one if the establishment belong to that sector and zero otherwise.

- Region

The region in which the plants are located also appears in our data set. There are 17 different regions in Spain which correspond to 17 different Autonomous Communities. Although in Spain the labor legislation is exactly the same for all regions, part of the collective negotiation between unions and employers' representatives is done at the regional level. Therefore, it may be still important to control for possible regional effects given the existence of potential differences in the negotiation between unions and employers of some labor contract aspects. We proceed to generate 17 variables, *REGION1* to *REGION17*, that will take value one if the establishment is located in that region and zero otherwise.

- Selection Practices

Regarding the selection process when hiring new workers, our data set has information on the different criteria used by the plants. There are five main criteria: previous experience, skills, age, ability to acquire new knowledge and ability to work in teams. We construct five dummy variables, *SEXPERIENCE*, *SSKILL*, *SAGE*, *SNEWKNOW* and *STEAM* that cap-

ture these different criteria. Each one takes value one if the specific criterion they represent is the most important selection criterion used by the plant and zero otherwise.

- Training Practices

Regarding training, we examine the amount of it as well as its content. For the first issue, the number of hours of training that workers receive in a yearly basis is available. This information is captured in the variable *THOURS*. For the second issue, the person interviewed had to divide this number of hours in five different categories of training: basic knowledge, knowledge directly linked to job content, quality techniques, abilities for teamwork and problem solving, and other training. We construct four different variables, *TBASIC*, *TJOB*, *TQUALITY* and *TTEAM*, that capture the number of annual hours of training that workers at the plant receive in each of the categories mentioned.

- Promotion Practices

In the area of promotion practices the survey contains information on the level of use of internal promotions and the criteria used in these processes. For the first issue a scale of one to five measures how many of the current supervisors and skilled technicians have been blue-collar workers at that specific plant in the past. This information is captured by the variable *PINTERNAL*. Regarding the criteria used in internal promotions, the features considered were performance, professional qualifications, ability to become a manager and commitment showed to the company. This gave rise to four dichotomous variables: *PPERFORMANCE*, *PSKILL*, *PMANAGER*, and *PCOMMIT*.

- Wage Practices

Regarding wage practices, the survey contains information on both the level and the criteria used to set worker's pay. The compensation level policy is captured through a binary variable, *WABOVE*, that takes value one if the respondent thought that manual workers in the plant were paid above the average in the industry and the region. As far as the main determinants of the basic wage is concerned, four dichotomous variables have been created to gather the four criteria taken into account: job content (*WJOB*), skills (*WSKILL*), seniority (*WSENIOR*) and work effectiveness (*WEFFECTIVENESS*). Intra-firm wage dispersion was captured with the variable *WTREND* with a scale from zero to two, that indicates whether this dispersion tends to decrease, keep the same or increase over time.

- Incentive Practices

Four practices describe the policy of the plant regarding variable pay. The first three refer to the presence of different incentive pay schemes. We build three dummy variables that contain the information regarding this schemes: production incentives (*PRODINCENT*), quality incentives (*QUALINCENT*), and firm or plant incentives (*FIRMINCENT*). Moreover, a fourth variable indicating the percentage of the whole pay that is contingent on some measure of performance is used, *PAYINCENT*.

- Work Organization Practices

Practices aimed at describing the way work is organized at the plant are also included. We build four variables representing the four practices that refer to organizational activities that might take place every day at the work place: setting up the machines (*SETUPMACH*), carrying out equipment maintenance (*MAINTENANCE*), analyzing the outcomes (*DATANALYSIS*), and self-planning and organizing (*SELFPLAN*). We construct two other variables that refer to events that only occasionally happen in the life of the plant, such as collaborating in the training of new workers (*COLTRAINEW*), and participating in job design (*JOBDESIGN*). All of them are measured on a scale of zero to 10.

- High-Performance Work Practices

Finally, several high-performance work practices directed at encouraging workers participation and giving them voice in the plant are incorporated. To account for this, we construct a variable with the percentage of workers that take part in self-autonomous teams, *AUTONTEAMS*. We also have information on the use of job rotation at the plant level. We construct a dummy variable, *JOBROTATION*, that takes value one if there is job rotation in the plant and zero otherwise. Finally, five other employee involvement practices are studied. We construct five dummy variables to account for suggestion systems (*SUGSYSTEM*), quality circles or another kind of improvement groups (*IMPROGROUPE*), attitude surveys (*ATTISURVEYS*), meetings between managers and employees (*INFORMEET*), and the celebration of open-door days at the plant (*OPENDOOR*).

### 3 Empirical Strategy

In order to analyze the role that foreign ownership plays on HRM practices, our empirical strategy is executed in two steps. In both of them a large number of practices are examined which refer to the different areas covered under HRM. The first step consists on the descrip-

tion of the HRM practices adopted both in Spanish owned plants and foreign-owned plants. This part of the analysis shows the extent to which practices are being used in the Spanish manufacturing industry depending on the presence or not of multinational ownership. The differences in HRM practices between both groups of firms are tested using a variance analysis.

Furthermore, we undertake an additional variance analysis based on the nationality of the multinational. The countries of origin of the multinationals that appear in our sample are very heterogeneous. We have specifically considered those multinationals which countries of origin are Germany, France, United Kingdom, USA and Japan, due to their relevance and their importance in our sample. Moreover, we have grouped under the heading “Other European”, those plants owned by companies from other European countries such as Italy, Sweden or the Netherlands. Plants owned by other countries, like Brazil, Mexico or South Africa have also been taken into account under the heading “Other World”. Finally, we also consider a minority of plants that are owned by firms of two or three different nationalities.

The conclusions of our variance analysis will lead us to undertake the next step in our empirical analysis. In this second step, we perform a multivariate analysis. This analysis intends to discover if the significant differences observed in the descriptive analysis between Spanish and foreign-owned plants have their origin in the type of ownership or are due to differences in other characteristics of the plants. We estimate different models to understand if these differences in HRM practices remain after controlling for different firm’s characteristics including sectorial and regional indicators.<sup>4</sup> The idea is simple, since Spanish and foreign owned firms differ in these observable characteristics, it is important to understand if the difference in practices arises because of them. The different multivariate techniques used depend on the nature of the dependent variable. In those practices that are measured by a binary variable, a probit analysis has been performed. If the practice was measured using several ordered categories, an ordered probit model was used instead. When the practice to be analyzed was measured by a quantitative variable, the technique applied was linear regression. Finally, if the variable was censored, tobit estimations were calculated.

Therefore, in this second step, we first perform the multivariate analysis considering a foreign dummy variable along with other controls. For those practices in which the for-

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<sup>4</sup>The variables used as controls are the following: *SIZE1*, *SIZE2*, *AGE1*, *AGE2*, *UNION*, *COMPETITION*, *STRATEGY*, *SECTOR1* to *SECTOR12* and *REGION1* to *REGION17*.

ign dummy remains significant, we then undertake a second analysis in which we further investigate which nationalities of these foreign owned firms drive the results.

## 4 Descriptive Analysis

The first analysis consists on the description of firms characteristics as well as the adoption of HRM practices both in Spanish owned plants and foreign-owned plants. Table 2 provides summary statistics of these variables distinguishing between Spanish and foreign owned companies. The statistical significance of the difference in the mean value of these variables is presented through the p-value. In table 3 we undertake the same analysis distinguishing by the nationality of the firm.

### 4.1 HRM Practices and Multinationals

We first investigate at the descriptive level whether Spanish and foreign owned firms are different regarding plant characteristics and the practices they apply in relation with personnel selection, training, promotion, wages, incentives, work organization, teams organization, job rotation and employee involvement.

