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Abstract: Is there a link between Italy's disappointing productivity growth and the way Italian firms select and develop managerial talent? We collect extensive information on the characteristics of Italian managers and of the firms that employ them. In particular, we analyze the incentive structure that managers face, their career profile, and their use of time. Our data indicate that a fraction of firms – especially non-family firms and multinationals – adopt a *performance model*, whereby managers are hired through formal channels (business contacts, head-hunters, ads), they are assessed regularly and rewarded, promoted and dismissed on the basis on the assessment results. Other firms – especially family firms and firms that operate on the national market only – instead adopt a *fidelity model* of managerial talent development: they hire managers on the basis of personal or family contacts, they do not assess their performance formally, and they reward them based on the quality of their relationship with the firm's owners.

The managerial model adopted by a firm is significantly associated with the quality, behaviour, and performance of its managers – as well as the performance of the firm itself. Managers who work for firms that reward performance tend to be more educated and less risk-averse. They work longer hours, but they are paid more and they report higher levels of job satisfaction. Firms that use performance-based incentives grow faster and have a higher return on capital. While the fidelity model appears to have worse outcomes, there appears to be no generational shift towards the performance model.

1 Introduction and Summary of Findings

From the end of the World War II until the end of the 80s, the Italian economic system was mostly a success story, outperforming most other developed countries. For instance, between 1975 and 1995 hourly labour productivity in manufacturing in Italy grew at an average rate of 3.6%. In the same period US manufacturing productivity grew at 1.8%. However, since 1995 there is no doubt that Italy has done worse than most other developed countries. In that period, the hourly labour productivity

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in manufacturing has actually decreased, while, for instance, in the US it has increased at an average rate of 3.1%.

One can try many avenues to explain why Italy has become "The Sick Man of Europe." In this paper we investigate the potential role of one productive factor: managerial talent. There is a growing consensus that the presence of capable and motivated managers is an important ingredient to the success of an economic system. There is some evidence that Italian firms may lag behind those of other countries in the way they nurture and develop human capital (Bloom et al 2008). The goal of this work is to analyse the incentive schemes adopted by Italian firms, and their effect on managerial selection, effort, managerial style and ultimately firm performance. To this purpose we have designed and implemented two new surveys of managers and top CEOs.

Our key hypothesis is that there are two models of managerial career development: a performance model and a fidelity model.

In the performance model, managers are hired on the basis of their expected performance, based on all available signals (education, success in past jobs, etc). Their performance is assessed regularly on the bases of pre-determined, measurable outcomes. Assessments are used to determine the bonus they receive, which is a significant part of their compensation package, and to make promotion decisions. Managers who systematically underperform are dismissed.

In the fidelity model, there is instead an important relational component. Rather than focusing on pre-determined outcome measures, the manager is expected to implement faithfully the firm owners' wishes. Managers are hired on the basis of their expected fidelity; hence, direct personal knowledge is highly valued. Objective performance measures are used less often. Instead, managers are promoted or dismissed on the basis of the quality of their relationship with the owners.

Of course, no firm uses a pure form of fidelity model or a pure form of performance model. A personal relationship component is always present, even for positions with highly measurable outcomes. A performance component is also always there: even the most dictatorial owner is likely to reward talent. However, as we will soon show, the fidelity/performance model will be able to offer a consistent account of what we see in the data we have collected. In particular, we will use our model to ask the following research questions:

Question 1: How are Italian managers selected? How are they assessed? How are they rewarded, promoted and dismissed?

Question 2: Are the policies we observe more consistent with a fidelity model or a performance model? Which firms are more likely to use a fidelity model?

Question 3: What do the two models imply about the selection of managerial talent? What are the characteristics of managers that tend to work in fidelity-based firms? Do they put more or less effort? How do they use their time?

Question 4: Does the choice of the managerial policy model explain firm performance, both in terms of growth and return on capital?

Question 5: Do Italian firms rely more on the fidelity model than comparable firms in other countries?

For this purpose we rely on four main data sources:

i. Our survey of 600 managers belonging to Manageritalia (the trade association for managers who work in the service sector);

ii. Our survey of 121 top CEOs, selected among the largest Italian firms and banks;

iii. Pay information on managers from the Italian Social Security agency (INPS);

iv. An international management practices survey covering over 4,000 manufacturing firms in 12 countries.