[TABLES 2a, 2b, 2c HERE]

We start our analysis concentrating in plant characteristics. As table 2a shows, multinational firms tend to be larger than Spanish firms. However, in terms of age, there is no much difference between multinational and national firms. The influence of unions tends to be a bit larger in multinational firms and fewer multinational firms have many competitors in the market in which they operate. Moreover multinational firms consider that quality is more important than cost in terms of firm's strategy. Finally, there are significant differences in terms of industries and regions between Spanish and foreign owned firms.<sup>5</sup>

It is important to highlight these differences because it is in these characteristics where we can find the reason behind the adoption or not of certain HRM practices. And therefore, these characteristics should be considered when analyzing the differences in HRM practices between national and foreign owned firms.

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<sup>5</sup>This information is not reported in table 1 given the lack of space but is available upon request.

Regarding selection practices, table 2a also shows that multinational firms are less likely to select workers on the basis of experience than national firms. In addition, multinational firms are more likely to select workers on the basis of their skills. There is no significant difference between the hiring criteria of national and multinational firms.

Training practices are present in table 2a as well. The results show that multinational firms train around 5 hours more per year than Spanish firms. Furthermore, regarding the type of training, multinational firms are more likely to offer training in quality related topics than Spanish firms. With respect to the other forms of training, the difference in training strategies are not significantly different between foreign and Spanish firms.

Regarding promotion practices, information is available on whether firms opt for an internal promotion policy or not. Table 2b shows that multinational firms tend to promote internally their workers less frequently than Spanish firms. Regarding promotion of workers, the data set also has information on the different criteria used to promote. Table 2b shows that multinational firms are less likely to promote workers on the basis of performance and more likely to promote on the basis of skills than national firms. However, the hiring criteria do not seem to be significantly different between national and multinational firms.

Wage practices also appear in our data set. We find that foreign firms pay higher wages than similar indigenous firms in the same industry and region. Also, as table 2b shows, multinational firms are more likely to base their employees' pay on the basis of their skills and less likely to base it on work effectiveness.

Regarding incentive practices, multinational firms tend to provide less incentives based on worker's production and more on firm and plant results. Moreover, multinational firms offer less incentives, measured in terms of the percentage of the total worker's pay that is variable, than local firms. While in relation with work organization practices, foreign firms are more likely to allow for analysis of outcomes, self-planning and organizing, as well as collaboration in the training of new workers.

Finally, with respect to high-performance work practices, as table 2c shows, multinational firms are more likely to have a higher percentage of workers that take part in self-autonomous teams. Similarly, there is more job rotation at the plant level in foreign firms than in Spanish firms. And multinational firms are more likely to undertake different employee involvement practices.

Overall, our results show statistically significant differences for HRM practices in 23 out of 38 practices considered. That is, in 60 per cent of the practices considered. Therefore, we observe global differences in the way human resources are managed. These findings justify to further analyze the factors behind these differences.

## 4.2 HRM Practices and the Nationality of Firms

Next we undertake a similar analysis distinguishing among the different nationalities of the multinational firms. Table 3 includes the information about the extent of HRM practices in foreign-owned plants according to their country of origin. As we mentioned before, the nationalities of the multinationals represented in our sample are very heterogeneous and these is reflected in the different columns of table 3.

[TABLE 3a, 3b HERE]

Regarding selection practices, variations are found in the criteria used when a new worker has to be hired. These variations come especially from Japanese firms. In this case less attention is devoted to previous experience in other jobs and more to age. We also find that companies from other non-European countries prefer to base the hiring of a new worker mostly in experience.

In the area of training, the behavior of plants in terms of the amount of total annual hours of training provided to workers is quite similar. However, this does not apply to the content. For instance, establishments owned by French and US companies put more emphasis than the rest in training aimed at improving the ability to work in teams and to solve the problems they might face in their job.

In relation with promotion practices, and as long as internal promotions are concerned, nationality of parent country does not seem to play any role in explaining the decisions of foreign-owned firms. We have not found any differences either in the degree of use or in the criteria employed in determining the winners of the promotions.

With respect to wage practices, there are some interesting differences. Whereas the factors considered in fixing basic wages in multinational firms do not seem to be affected by their nationality, the same does not seem to happen regarding variable pay.

With respect to incentive practices, German companies are the ones that present a differential behavior. Around 63 per cent of their plants in Spain use production incentives

to reward their manual workers. Besides that, the weight that the variable pay has in the total pay of employees is 13.18 per cent.<sup>6</sup> The low diffusion of production incentives in British-owned plants (30 per cent) is a feature that must also be underlined.

Regarding work organization practices all the establishments seem to have adopted a similar focus. The same does not apply to the introduction of some of the high-performance work practices analyzed. Participation in autonomous work teams reaches higher levels in German-, French- and US-owned plants and lower in the case of British- and Japanese-owned plants. Slightly different results are obtained for job rotation, for which the rate of diffusion is higher for US and Japan, and lower for Germany and Britain. Finally, no significant differences are found by nationality regarding employee involvement practices.

Overall, when comparing different non Spanish firms, our results show statistically significant differences in 8 HRM practices out of 38 considered. We do not observe global differences in the way human resources are managed.

## 5 Results

Following the structure of the previous section, we first describe the results obtained using the multivariate analysis with control variables in terms of a broad measure of multinationals. Then we perform the same type of analysis making a finer distinction as we take into account the nationality of firms.

### 5.1 HRM Practices and Multinationals

The results concerning HRM practices and foreign owned firms can be found in tables 4 to 10. In these tables we display the results of the multivariate analysis performed. The multivariate techniques used depend on the nature of the dependent variable.

Based on the results from table 2a, we further analyze what drives the differences observed in selection practices. The practices analyzed were measured by a binary variable, so probit models are estimated in table 4. Are multinational firms less likely to use experience as a selection criteria because these firms are characterized in such a way that experience is less important for them than for national firms? This could be the case, for example, if

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<sup>6</sup>This is a high percentage in comparison with other nationalities for which this percentage range from 6 to 8 per cent.

multinational firms invest more in new technologies that require younger workers with more modern skills (see Lazear, 1997, and Almeida, 2003). Alternatively, there could be a genuine effect of being multinational. In order to test this possibility, we estimate a probit model for the probability of implementing such a policy as a function of being a multinational firm as well as other characteristics. Table 4 reports the results of this exercise.

[TABLE 4 HERE]

The first two columns on table 4 analyze the experience criteria when selecting workers, while columns (3) and (4) analyze the skills criteria when hiring new workers. The first and third columns express the same findings as in table 2a. That is, foreign firms are less likely to use experience as the main criteria for selection while it is also true that they are more likely to use skills as the main criteria for selection. Columns (2) and (4) replicate the estimations including a set of controls to understand the robustness of the foreign dummy. As can be seen, the variable *multinational* is still negative and statistically different from zero for experience but the significance goes away for the case of hiring based on skills. This is basically due to the fact that larger firms and firms that face less competition are more likely to undertake the selection based on skills. As discussed above, multinationals tend to be larger and face less competition, so once we control for these characteristics the coefficient for the variable *SSKILL* on the multinational variable fades away.

In table 5 we further investigate the evidence regarding training practices that arise from table 2a. Since the variables used in this case are censored, tobit estimations were performed in this occasion. We want to understand if the differences observed are due to particular characteristics of multinationals or if there is multinational effect beyond these.

[TABLE 5 HERE]

In the first two columns we estimate a tobit model for the number of training hours. The inclusion of several controls reduces the coefficient on the multinational variable to zero. This is mainly driven by the fact that medium size firms are more likely to undertake this policy. Columns (3) and (4) show the results of a tobit model for the hours of training in quality techniques. The results reveal that, even after including several controls, multinational firms are more likely to provide training related to quality issues.

Based on the facts observed on table 2b, we further analyze what drives the differences in promotion practices between multinationals and local firms. Since the first practice analyzed

was measured using several ordered categories, we estimate an ordered probit in columns (1) and (2). The other two practices analyzed are measured by a binary variable and, therefore, probit models are estimated in columns (3) to (6). The results of these estimations appear in table 6.

[TABLE 6 HERE]

Columns (1) and (2) of table 6 analyze internal promotion. Even after including controls, multinational firms are less likely to promote internally their employees. Columns (3) to (6) analyze the different promotion criteria used by multinational and foreign firms. Columns (3) and (4) analyze worker performance and columns (5) and (6) analyze skills. The third and fifth columns display the same findings that those found in table 2b. However, columns (4) and (6) show that once we include appropriate controls, these results fade away. That is, the reason why foreign firms have different practices of promotion is mainly due to the fact that they are different to begin with. The main control that drives these results is the effect of large firms as well as regional dummies.

Table 7 analyzes wage practices. Since the first two practices analyzed were measured by a binary variable, probit models are estimated in columns (1) to (4). The other two practices were measured using several ordered categories and, therefore, we estimate ordered probit models in columns (5) to (8). Columns (1) and (2) analyze wage levels. Column (1) shows the same finding as in table 2b, that is, foreign owned firms are more likely to pay higher wages than similar firms in the industry and region in comparison with Spanish firms. As column (2) shows, this effect fades away once relevant controls are considered. In particular, large firms, firms in which firms have higher influence and certain regional dummies drive these new results.

[TABLE 7 HERE]

Regarding the different criteria used when setting wages, columns (3) to (6) analyze skills and work effectiveness. Columns (3) and (5) show the same results as in table 2b. However, once the relevant controls are included, columns (4) and (6) show that the coefficient of foreign goes to zero. The former is mainly driven by sectorial dummies and the latter is driven by the fact that larger firms are less likely to use this policy. Regional and sectorial dummies are also relevant for the latter result. Finally, columns (7) and (8) analyze intra-firm

wage dispersion. As column (8) shows, after allowing for the relevant controls, multinationals firms are not less likely to present this feature in wages at the plant level.

Table 8 displays the results concerning the different incentive practices. Columns (1) to (6) analyze the three criteria used by multinational firms that differ from local firms, as seen in table 2b. Since the first two practices analyzed were measured by a binary variable, we estimate probit models in columns (1) to (4). Since the third practice analyzed is a censored variable, tobit models are estimated in columns (5) and (6).

[TABLE 8 HERE]

Regarding production incentives, once we include the relevant controls (see column 2), it is no longer the case that multinational firms are less likely to use this policy than national firms. This is mainly driven by the *UNION* variable as well as the regional dummies. However, regarding firm or plant incentives (columns 3 and 4), even after controlling for the relevant characteristics, multinational firms are more likely to follow such policy than Spanish firms. Finally, the last two columns analyze the amount of incentives granted to workers. As column (6) shows, even after allowing for several controls, it is the case that multinational firms pay less incentives defined as the percentage of the whole pay that is contingent on some measure of performance.

The different work organization practices are analyzed in table 9. Since the practices to be analyzed were measured by a quantitative variable, the technique applied in this case was linear regression.

[TABLE 9 HERE]

Columns (1), (3) and (5), that regress each of the practices without considering any controls, report the same results as those found in table 2b. Columns (2) and (4) show that after controlling for relevant characteristics, it is still the case that multinational firms are more likely to allow workers to analyze the outcomes, as part of the work organization scheme, as well as self-planning and organizing their work. However, column (6) shows that once we include the relevant controls, it is not the case that we observe more collaborating in the training of new workers among their workers in multinational firms. The main variables driving these results are the industry dummies.

Regarding high-performance work practices, table 10 shows the results for the analysis of this specific criterion. The presence of self-autonomous teams at the plant level is analyzed

in columns (1) and (2). Since this practice is a censored variable, tobit models are estimated in those columns. The results do not change from those displayed in table 2c. They show that multinationals are more likely to undertake such policy after controlling for the relevant plant characteristics.

[TABLE 10 HERE]

The results for job rotation practices and employee involvement practices appear in columns (3) and (4), and (5) to (12) respectively. Since these two practices were measured by a binary variable, we estimate probit models for columns (3) to (12) in table 10. These columns analyze those criteria used by multinational firms that differ from local firms, as seen in table 2c. Regarding job rotation at the plant level, as columns (3) and (4) show, the main result found in table 2c is mainly driven by the fact that medium-size firms are more likely to undertake such policy and therefore there are no differences in terms of ownership with respect to this policy. Regarding employee involvement practices, the main descriptive results found in table 2c remain the same after allowing for several controls. That is, multinational firms are more proactive in this type of practices than Spanish firms.

## 5.2 HRM Practices and the Nationality of Firms

In this section we analyze the HRM practices that are “genuinely” different for Spanish and multinational firms trying to investigate the existence of a nationality effect of the multinationals that could be driving these results. In particular we perform the same exercise as in the previous section, but only for those HRM practices for which the variable *FOREIGN* is still significant after allowing for several controls, replacing this variable by the different nationalities of multinational firms as displayed in table 1.

Regarding selection practices and estimating a probit model, table 11 shows that the fact that multinational firms are less likely to use worker’s experience as the main criteria when selecting workers is mainly driven by German and French multinational firms. The other multinational firms are no different from the Spanish firms regarding this issue.

[TABLE 11 HERE]

The results for training practices are shown in table 12. Estimating a tobit model we find that the fact that multinational firms are more likely to provide training in quality issues

is mainly driven by multinational firms from USA. In this respect, the other multinational firms are no different from Spanish firms.

[TABLE 12 HERE]

Table 13 displays the results for promotion practices. After estimating an ordered probit model, we find that those multinational firms that are less likely to promote internally their employees are mostly UK multinational firms as well as multinationals owned by firms of two or three different nationalities. The other multinational firms are no different from Spanish firms regarding this issue.

[TABLE 13 HERE]

The two incentive practices for which we found differences were *FIRMINCENT* and *PAYINCENT*. Since the first practice was measured by a binary variable a probit model is estimated in column (1) of table 14. The second practice was measured by a censored variable and therefore a tobit model is estimated in column (2) of table 14.

[TABLE 14 HERE]

On the one hand, column (1) shows that the multinational firms that are more likely to provide firm and plant based incentives are mainly French and UK multinationals. In this respect, the other multinational firms are no different from Spanish firms. On the other hand, column (2) shows that the fact that multinational firms provide lower levels of incentives is mainly driven by multinational from other European countries. The other multinational firms are no different from Spanish firms regarding this issue.

Since both work organization practices considered were measured by a quantitative variable, the technique applied in both cases is linear regression and the results are reported in table 15. Column (1) shows that the multinational firms that are more likely to allow their workers to analyze the outcomes of their work are those from the USA as well as from other European countries. In this respect, the other multinational firms are no different from Spanish firms. Column (2) also shows that the result found that multinational firms are more likely to allow their employees to self-planning and organizing their work is mostly driven by French and USA firms. The other multinational firms are no different from Spanish firms regarding this issue.

[TABLE 15 HERE]

Regarding high-performance work practices, the results are displayed in table 16. The autonomous teams variable (*AUTONTEAMS*) was measured by a censored variable. Therefore in this case a tobit model is estimated. Column (1) in table 16 shows that the multinational firms that are more likely to organize their workforce in autonomous teams are those French and from USA. In this respect, the other multinational firms are no different from Spanish firms.

[TABLE 16 HERE]

Moreover, since the employee involvement practices were measured by a binary variable, probit models are estimated in columns (2) to (6) of table 16. The second column of this table shows that those multinational firms that are more likely to allow suggestion systems in the plant are German as well as from other European multinationals. The other multinational firms are no different from Spanish firms regarding this issue. Columns (3) and (4) show that the multinational firms that are more likely to allow quality circles or another kind of improvement groups in the plant, as well as more likely to undertake attitude surveys, are the German, French, those from the United Kingdom, the USA, as well as those from other European multinationals. We also find that those multinationals owned by firms with two different nationalities are more likely to undertake attitude surveys. The other multinational firms are no different from Spanish firms in this regard.

The fifth column in table 16 shows that the fact that multinational firms are more likely to promote meetings between managers and employees is mainly due to the German, French and US multinationals. Finally column (6) shows that those multinational firms that are more likely to undertake open-door days mainly the Japanese as well as those contained under the heading “Other World”. The other multinational firms are no different from Spanish firms in these regards.