The datasets (i)-(iv) are described in detail in Section 3. For the purpose of the analysis the observations in our data sets have been matched to the Italian Company Accounts and Amadeus data bases, both of which contain standard firm balance sheet and income statement information.

Even though the primary purpose of this research is to shed light on the characteristics of Italian managers and contribute to the debate on the Italian economy, our study is also a first step toward answering some questions of general interest. Our managers' survey is indeed the first to combine extensive personal data on managers with detailed information on firms. Our CEO's study is, to the best of our knowledge, the first time use study conducted among top managers.

The picture that emerges from our various data sources, while far from conclusive, is quite consistent, and can be summarized as follows:

1. *Italian firms are less likely to use a performance-based management model than their international counterparts*. *Within Italy, family firms and firms that operate only on the national market are more likely to choose fidelity over performance.*

   According to our international comparison, Italian firms trail their competitors when it comes to formal systems of evaluation selection and reward of managerial talent. It is then useful to use the Manageritalia data to understand whether this is a general phenomenon or it is concentrated in certain classes of firms. This shows that, within Italy, family firms and domestic firms are more likely to hire, assess, reward, promote and dismiss their employees based on personal relationship rather than performance (this result holds if we control for size, industry and location). In particular, family firms:

   - Are less likely to have appraisal meetings to evaluate managers' performance and appraisal meetings are less relevant for the managers' careers;
   - Are more likely to hire managers through family contacts and less likely to use formal channels like head hunters and public advertisements;
   - Offer less generous bonus schemes;
   - Are more likely to dismiss managers because of disagreement with the owners rather than because of poor performance or bad market conditions;
   - Are more likely to promote managers who have a good relationship with the owners and are less likely to offer fast-track promotions for star performers.

Conversely, the performance model is found more often in non-family owned firms and multinationals. It is interesting to note that Italian multinationals tend to treat their managers in the same manner as other European multinationals

Next, we examine what effect managerial policies have on the selection and behaviour of managers.

2. *Managerial selection differs in the two models. The performance model attracts managers that have higher levels of education and are more risk-tolerant*, *but there is no systematic age difference between managers in the two models*.

   The fidelity model and the performance model use different selection methods. Performance-based firms hire on the basis of observable signals of quality rather than personal connections, and hence they put a premium of education, both university degrees and executive training. A performance-based incentive scheme involves a certain risk, because it rewards success and punishes failure. Highly risk-averse individuals prefer to work for fidelity-based firms. Our data show that both these predictions are correct.

   The fact that there is no systematic age difference between the two models indicates that a new generation of fidelity-oriented managers is being trained. They were hired because of personal connections, they have low levels of education, and they know that their career depends on relationships rather than observable outcomes. Only time will tell whether this generation is able to tackle the challenges that the Italian productive system faces.

3. *Managers work harder, are paid more and display higher job satisfaction in performance-based firms than in fidelity-based firms*. *Managers who work longer hours also display a different leadership style.*

   We construct two measures of management practices: an incentive index (bonus, appraisals, merit-based promotions, etc) and a fidelity index (role of personal relationship in hiring, firing and promotions). Our survey shows that the effort that a manager puts (hours at work and weekends at work) is significantly higher when the incentive index is high and significantly lower when the fidelity index is higher. The incentive index is positively correlated with both total compensation and fixed salary. This is expected, given that managers work harder and they take on more risk.

   There is nothing in the theory that tells us whether managers should be happier in a performance model or in fidelity model. While the former offers more pay, the latter offers more security, requires less effort. However, the managers in our sample report higher levels of job satisfaction when they work in performance-based firms. This confirms the widely held view that being a manager in a tightly controlled family firm tends to be a less rewarding experience (unless one is a family member)

   Finally, our CEO time use survey shows that executives who spend more time at work, tend to devote a smaller percentage of their time to meetings and in particular meetings with consultants. In addition, they tend to display more responsiveness to unplanned events.

4. *Performance-based firms grow faster and have higher return on capital*. By linking our survey data with the Italian Company Account (Centrale dei Bilanci) database, we find that the

incentive index is positively correlated with the firm's recent employment growth rate as well as the return on capital employed index.