The results obtained in this subsection are summarized in table 17. This table displays those HRM practices for which the nationality effect is significant either in a positive or negative way. Only 13 out of the 38 different practices analyzed, belonging to 6 out of 7 different areas, seem to be influenced by this nationality effect.

[TABLE 17 HERE]

## 6 Conclusions

Our main results are the following. We have considered 38 different HRM practices in 7 different areas. A first approximation to the data shows that multinational firms adopt different HRM practices in around 60 per cent of the cases. Those cases are distributed among all the different areas. However, when considering that multinational firms have different firm characteristics and that these could partly explain a different adoption in HRM practices, indeed the differences reduce to 35 per cent of the cases. Interestingly enough, these cases are now distributed in all areas except in the wage setting practices. Remarkably, all the different practices in the area of employee involvement remain different for Spanish and multinational firms.

Among multinationals, firms with different nationality seem to adopt some different specific practices that range from seven different practices applied by USA multinationals to only one different practice applied by Japanese multinationals. Therefore, when considering the nationality in the adoption of different HRM practices, the results obtained are very mixed and do not seem to show a clear pattern. Regarding the high-performance work practices, there are more similarities among the different non-Spanish nationalities.

Overall, we interpret these results as some evidence of the fact that multinational and Spanish manufacturing firms adopt different HRM practices, specially in the area of high-performance work practices.

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Table 1a. Variable Definitions, Means and Standard Deviations

Variable	Definition	Mean	Std. D.	N
Plant Character.				
FOREIGN	1=plant owned by a foreign company; 0=plant owned by a Spanish company	0.267	0.444	949
GERMANY	1=company fully owned by a German company; 0=otherwise	0.045	0.208	949
FRANCE	1=company fully owned by a French company; 0=otherwise	0.046	0.210	949
U. K.	1=company fully owned by a British company; 0=otherwise	0.024	0.154	949
USA	1=company fully owned by an American company; 0=otherwise	0.056	0.230	949
JAPAN	1=company fully owned by a Japanese company; 0=otherwise	0.016	0.125	949
OTHEREU	1=company fully owned by other European company; 0=otherwise	0.058	0.234	949
OTHERW	1=company fully owned by other company from rest of the world; 0=otherwise	0.012	0.107	949
TWONAT	1=company owned by firms of two different nationalities; 0=otherwise	0.005	0.072	949
THREENAT	1=company owned by firms of three different nationalities; 0=otherwise	0.007	0.085	949
SIZE1	1=number of workers of the plant between 200 and 499; 0=otherwise	0.171	0.377	965
SIZE2	1=number of workers of the plant greater or equal than 500; 0=otherwise	0.110	0.313	965
AGE1	1=plant founded in 1960 or before; 0=otherwise	0.445	0.497	953
AGE2	1=plant founded between 1961 and 1980; 0=otherwise	0.242	0.428	953
UNION	Level of influence of unions in the plant measured on a scale 1-5	2.56	1.238	935
COMPETITION	1=many competitors in market where the plant sells the products; 0=otherwise	0.408	0.491	963
QUALITY	1=quality more important than cost in strategy followed by the firm; 0=otherwise	0.634	0.481	965
SECTOR1-12	1=plant belong to sector 1-12; 0=otherwise	-	-	965
REGION 1-17	1=plant belong to region 1-17; 0=otherwise	-	-	965
Selection				
SEXPERIENCE	1=Previous experience as the most important selection criterion; 0=otherwise	0.313	0.464	954
SSKILL	1=Skills as the most important selection criterion; 0=otherwise	0.330	0.471	954
SAGE	1=Age as the most important selection criterion; 0=otherwise	0.058	0.233	954
SNEWKNOW	1=Ability to acquire new knowledge as the most important selection criterion; 0=otherwise	0.161	0.368	954
STEAM	1=Ability for teamwork as the most important selection criterion; 0=otherwise	0.106	0.308	954

Table 1b. Variable Definitions, Means and Standard Deviations

Variable	Definition	Mean	Std. D.	N
Training				
THOURS	Training (number of annual hours per worker)	21.177	28.456	785
TBASIC	Training in basic skills (number of annual hours per worker)	2.061	7.732	867
TJOB	Training in skills linked to job content (number of annual hours per worker)	9.900	15.694	780
TQUALITY	Training in quality (number of annual hours per worker)	5.322	9.926	798
TTEAM	Training in teamwork and problem solving (number of annual hours per worker)	2.030	6.587	862
Promotion				
PINTERNAL	Use of internal promotions from blue-collar workers to supervisors (1-5)	2.705	1.220	960
PPERFORMANCE	1=Performance as most important criterion in promotions from blue-collar workers to supervisors; 0=otherwise	0.293	0.455	948
PSKILL	1=Professional qualification as the most important criterion in promotions from blue-collar workers to supervisors; 0=otherwise	0.380	0.485	948
PMANAGER	1=Ability for management as the most important criterion in promotions from blue-collar workers to supervisors; 0=otherwise	0.195	0.396	948
PCOMMIT	1=Commitment to the firm as the most important criterion in promotions from blue-collar workers to supervisors; 0=otherwise	0.011	0.102	948
Wages				
WABOVE	1=Wages above the average in region and industry; 0=otherwise	0.411	0.492	929
WJOB	1=Job as the most important criterion in determining basic wages; 0=otherwise	0.433	0.496	950
WSKILL	1=Professional qualifications as the most important criterion in determining basic wages; 0=otherwise	0.248	0.432	950
WSENIOR	1=Seniority as the most important criterion in determining basic wages; 0=otherwise	0.088	0.284	950
WEFFECTIVENESS	1=Work effectiveness as the most important criterion in determining basic wages; 0=otherwise	0.195	0.396	950
WTREND	Trend of wage dispersion in the plant (0-2)	1.193	0.632	953

Table 1c. Variable Definitions, Means and Standard Deviations

Variables	Definition	Mean	Std. D.	N
Incentives				
PRODINCENT	1=If production incentives provided; 0=otherwise	0.495	0.500	960
QUALINCENT	1=If quality incentives provided; 0=otherwise	0.150	0.357	960
FIRMINCENT	1=If firm or plant incentives provided; 0=otherwise	0.110	0.313	960
PAYINCENT	Variable pay over total pay (%)	9.765	10.803	883
Work Organization				
SETUPMACH	Workers set up the machines they use (0-10)	6.599	3.331	944
MAINTENANCE	Workers carry out equipment maintenance (0-10)	3.933	3.342	942
DATANALYSIS	Workers analyze the data resulting from their job (0-10)	4.174	3.384	938
SELFPLAN	Self-planning and organization of work (0-10)	2.445	2.942	940
COLTRAINEW	Collaboration in the training of new workers (0-10)	6.240	3.021	949
JOBDESIGN	Participation in job design (0-10)	3.639	3.058	942
High-Performance Work Practices				
AUTONTEAMS	Autonomous work teams (% of workers)	17.474	29.550	926
JOBROTATION	1=If job rotation; 0=otherwise	0.450	0.498	962
SUGSYSTEM	1=If suggestion systems implemented; 0=otherwise	0.566	0.496	955
IMPROGROUPS	1= If improvement groups implemented; 0=otherwise	0.390	0.488	959
ATTISURVEYS	1=If attitude surveys; 0=otherwise	0.221	0.415	947
INFORMEET	1=If informative meetings between managers and employees implemented; 0=otherwise	0.584	0.493	953
OPENDOOR	1=If open-door days implemented; 0=otherwise	0.201	0.401	927

Table 2a. Spanish Versus Foreign Owned Plants

Variable	SPANISH			FOREIGN			p-value
	Mean	Std. D.	N	Mean	Std. D.	N	
FOREIGN	0	-	693	1	-	256	
SIZE1	0.140	0.347	693	0.258	0.438	256	0.000
SIZE2	0.076	0.266	693	0.199	0.400	256	0.000
AGE1	0.448	0.498	683	0.427	0.496	255	0.286
AGE2	0.236	0.425	683	0.271	0.445	255	0.135
UNION	2.464	1.229	670	2.828	1.221	250	0.000
COMPETITION	0.433	0.496	691	0.340	0.474	256	0.005
QUALITY	0.610	0.488	683	0.691	0.463	256	0.011
SECTOR1-12			693			256	
REGION 1-17			693			256	
<b>Selection</b>							
SEXPERIENCE	0.360	0.480	686	0.194	0.396	252	0.000
SSKILL	0.296	0.457	686	0.420	0.494	252	0.000
SAGE	0.058	0.234	686	0.055	0.229	252	0.872
SNEWKNOW	0.156	0.363	686	0.174	0.380	252	0.491
STEAM	0.100	0.301	686	0.123	0.329	252	0.324
<b>Training</b>							
THOURS	19.670	29.075	560	24.966	26.082	210	0.021
TBASIC	2.169	8.421	620	1.466	4.369	231	0.227
TJOB	9.422	16.058	555	11.345	14.966	210	0.133
TQUALITY	4.503	9.344	572	7.301	10.165	211	0.000
TTEAM	1.825	7.211	620	2.646	4.635	226	0.111

Table 2b. Spanish Versus Foreign Owned Plants

Variable	SPANISH			FOREIGN			p-value
	Mean	Std. D.	N	Mean	Std. D.	N	
<b>Promotion</b>							
PINTERNAL	2.770	1.200	688	2.554	1.254	256	0.015
PPERFORMANCE	0.322	0.468	682	0.224	0.417	250	0.003
PSKILL	0.350	0.477	682	0.452	0.498	250	0.005
PMANAGER	0.188	0.391	682	0.220	0.415	250	0.271
PCOMMIT	0.012	0.107	682	0.000	0.000	250	0.085
<b>Wages</b>							
WABOVE	0.385	0.487	664	0.480	0.501	250	0.009
WJOB	0.435	0.496	684	0.440	0.497	250	0.906
WSKILL	0.225	0.417	684	0.304	0.461	250	0.013
WSENIOR	0.089	0.285	684	0.084	0.277	250	0.804
WEFFECTIVENESS	0.216	0.412	684	0.132	0.339	250	0.004
WTREND	1.233	0.612	683	1.106	0.671	254	0.007
<b>Incentives</b>							
PRODINCENT	0.515	0.500	689	0.453	0.498	256	0.089
QUALINCENT	0.142	0.349	689	0.175	0.381	256	0.201
FIRMINCENT	0.095	0.294	689	0.152	0.360	256	0.013
PAYINCENT	10.525	11.239	628	8.153	9.509	241	0.003
<b>Work Organization</b>							
SETUPMACH	6.571	3.347	675	6.562	3.335	254	0.971
MAINTENANCE	4.000	3.424	674	3.806	3.125	253	0.432
DATANALYSIS	3.949	3.355	672	4.848	3.407	251	0.000
SELFPLAN	2.285	2.896	672	2.869	3.033	253	0.007
COLTRAINNEW	6.131	3.100	678	6.521	2.815	255	0.079
JOBDESIGN	3.585	3.141	673	3.853	2.823	253	0.234

Table 2c. Spanish Versus Foreign Owned Plants

Variable	SPANISH			FOREIGN			p-value
	Mean	Std. D.	N	Mean	Std. D.	N	
<b>High-Performance Work Practices</b>							
AUTONTEAMS	15.343	27.851	662	22.616	32.512	248	0.000
JOBROTATION	0.413	0.492	691	0.541	0.499	255	0.000
SUGSYSTEM	0.517	0.500	684	0.705	0.456	255	0.000
IMPROGROUPS	0.318	0.466	690	0.588	0.493	253	0.000
ATTISURVEYS	0.151	0.358	682	0.413	0.493	249	0.000
INFORMEET	0.518	0.500	685	0.761	0.126	252	0.000
OPENDOOR	0.154	0.361	666	0.323	0.468	247	0.000

Table 3a. Spanish Versus Foreign Owned Plants

Variable	GERMAN			FRENCH			UK			USA			JAPANESE			OTHEREU			OTHERW			p value
	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	
Selection																						
SEXPERIENCE	0.142	0.354	42	0.116	0.324	43	0.218	0.422	23	0.245	0.434	53	0	0	15	0.204	0.406	54	0.545	0.522	11	0.025
NEWSSKILL	0.452	0.503	42	0.441	0.502	43	0.348	0.487	23	0.415	0.497	53	0.466	0.516	15	0.444	0.501	54	0.273	0.467	11	
SAGE	0.023	0.154	42	0.116	0.324	43	0.043	0.208	23	0.038	0.192	53	0.200	0.414	15	0.037	0.190	54	0	0	11	0.066
SNEWKNOW	0.214	0.415	42	0.209	0.411	43	0.174	0.387	23	0.151	0.361	53	0.266	0.458	15	0.129	0.339	54	0.091	0.301	11	0.825
STEAM	0.166	0.377	42	0.046	0.213	43	0.130	0.344	23	0.113	0.319	53	0.066	0.258	15	0.166	0.376	54	0.091	0.301	11	0.617
Training																						
THOURS	22.911	22.882	34	29.605	26.406	38	13.681	11.561	22	29.143	30.838	42	29.692	31.004	13	23.325	22.310	43	28.000	44.873	10	0.299
TBASIC	1.226	2.731	40	1.999	4.436	42	0.957	1.701	21	1.217	2.573	45	2.655	6.928	13	1.582	6.884	49	0	0	11	0.689
TJOB	10.907	15.448	34	13.241	14.468	38	6.240	6.167	21	12.205	16.685	42	16.770	19.035	13	9.799	11.843	43	17.820	27.143	10	0.495
TQUALITY	7.029	8.998	34	7.678	9.025	40	5.223	6.317	21	7.867	12.656	41	7.867	13.445	13	7.007	8.474	44	9.990	18.317	10	0.972
TTEAM	2.620	3.286	39	4.175	6.979	40	1.036	2.310	22	3.769	5.691	43	1.744	2.024	13	2.024	3.325	49	0	0	11	0.041
Promotion																						
PINTERNAL	2.790	1.124	43	2.636	1.058	44	2.174	1.402	23	2.604	1.245	53	2.866	1.302	15	2.654	1.250	55	2.182	1.601	11	0.069
PPERFORMANCE	0.309	0.467	42	0.139	0.350	43	0.136	0.351	22	0.255	0.440	51	0.133	0.352	15	0.222	0.419	54	0.273	0.467	11	0.447
PSKILL	0.547	0.503	42	0.581	0.499	43	0.545	0.509	22	0.333	0.476	51	0.400	0.507	15	0.389	0.492	54	0.363	0.504	11	0.145
PMANAGER	0.095	0.297	42	0.186	0.393	43	0.272	0.456	22	0.255	0.440	51	0.466	0.516	15	0.241	0.431	54	0.182	0.404	11	0.108
PCOMMIT	0	0	42	0	0	43	0	0	22	0	0	51	0	0	15	0	0	54	0	0	11	0.323
Wages																						
WABOVE	0.512	0.506	41	0.414	0.498	41	0.391	0.499	23	0.604	0.494	53	0.600	0.507	15	0.473	0.504	55	0.200	0.422	10	0.178
WJOB	0.465	0.504	43	0.285	0.457	42	0.500	0.512	22	0.451	0.502	51	0.466	0.516	15	0.518	0.504	54	0.272	0.467	11	0.346
WSKILL	0.395	0.494	43	0.380	0.491	42	0.364	0.492	22	0.274	0.451	51	0.133	0.352	15	0.241	0.431	54	0.272	0.467	11	0.343
WSENIOR	0.046	0.213	43	0.095	0.297	42	0.163	0.351	22	0.098	0.300	51	0.066	0.258	15	0.037	0.191	54	0.181	0.404	11	0.408
WEFFECTIVENESS	0.093	0.293	43	0.190	0.397	42	0	0	22	0.117	0.325	51	0.266	0.457	15	0.148	0.358	54	0.181	0.404	11	0.262
WTREND	0.976	0.293	43	1.209	0.558	43	1.217	0.795	23	1.151	0.690	53	1.200	0.560	15	1.129	0.702	54	0.727	0.467	11	0.248