This report is organized as follows. Section 2 reviews the relevant literature on managers' incentive schemes and selection practices. Section 3 describes our data sources in detail. Section 4, 5, and 6 report our findings: Section 4 focuses on managers' characteristics; Section 5 describes firms' policies; and Section 6 analyzes the link between managers' characteristics, firms' policies, and observable outcomes. Section 7 concludes.

2 Literature Overview

This research is related to several literatures. A first strand contains studies on HR and management practices, which look at of heterogeneity of practices across firms and at their relationship with firm performance. A second relevant strand of the literature focuses on family firms. Finally, we contribute to the literature on CEO selection and impact on firm performance. We briefly review each of these literatures below.

2.1 Literature on Management Practices, Incentives and Family Firms

Several studies have analysed the factors behind the adoption of specific HR practices and incentive (e.g. piece rate) contracts. Gibbons and Waldman (1999) survey the theoretical literature on careers in organizations, focusing on human-capital acquisition, job assignment, incentive contracting, efficiency wages, and tournaments. They apply these models to explain issues such as wage growth in the absence of promotions, promotions used for job assignment, promotions used to provide incentives, and separation. Demougin and Siow (1994) present a theoretical model that links the probability that an unskilled worker is successfully trained or screened to firms' effort. This, in turn, depends on the presence of positive hiring costs – which tilt the firm's preference towards internal training/screening – and optimal firm size – which might conflict with efficient managerial husbandry. The model generates a number of predictions on layoffs, lateral mobility, promotions and wages.

On the empirical side, Baker, Gibbs and Holmstrom (1994a) use data on the population of managers from a single firm, observed between 1969 and 1988 to provide evidence on the existence of internal labour markets, showing that employees have careers in firms that follow more-or-less defined paths in the organization. They show that these career paths are stable through time and result in long-term worker-firm attachments, and that wages are tied to the characteristics of jobs, rather than individuals. The paper also documents the existence of promotion "fast tracks", which reveals that tenure with the firm does not result in better career attainment, and that the importance of levels to pay is largely driven by selection of individuals through promotion. In a companion paper (Baker, Gibbs and Holmstrom, 1994b) the authors focus more specifically on wages. Their main finding is a cohort effect, i.e. cohorts who earn more maintain their advantage over time, suggesting that firms may shield their employees from some of the market induced variation in marginal product.

A second type of contributions looks at HR policies using large data sets with employee details for numerous firms. Abowd et al (2006), for example, use longitudinally linked employer–employee data

from France to look at the simultaneous determination of worker mobility and wage rates using an econometric model that allows for both individual and firm-level heterogeneity. The results show remarkable heterogeneity with both positive and negative duration dependence present in a significant proportion of firms. They show average structural returns to seniority are essentially zero, but positive seniority returns found in low starting-wage firms. With a similar approach, Lazear and Oyer (2004) use a very rich Swedish data-set with detailed and accurate job classifications, which make it possible to determine whether job openings are filled internally or externally, and to follow employees as they change jobs. They show evidence that firms fill a large number of jobs internally, especially within higher managerial ranks. In terms of wages, external labor markets seem to be relatively more important than idiosyncratic firm effects.

Prendergast (1999) provides an excellent review on the subject of incentive contracts, which are specific types of management/HR practices used to exert employees' effort and correct time allocation. A recurring theme in this context is the trade-off between risk and incentives, i.e. that the provision of incentives is aided by the use of pay-per-performance, but their provision imposes additional risk on workers, which is costly to firms through higher wages. In this context, pay per performance should be less frequent with noisy performance measures, or when agents are less able to handle risk. Empirical research has tested the relationship between pay for performance and observed measures of uncertainty or risk aversion, with mixed results. Ackerberg and Botticini (2002) test for risk sharing in sharecropping by considering how farmer wealth, a proxy for ability to handle risk, affects contract choice. They find that after they control for matching issues, more wealth is correlated with a greater likelihood of renting, consistent with the usual risk-sharing story. However, observed measures of uncertainty have rarely been found to be positively correlated with incentive provision. Prendergast (2002) reviews the available evidence and suggest that the allocation of responsibility to employees may play an important role for the relationship between uncertainty and incentives. When workers operate in certain settings, firms are content to assign tasks to workers and monitor their inputs. By contrast, when the situation is more uncertain, they delegate responsibility to workers but, to constrain their discretion, base compensation on observed output. This might induce a positive relationship between uncertainty and performance pay.