Table 3b. Spanish Versus Foreign Owned Plants

Variable	GERMAN			FRENCH			UK			US			JAPANESE			OTHEREU			OTHERW			p value
	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	Mean	Std. D.	N	
Incentives																						
PROINCENT	0.627	0.489	43	0.500	0.505	44	0.304	0.470	23	0.453	0.502	53	0.400	0.507	15	0.345	0.479	55	0.636	0.504	11	0.086
QUALINCENT	0.209	0.411	43	0.227	0.423	44	0.130	0.344	23	0.188	0.395	53	0	0	15	0.145	0.355	55	0.273	0.467	11	0.482
FIRMINCENT	0.139	0.350	43	0.204	0.408	44	0.261	0.449	23	0.132	0.341	53	0.200	0.414	15	0.109	0.314	55	0	0	11	0.545
PAYINCENT	13.184	11.064	38	7.925	8.293	40	7.636	9.796	22	6.686	7.322	51	6.266	7.449	15	6.981	10.623	54	7.000	7.228	9	0.033
Work Organization																						
SETUPMACH	6.581	2.855	43	6.545	3.323	44	6.174	3.312	23	7.151	3.237	53	6.533	3.870	15	6.434	3.516	53	4.273	3.875	11	0.825
MAINTENANCE	3.744	3.063	43	3.750	2.737	44	3.478	2.574	23	4.283	3.248	53	5.133	2.559	15	2.923	3.229	52	3.727	3.875	11	0.107
DATANALYSIS	4.833	3.169	42	4.954	3.234	44	4.227	3.407	22	5.113	3.555	53	5.286	3.851	14	4.924	3.689	53	4.091	2.773	11	0.947
SELFPLAN	2.651	2.776	43	3.113	2.830	44	2.783	2.969	23	2.868	2.981	53	2.857	2.685	14	2.585	3.213	53	3.454	4.321	11	0.821
COLTRAINEW	7.093	2.750	43	6.727	2.739	44	6.217	2.746	23	6.641	2.746	53	6.266	3.081	15	6.315	2.951	54	5.454	2.504	11	0.624
JOBDESIGN	4.093	2.926	43	3.477	2.782	44	4.043	3.226	23	4.098	2.343	51	4.133	2.825	15	3.926	3.149	54	3.636	2.766	11	0.816
Teams																						
AUTONTEAMS	25.25	31.682	40	27.261	36.047	42	14.478	22.831	23	29.904	38.192	52	11.600	16.578	15	22.629	32.699	54	7.500	23.717	10	0.083
Rotation																						
JOBROTATION	0.418	0.499	43	0.534	0.504	43	0.435	0.507	23	0.698	0.463	53	0.666	0.488	15	0.418	0.498	55	0.545	0.522	11	0.014
Participation																						
SUGSYSTEM	0.833	0.377	42	0.427	0.450	44	0.652	0.487	23	0.641	0.484	53	0.533	0.516	15	0.763	0.428	55	0.636	0.504	11	0.244
IMPROGROUPS	0.642	0.484	42	0.558	0.502	43	0.522	0.511	23	0.653	0.480	52	0.733	0.457	15	0.600	0.494	55	0.273	0.467	11	0.247
ATTISURVEYS	0.428	0.500	42	0.372	0.489	43	0.391	0.499	23	0.449	0.502	49	0.600	0.507	15	0.426	0.499	54	0.091	0.301	11	0.603
INFORMEET	0.837	0.373	43	0.809	0.397	42	0.652	0.487	23	0.827	0.382	52	0.733	0.458	15	0.704	0.461	54	0.636	0.504	11	0.286
OPENDOOR	0.292	0.460	41	0.302	0.464	43	0.261	0.449	23	0.307	0.466	52	0.643	0.497	14	0.269	0.448	52	0.600	0.516	10	0.111

Table 4. Selection Practices<sup>1</sup>

	SEXPERIENCE		SSKILL	
	(1)	(2)	(3)	(4)
FOREIGN	-0.503 (0.102)	-0.295 (0.118)	0.335 (0.094)	0.160 (0.110)
SIZE1		-0.068 (0.126)		0.153 (0.122)
SIZE2		-0.295 (0.172)		0.324 (0.152)
UNION		0.015 (0.039)		0.046 (0.039)
AGE1		0.029 (0.109)		-0.151 (0.107)
AGE2		0.053 (0.130)		-0.124 (0.128)
COMPETITION		0.117 (0.094)		-0.277 (0.095)
QUALITY		0.050 (0.096)		-0.083 (0.096)
Constant	-0.358 (0.048)	-0.532 (0.510)	-0.536 (0.050)	0.225 (0.526)
Sector Dummies	N	Y	N	Y
Regional Dummies	N	Y	N	Y
Log Likelihood	-572.404	-521.016	-588.138	-525.472
Chi-squared	24.84	77.92	12.68	65.21
N	938	893	938	869

Notes: <sup>1</sup>Probit estimates.

Table 5. Training Practices<sup>1</sup>

	THOURS		TQUALITY	
	(1)	(2)	(3)	(4)
FOREIGN	10.602 (2.883)	2.101 (3.090)	6.017 (1.135)	2.424 (1.216)
SIZE1		13.150 (3.475)		5.955 (1.368)
SIZE2		4.255 (4.403)		1.712 (1.696)
UNION		-0.233 (1.119)		-0.125 (0.444)
AGE1		-6.651 (3.015)		-1.099 (1.203)
AGE2		-6.192 (3.568)		-1.768 (1.049)
COMPETITION		1.928 (2.630)		0.592 (1.09)
QUALITY		0.117 (2.716)		0.358 (1.091)
Constant	12.476 (1.565)	3.335 (15.136)	-0.400 (0.644)	-5.007 (5.874)
Anc. Param.	34.806 (1.064)	32.459 (1.000)	13.390 (0.454)	12.540 (0.428)
Sector Dummies	N	Y	N	Y
Regional Dummies	N	Y	N	Y
Log Likelihood	-3046.974	-2898.935	-2153.338	-2042.233
Chi-squared	13.56	125.99	28.24	136.37
N	770	742	783	755

Notes: <sup>1</sup>Tobit estimates.

Table 6. Promotion Practices

	PINTERNAL <sup>1</sup>		PPERFORMANCE <sup>2</sup>		PSKILL <sup>2</sup>	
	(1)	(2)	(3)	(4)	(5)	(6)
FOREIGN	-0.186 (0.077)	-0.192 (0.090)	-0.298 (0.101)	-0.171 (0.117)	0.263 (-0.384)	0.125 (0.109)
SIZE1		0.062 (0.100)		-0.075 (0.125)		-0.120 (0.121)
SIZE2		0.022 (0.124)		-0.469 (0.169)		0.286 (0.148)
UNION		0.063 (0.031)		0.023 (0.039)		0.063 (0.038)
AGE1		-0.125 (0.086)		-0.115 (0.109)		-0.003 (0.105)
AGE2		-0.164 (0.103)		-0.050 (0.128)		-0.056 (0.124)
COMPETITION		0.153 (0.076)		-0.168 (0.095)		-0.026 (0.091)
QUALITY		-0.110 (0.077)		0.073 (0.097)		-0.080 (0.092)
Constant			-0.460 (0.049)	0.708 (0.510)	-0.384 (0.049)	-0.496 (0.509)
Anc. Param. 1	-1.572 (0.067)	-2.086 (0.437)				
Anc. Param. 2	-0.894 (0.051)	-1.378 (0.435)				
Anc. Param. 3	-0.484 (0.047)	-0.952 (0.434)				
Anc. Param. 4	0.449 (0.047)	0.014 (0.433)				
Sector Dummies	N	Y	N	Y	N	Y
Regional Dummies	N	Y	N	Y	N	Y
Log Likelihood	-1362.502	-1269.047	-561.882	-521.759	-613.877	-573.585
Chi-squared	5.70	86.39	8.84	38.28	7.93	35.52
N	944	905	932	887	932	893

Notes: <sup>1</sup>Ordered probit estimates; <sup>2</sup>Probit estimates.