A second relevant strand of literature focuses on management practices (both in terms of HR and operations), and their implications for firm performance. Data availability dictates the type of methodology used, with the focus gradually shifting from sample of a single or few firms, to large samples of firms active within a single country, to large samples of firms observed in multiple countries.

Lazear (2000) relates to effects of monetary incentives on output using data from a single firm. He tests the existence of a positive correlation between piece rates and average worker productivity, workforce ability, and variance in output across individuals. The shift towards incentive pay is associated with a 44-percent increase in output per worker, and a significant rise in profits. Bandiera Barankay and Rasul (2007) design a field experiment to identify the causal effect of high powered managerial incentives on firm productivity. They find that offering managers performance bonuses instead of fixed pay increases productivity by 22%, half of which is due to the fact that, when paid performance bonuses, managers select more productive workers.

Ichinowsky et al. (1997) investigate the productivity effects of employment practices using data from a sample of 36 homogenous steel production lines owned by 17 companies. They show that specific HR practices – such as incentive pay, teams, flexible job assignments, employment security and training achieve substantially higher levels of productivity that firm with more "traditional" HR policies.

Among large sample, single country studies, Black and Lynch (2001) estimate the effect of workplace practices, information technology, and human capital investments on productivity using a large sample of US firms. They estimate an augmented Cobb-Douglas production function with both cross section and panel data covering the period of 1987–1993, and find that it is not whether an employer adopts a particular work practice but rather how that work practice is actually implemented within the establishment that is associated with higher productivity. For example, unionized establishments that have adopted human resource practices that promote joint decision making coupled with incentive-based compensation have higher productivity than other similar non-union plants, whereas unionized businesses that maintain more traditional labor management relations have lower productivity. Furthermore, they show that plant productivity is higher in businesses with more-educated workers or greater computer usage by non-managerial employees.

Bloom and Van Reenen (2007) collect synthetic measures of management practices for 800 medium sized manufacturing firms in France, Germany, the UK and the US[2]. They report evidence of significant heterogeneity in management practices even within narrowly defined sectors. The study shows the existence of strong positive correlations between management quality and measures of firm performance (total factor productivity, sales growth, return on capital and Tobin's q) and between management quality and competition[3]. Bloom, Sadun and Van Reenen (2008) extend the previous analysis augmenting the original sample with a set of 200 Italian firms. They show the relative managerial weakness of Italian firms vis-à-vis the US and, to a lesser extent, France, Germany and the UK.

Family firms are a central theme of this research. From a theoretical perspective, Burkart, Panunzi and Shleifer (2003) provide a model of family ownership, which focuses on the founder's trade off between more professional management and risk of expropriation. A very relevant point of the paper is the observation that the founder's decision is shaped by the legal environment[4], which may rationalise the different patterns of corporate governance between Anglo-Saxon and Continental European firms.

A recent strand of the literature has focused on the role of family ownership for firms' growth and performance.[5] Bloom and Van Reenen (2008) document that family firms where the CEO is chosen on a *primogeniture* basis show significantly lower management scores than other family and non family owned firms. Bloom, Sadun and Van Reenen (2008) discuss the role of first generation family firms, i.e. firms where the founder still acts as CEO of the company and other family members play

[2] See Section 3 for details on the methodology.

[3] They employ three alternative measures of competitive pressure: the inverse of the Lerner index, the share of imports on industry production and the number of competitors reported by the managers during their interviews.

[4] Specifically, in legal regimes that successfully limit the expropriation of minority shareholders, the widely held professionally managed corporation emerges as the equilibrium outcome. In legal regimes with intermediate protection, management is delegated to a professional, but the family stays on as large shareholders to monitor the manager. In legal regimes with the weakest protection, the founder designates his heir to manage and ownership remains inside the family

5 See Betrtand and Schoar (2006) for a survey.

key managerial roles and shows that these specific types of family firms account for a relevant fraction of the Italian managerial gap vis-à-vis the US.