Table 7. Wages

	WABOVE <sup>1</sup>		WSKILL <sup>1</sup>		WEFFECTIVENESS <sup>1</sup>		WTREND <sup>2</sup>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
FOREIGN	0.240 (0.093)	0.098 (0.109)	0.241 (0.098)	0.040 (0.118)	-0.332 (0.113)	-0.104 (0.136)	-0.026 (0.083)	-0.065 (0.096)
SIZE1		0.135 (0.121)		-0.216 (0.134)		0.155 (0.138)		-0.144 (0.106)
SIZE2		0.361 (0.150)		0.107 (0.158)		-0.632 (0.220)		-0.365 (0.134)
UNION		0.084 (0.038)		0.067 (0.041)		-0.086 (0.045)		0.012 (0.033)
AGE1		-0.040 (0.104)		-0.032 (0.114)		0.132 (0.123)		0.039 (0.092)
AGE2		-0.259 (0.126)		0.079 (0.134)		-0.133 (0.148)		0.223 (0.109)
COMPETITION		0.012 (0.092)		-0.015 (0.100)		-0.034 (0.107)		0.014 (0.080)
QUALITY		0.041 (0.094)		-0.024 (0.101)		0.090 (0.109)		-0.060 (0.082)
Constant	-0.290 (0.049)	-1.258 (0.532)	-0.754 (0.053)	-1.671 (0.635)	-0.784 (0.053)	0.077 (0.531)		
Anc. Param. 1							-1.245 (0.059)	-1.186 (0.451)
Anc. Param. 2							0.414 (0.047)	0.532 (0.450)
Sector Dummies	N	Y	N	Y	N	Y	N	Y
Regional Dummies	N	Y	N	Y	N	Y	N	Y
Log Likelihood	-615.783	-561.970	-518.361	-465.381	-454.782	-399.891	-878.871	-815.903
Chi-squared	6.64	63.58	5.96	66.31	8.88	81.90	7.41	73.80
N	914	877	934	889	934	895	937	899

Notes: <sup>1</sup>Probit estimates; <sup>2</sup>Ordered probit estimates.

Table 8. Incentives

	PRODINCENT <sup>1</sup>		FIRMINCENT <sup>1</sup>		PAYINCENT <sup>2</sup>	
	(1)	(2)	(3)	(4)	(5)	(6)
FOREIGN	-0.155 (0.091)	-0.196 (0.110)	0.279 (0.115)	0.263 (0.136)	-2.968 (1.307)	-3.000 (1.404)
SIZE1		0.167 (0.122)		-0.010 (0.157)		1.565 (1.539)
SIZE2		-0.018 (0.153)		0.022 (0.194)		-1.412 (1.935)
UNION		0.130 (0.038)		-0.063 (0.050)		1.935 (0.485)
AGE1		-0.137 (0.104)		-0.091 (0.137)		-0.349 (1.328)
AGE2		-0.318 (0.124)		-0.224 (0.166)		-2.737 (1.593)
COMPETITION		-0.015 (0.091)		-0.075 (0.122)		-0.444 (1.155)
QUALITY		0.110 (0.009)		0.007 (0.124)		1.270 (1.184)
Constant	0.038 (0.047)	-0.048 (0.512)	-1.305 (0.065)	-0.912 (0.0695)	6.354 (0.707)	6.696 (6.492)
Sector Dummies	N	Y	N	Y	N	Y
Regional Dummies	N	Y	N	Y	N	Y
Log Likelihood	-653.577	-570.302	-326.790	-294.740	-2503.628	-2386.828
Chi-squared	2.88	118.11	5.71	44.63	5.14	107.36
N	945	908	945	875	869	839

Notes: <sup>1</sup>Probit estimates; <sup>2</sup> Tobit estimates.

Table 9. Work Organization<sup>1</sup>

	DATAANALYSIS		SELFPLAN		COLTRAINEW	
	(1)	(2)	(3)	(4)	(5)	(6)
FOREIGN	0.899 (0.249)	0.714 (0.284)	0.583 (0.216)	0.656 (0.244)	0.390 (0.222)	0.245 (0.255)
SIZE1		0.279 (0.313)		-0.126 (0.270)		0.162 (0.282)
SIZE2		0.216 (0.405)		-0.441 (0.350)		0.059 (0.357)
UNION		-0.003 (0.099)		-0.034 (0.085)		-0.110 (0.089)
AGE1		-0.180 (0.272)		0.030 (0.235)		-0.099 (0.244)
AGE2		0.043 (0.322)		0.450 (0.277)		0.119 (0.289)
COMPETITION		0.097 (0.237)		-0.198 (0.204)		0.177 (0.212)
QUALITY		0.395 (0.240)		-0.154 (0.207)		0.109 (0.215)
Constant	3.949 (0.129)	2.505 (1.311)	2.285 (0.113)	1.541 (1.130)	6.131 (0.116)	6.219 (1.181)
Sector Dummies	N	Y	N	Y	N	Y
Regional Dummies	N	Y	N	Y	N	Y
R-squared	0.014	0.064	0.008	0.072	0.003	0.055
N	923	884	925	886	933	894

Notes: <sup>1</sup>Linear regression.

Table 10. High-Performance Work Practices

	AUTONTEAMS <sup>1</sup>		JOBROTATION <sup>2</sup>		SUGSYSTEM <sup>2</sup>		IMPROGROUPS <sup>2</sup>		ATTISURVEYS <sup>2</sup>		INFOMEET <sup>2</sup>		OPENDOOR <sup>2</sup>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
FOREIGN	17.047 (4.564)	11.856 (4.972)	0.321 (0.092)	0.166 (0.108)	0.497 (0.096)	0.290 (0.111)	0.696 (0.094)	0.544 (0.109)	0.814 (0.099)	0.675 (0.119)	0.667 (0.099)	0.448 (0.115)	0.560 (0.102)	0.425 (0.122)
SIZE1		2.327 (5.504)		0.394 (0.121)		0.273 (0.124)		0.260 (0.120)		0.142 (0.135)		0.346 (0.127)		0.236 (0.135)
SIZE2		-8.095 (7.158)		0.196 (0.150)		-0.176 (0.154)		0.599 (0.156)		0.174 (0.172)		-0.015 (0.157)		0.377 (0.164)
UNION		-0.694 (1.779)		-0.056 (0.038)		0.039 (0.038)		-0.008 (0.039)		0.012 (0.044)		0.002 (0.039)		0.037 (0.044)
AGE1		-0.394 (4.840)		-0.077 (0.104)		0.108 (0.104)		-0.009 (0.107)		0.152 (0.124)		0.077 (0.106)		0.013 (0.122)
AGE2		1.521 (5.743)		-0.011 (0.123)		0.107 (0.124)		0.018 (0.126)		0.308 (0.142)		0.197 (0.127)		0.164 (0.144)
COMPETITION		1.156 (4.244)		0.030 (0.090)		0.014 (0.091)		0.020 (0.093)		-0.101 (0.106)		0.046 (0.093)		0.003 (0.106)
QUALITY		5.088 (4.356)		0.035 (0.092)		-0.057 (0.093)		-0.044 (0.094)		-0.069 (0.107)		0.123 (0.094)		0.141 (0.109)
Constant	-14.476 (2.843)	-21.807 (24.195)	-0.217 (0.048)	0.058 (0.499)	0.044 (0.048)	0.245 (0.491)	-0.471 (0.049)	-6.436 (0.647)	-1.032 (0.058)	-6.231 (0.640)	0.046 (0.048)	0.189 (0.500)	-1.017 (0.059)	-0.445 (0.546)
Anc. Param.	54.867 (2.193)	51.761 (24.195)												
Sector dummies	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Regional dummies	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Log Likelihood	-2459.711	-2353.261	-644.553	-628.170	-628.170	-569.360	-603.277	-547.271	-458.361	-412.695	-612.666	-551.431	-442.397	-405.019
Chi-squared	13.95	72.85	12.16	27.61	27.61	89.51	55.80	115.41	67.36	125.49	47.20	113.70	30.05	77.50
N	910	875	946	939	939	900	943	901	931	890	937	899	913	871

<sup>1</sup>Tobit estimates; <sup>2</sup>Probit estimates.

Table 11. Selection Practices

	SEXPERIENCE <sup>1</sup>
GERMANY	-0.561 (0.272)
FRANCE	-0.664 (0.265)
UK	-0.098 (0.310)
USA	-0.123 (0.211)
JAPAN <sup>2</sup>	- -
OTHEREU	-0.240 (0.211)
OTHERW	0.588 (0.408)
TWONAT	-0.062 (0.695)
THREENAT	0.047 (0.546)
Controls <sup>3</sup>	Y
Sector Dummies	Y
Regional dummies	Y
Log Likelihood	-513.215
Chi-squared	83.39
N	880

Notes: <sup>1</sup>Probit estimates; <sup>2</sup>All observations are zero;

<sup>3</sup>As in Table 3.

Table 12. Training Practices

	TQUALITY <sup>1</sup>
GERMANY	2.577 (2.464)
FRANCE	2.423 (2.268)
UK	-0.158 (3.031)
USA	4.493 (2.227)
JAPAN	-0.775 (3.956)
OTHEREU	1.698 (2.147)
OTHERW	8.073 (4.569)
TWONAT	-1.073 (6.491)
THREENAT	-0.321 (6.417)
Controls <sup>2</sup>	Y
Sector Dummies	Y
Regional dummies	Y
Log Likelihood	-2040.106
Chi-squared	140.62
N	755

Notes: <sup>1</sup>Tobit estimates; <sup>2</sup>As in Table 3.

Table 13. Promotion Practices

	PINTERNAL <sup>1</sup>
GERMANY	-0.014 (0.183)
FRANCE	-0.061 (0.176)
UK	-0.469 (0.235)
USA	-0.211 (0.164)
JAPAN	-0.125 (0.306)
OTHEREU	-0.086 (0.158)
OTHERW	-0.444 (0.341)
TWONAT	-1.279 (0.509)
THREENAT	-1.017 (0.405)
Controls <sup>2</sup>	Y
Sector Dummies	Y
Regional Dummies	Y
Log Likelihood	-1262.444
Chi-squared	99.60
N	905

Notes: <sup>1</sup>Ordered Probit estimates; <sup>2</sup>As in Table 3.

Table 14. Incentives Practices

	FIRMINCENT <sup>1</sup>	PAYINCENT <sup>2</sup>
	(1)	(2)
GERMANY	0.077 (0.279)	4.625 (2.750)
FRANCE	0.494 (0.246)	-3.523 (2.763)
UK	0.685 (0.317)	-2.565 (3.648)
USA	0.273 (0.249)	-3.691 (2.508)
JAPAN	0.571 (0.404)	-7.153 (4.569)
OTHEREU	-0.024 (0.255)	-5.702 (2.506)
OTHERW <sup>3</sup>		-4.744 (5.408)
TWONAT <sup>3</sup>		-1.069 (7.408)
THREENAT	0.599 (0.525)	-5.931 (6.061)
Controls <sup>4</sup>	Y	Y
Sector Dummies	Y	Y
Regional Dummies	Y	Y
Log Likelihood	-289.255	-2381.035
Chi-squared	51.80	118.95
N	860	839

Notes: <sup>1</sup>Probit estimates; <sup>2</sup>Tobit estimates;

<sup>3</sup>All observations are zero for FIRMINCENT; <sup>4</sup>As in Table 3.

Table 15. Work Organization Practices<sup>1</sup>

	DATANALYSIS	SELFPLAN
	(1)	(2)
GERMANY	0.486 (0.579)	0.272 (0.495)
FRANCE	0.653 (0.557)	0.785 (0.482)
UK	0.069 (0.762)	0.638 (0.644)
USA	1.051 (0.515)	0.724 (0.444)
JAPAN	1.063 (0.972)	0.899 (0.840)
OTHEREU	1.084 (0.500)	0.476 (0.432)
OTHERW	0.275 (1.056)	1.156 (0.913)
TWONAT	0.741 1.560	1.473 (1.348)
THREENAT	-1.046 (1.303)	1.162 (1.126)
Controls <sup>2</sup>	Y	Y
Sector Dummies	Y	Y
Regional Dummies	Y	Y
R-squared	0.069	0.074
N	884	886

Notes: <sup>1</sup>Linear regression; <sup>2</sup>As in Table 3.

Table 16. Employee Participation Practices

	AUTONTEAMS <sup>1</sup>	SUGSYSTEM <sup>2</sup>	IMPROGROUPS <sup>2</sup>	ATTISURVEYS <sup>2</sup>	NFORMEET <sup>2</sup>	OPENDOOR <sup>2</sup>
	(1)	(2)	(3)	(4)	(5)	(6)
GERMANY	17.701 (9.763)	0.595 (0.257)	0.497 (0.222)	0.561 (0.229)	0.578 (0.257)	0.297 (0.244)
FRANCE	20.202 (9.268)	0.348 (0.223)	0.434 (0.217)	0.572 (0.225)	0.572 (0.245)	0.346 (0.227)
UK	4.335 (12.565)	0.194 (0.291)	0.584 (0.284)	0.808 (0.289)	0.219 (0.294)	0.396 (0.302)
USA	21.821 (8.632)	0.079 (0.201)	0.837 (0.208)	0.838 (0.215)	0.662 (0.232)	0.354 (0.212)
JAPAN	-2.404 (16.376)	-0.181 (0.369)	0.669 (0.383)	1.042 (0.371)	0.401 (0.385)	1.173 (0.383)
OTHEREU	13.271 (8.514)	0.591 (0.209)	0.594 (0.191)	0.788 (0.202)	0.361 (0.202)	0.283 (0.214)
OTHERW	-43.493 (26.177)	0.148 (0.414)	-0.047 (0.440)	-0.894 (0.755)	0.398 (0.407)	1.140 (0.425)
TWONAT <sup>3</sup>	- -	-0.271 (0.591)	-0.134 (0.595)	1.175 (0.589)	0.040 (0.718)	0.446 (0.604)
THREENAT	-16.344 (22.873)	-0.193 (0.492)	-0.038 (0.508)	0.302 (0.538)	-0.245 (0.513)	0.171 (0.564)
Controls <sup>4</sup>	Y	Y	Y	Y	Y	Y
Sector Dummies	Y	Y	Y	Y	Y	Y
Regional dummies	Y	Y	Y	Y	Y	Y
Log Likelihood	-2342.305	-564.804	-543.537	-407.050	-549.166	-400.829
Chi-squared	94.76	98.63	122.88	136.78	118.23	85.88
N	875	900	901	890	899	871

Notes: <sup>1</sup>Tobit estimates; <sup>2</sup>Probit estimates; <sup>3</sup>All observations are zero; <sup>4</sup>As in Table 3.

Table 17. Summary of Nationality Effects<sup>1</sup>

Variables	GERMANY	FRANCE	UK	USA	JAPAN	OTHEREU	OTHERW	TWONAT	THREENAT
SEXPERIENCE	-	-							
TQUALITY				+					
PINTERNAL			-					-	-
FIRMINCENT		+	+						
PAYINCENT						-			
DATANALYSIS				+		+			
SELFPLAN		+		+					
AUTONTEAMS		+		+					
SUGSYSTEM	+					+			
IMPROGROUPS	+	+	+	+		+			
ATTISURVEYS								+	
INFORMEET	+	+		+					
OPENDOOR					+		+		

<sup>1</sup> For actual values, see tables 11 to 16.