Villalonga and Amit (2005), using proxy data on all Fortune 500 firms during 1994-2000 find that family ownership creates value only when the founder serves as the CEO of the family firm or as its Chairman with a hired CEO, while when descendants serve as CEOs, firm value is destroyed. Consistently with this finding, Perez-Gonzalez (2006) uses data from chief executive officer (CEO) successions to examine the impact of inherited control on firms' performance, finding that firms where incoming CEOs are related to the departing CEO, to a founder, or to a large shareholder by either blood or marriage underperform in terms of operating profitability and market-to-book ratios, relative to firms that promote unrelated CEOs. These findings are confirmed in Bennedsen et al (2006), where variation in CEO succession decisions that result from the gender of a departing CEO's firstborn child is used as an instrumental variable (IV) for the probability of encountering a family CEOs. Using this strategy, they show that family successions have a large negative causal impact on firm performance and that the negative impact of family CEO's is underestimated by standard OLS techniques. In a recent contribution, Bertrand et al (2008) study the family trees and the business groups of 70 of the largest business families in Thailand. They find a positive relationship between family size and involvement of family members in the business group, especially when the ultimate control has passed from the founder to one of his descendants, and document that groups that are run by larger families tend to have lower performance.

2.2 Literature on CEOs' Activity

Evidence on CEOs characteristics and working environment is remarkably thin. To the best of our knowledge, ours, is the first survey on CEOs' use of time use.[6] One of the few studies that focuses on CEOs characteristics is Kaplan et al (2007) who use a detailed dataset with assessments of CEO candidates for companies involved in private equity (PE) transactions to study how CEOs' characteristics and abilities relate to hiring decisions, PE investment decisions, and subsequent performance. They highlight the importance of "soft" or team-related skills for hiring decisions, in spite of the fact that these skills are not necessarily associated with greater success[7]. Frydman (2005) investigates the market for managers from the 1930s to the 2000s. The paper documents that until the 1970s, the market for CEOs was characterized by relatively stable pay and low inequality among executives, while these patterns have reversed over the past three decades. Furthermore, using biographical sources to construct a consistent panel dataset following the education, career paths, and compensation of top executives from 1936 to 2003, she documents the rapid increase in business education and greater occupational mobility within the firm since the 1970s, and that the fraction of executives who worked at one corporation throughout their entire career was about 20 percentage points higher in the 1960s than in the 1990s.

Relatively little is known on the impact of CEOs on firm performance. Westphal (1998) shows that CEOs with more independent boards spend time "ingratiating and persuading" board members, while Adams et al (2005) document that firms whose CEO's have more powers display more variable

[6] The only other study on the use of time by managers that we are aware of is Luthans (1988).

[7] See Graham and Harvey (2001) for a survey of 392 CFOs about the cost of capital, capital budgeting, and capital structure.

performance. Bertrand and Schoar (2003) construct a manager-firm matched panel data set to track top managers across different firms over time and find that manager fixed effects matter for a wide range of corporate decisions, including investment, financial, and organizational practices. Furthermore, managers with higher performance fixed effects receive higher compensation and are more likely to be found in better governed firms. They show that executives from earlier birth cohorts appear on average to be more conservative, while managers who hold an MBA degree seem to follow on average more aggressive strategies.

3 Data Sources

Our analysis relies on four datasets. The first two are collected for the purpose of this study, and contain information on a cross section of Italian managers and CEOs. We complement these with two further pre-existing data sets to shed light on the evolution of key variables over time and on the comparison between Italian managers and their foreign counterparts.

3.1 Survey of Manageritalia Members

The aim of this novel survey is to collect information on the characteristics of Italian managers, the firms they work for and obtain a rich description of the incentives managers face, both explicitly (e.g. performance bonuses) and implicitly (e.g. importance of personal relationships for career progress). In particular, we collect information on:

(1) Managers' demographics, education, family background and risk aversion

(2) Firms' ownership structure and multinational status

(3) Hiring and firing practices

(4) Career progression path within the firm: appraisals and promotion tracks

(5) The structure of pay schemes

Our sample of managers is selected from the member directory of Manageritalia, a professional association of managers operating in the trade and services sectors. Manageritalia members account for 96% of all managers in the trade and service sectors. These, in turn, make up for 20% of all Italian managers.[8]

Manageritalia member directory contains 22,100 managers employed by 8,739 firms. Of these, we sample from the 2,012 firms that can be matched with the Italian Company Accounts Database – a

[8] Social security data indicate that in 2006, the number of individuals employed on a "manager contract" in the private sector were 117,000. Of these, 23,000 belong to the trade and private service sectors, and 22,100 belong to Manageritalia. Managers working for Italian branches of multinational firms belong to the trade and service sectors even if the firm itself is classified as industry—e.g. car manufacturers—as long as no production plants are located in Italy.

firm level data set containing information on balance sheets, firm demographics, and employment. The information is provided by commercial banks and covers all the banks' largest clients.[9] The Company Account Database and, a fortiori, our sampling universe is skewed towards large firms.

To select our sample, we start from the 2,012 firms for which balance sheet data is available. We further restrict the list to managers employed in the three main operational areas –general directorate, finance, and sales—and randomly draw one manager per firm in either of these areas. The final sample contains 605 each of general directors, finance directors and sales directors, for a total of 1,815 observations.

The administration of the survey was outsourced to Erminero & Co.- an established survey firm located in Milan. All 1815 sample managers were contacted by phone to schedule a subsequent phone interview, administered by a team of 35 analysts trained by Erminero & Co. The response rate was 33%, with an average duration of 21 minutes per interview. The data thus contains 603 observations, equally split across the three operational areas.

The average size of the firms included in our sample is 240 employees (50 at the median). In terms of ownership, 48% of the firm in our sample are family or founder owned, 12% are privately owned, 8% are state-owned . We also have a sizeable proportion of firms owned by dispersed shareholders (i.e. no party detains more than 25% of the company's shares) and private equity backed firms (8%). Most of the firms included in the sample (58%) are affiliated with a multinational. In 21% of the cases, the multinational is headquartered in Italy.

The Manageritalia dataset only covers the service sector. Among services, specific industries are over-represented, such as Wholesale (45% of the sample) and Business Services (11%) and Retail and Specialized IT services (4%). The survey is also skewed in terms of location. Most of the sample refers to firms incorporated in Lombardy (58%). However, the survey also includes a fairly high number of firms incorporated in other Northern and Central regions such as Veneto (8%), Piedmont (5%), Emilia (9%), Tuscany (5%) and Lazio (9%).

3.2 CEO's Time Use Survey

The aim of this survey is to shed light on the activities CEOs engage in on a day-to-day basis. To this purpose we designed a "time-use" questionnaire that allows the CEOs' personal assistants (PA) to record information on the nature of and time involved in all activities performed over the course of a day over a five day week.

The questionnaire is divided into three parts. The first part asks the PA to record the information on all activities that last 15 minutes or longer for each day of the week. We collect detailed information on the following:

(1) The type of activity the CEO is engaged in (e.g. meetings, phone calls etc)

(2) The duration of the activity

[9]The data are collected by the Centrale dei Bilanci, an organization established in the early 80s by the Bank of Italy and Italian Banks with the purpose of recording and sharing information on borrowers.

(3) Whether the activity had been scheduled in advance and if so when

(4) Whether the activity is held regularly and if so how often

(5) Where the activity took place (e.g. own firm headquarters, other firm)

(6) The number of participants

(7) The type of insider participants (e.g finance, marketing etc.)

(8) The type of outsider participants (e.g. suppliers, consultants etc.)

The second part asks the PA to list the type and duration of all activities that last less than 15 minutes and all other activities not listed in the first part.

The third part asks the PA to record whether scheduled activities had to be cancelled, whether the CEOs took some days off during the week and basic demographic information on the CEO, namely age and gender.

CEOs in our sample are selected from the largest Italian firms and banks. Size is measured as yearly revenue for firms and as the average of (i) employment, (ii) Stock market capitalization; (iii) Total value of loan portfolio for banks. The master sample contains the top 850 Italian firms from the Dun&Bradstreet data base and the top 50 Italian banks from the list of all major Italian financial groups compiled yearly by the Research Division of Mediobanca, a leading Italian investment bank.

The administration of this survey was also outsourced to Erminero & Co. All 850 institutions were contacted to ascertain the identity and contact details of the CEO; this procedure yielded 720 complete records. Out of these, 50 were randomly selected for a pilot survey and the remaining 670 formed the final sample.

Sample CEOs received an official invitation letter from the Fondazione Rodolfo Debenedetti that sponsors this project , followed by a personal phone call explaining the purpose of the survey and the relevant confidentiality clauses. Upon acceptance, the survey was mailed to the PA identified by the CEO, who was asked to record the information and send back the completed forms via either fax or mail.

The acceptance rate was 18%; the final sample contains information on the time use of 121 CEOs, belonging to 110 firms and 11 financial institutions.

3.3 INPS Database

Our third dataset is the INPS database which contains information on the entire population of workers registered with the social security system. The Italian National Institute for Social Security (Istituto Nazionale della Previdenza Sociale, INPS) requires firms to file a yearly report (form O1M until 1998 and form SNA-770 since 1999) for each worker on the payroll. The data are used to estimate the amount of withholding tax the employer has to pay on behalf of the employees, and to INPS as contributions towards health insurance and pension funds. This database covers the universe of employees in the private sector - thus excluding the self-employed, public employees, and off-the books work.

Our data set is a sub-sample of the universe, based on workers born on any one of four particular days of the year. Our data refer to 1985-2004. Data are extracted for each of the years between 1985-2004. If a worker is extracted in a year, information is then provided for all the years covered by the sample provided the worker in previous or subsequent year contributes to INPS. Hence, the dataset is a longitudinal panel, with different careers lengths which is particularly suited to make comparisons over time. Since only employees in the private sector contribute to INPS, a worker can leave the sample because he retires, or because he becomes a self-employed or joins the public administration, or moves to work abroad. Movers within the private sector can instead be tracked.

The form reports information on annual earnings and on the number of weeks worked and days. Earnings are divided into two components: normal and occasional. Occasional earnings includes sums drawn from the wage supplementation fund laid-off or short-time workers, seniority and loyalty premia, one-time bonuses, relocation expenses and business travel refunds, the monetary value of goods in kind, and allowances for lost tips and commissions. The bulk of the occasional earnings should be one time-bonuses and their incidence on total pay has been increasing over the years. We will distinguish between the two complement and their sum, corresponding to total pay. Since misreporting is prosecuted, reporting error should be negligible.

Given the nature of the dataset, each observation represents a single job - relationship for which the employer has paid at least one contribution to INPS on behalf of its employee during the reference year (what is called 'contributive position'), and not a single individual. As a consequence, for the same worker multiple observations can be found in the same year for different positions opened with the same or different employers. To obtain total pay components for a given individual-year we aggregate across different employers. INPS has made the data available in an anonymous format to guarantee privacy, but apart from that, data are not subject to top coding. Hence, information is available also for workers at the top percetiles of the pay distribution, making the data particularly useful to explore pay-structure issues.

The data set also has information on job categories, albeit with a rough breakdown: apprentices, production workers, clericals and executives. Some demographic information on the worker is also available; in particular, gender, year and province of birth. Unfortunately, no information on education attainment is available.

3.4 CEP Management Survey

Finally, in order to contrast Italian managers and managerial practices in Italy with those prevailing in other countries we have relied on a fourth database, the CEP Management Survey. In the summer of 2006 the Centre for Economic Performance at the London School of Economics, in cooperation with a private consultancy firm, employed a team of 51 MBA-type students to collect data on management practices on more than 4,000 firms in 12 countries (see Bloom, Sadun and Van Reenen, 2008, for a full description). Following the methodology in Bloom and Van Reenen (2007) the survey was based on a grid of 18 questions, which relate to key aspects of workplace management.

Four of these questions relate to "people" management and these are the questions we will focus throughout.[10] The questions are open rather than tick box and the interviewers are trained to probe with follow up questions in order to ascertain what is actually going on in the firm. They relate to the promotion system, the fixing/firing of poor performers, the rewarding of high performers and the incentives and importance given to attracting and retaining talented workers. Each question is scored on a scale of 1 ("worst practice") to 5("best practice") and the basic composite measure z-scores each individual question, averages across the four questions and then z-scores this average. For example, on the promotion question a low score indicates that employees are promoted solely on the basis of tenure, whereas a high score reflects firms who promote on the basis of effort and ability.

In sum, the scores reveal whether the firm devotes much effort to promoting, rewarding and retaining its most talented workers.

To avoid the well known sample bias arising from the psychological reflex to give an answer that the interviewee thinks the interviewer wants to hear, the survey was "double blind". First, the interviewees did not know that they were being scored. Second, the interviewers had no information about the firm's performance before the interview. This was achieved by selecting medium sized manufacturing firms and by providing only firm names and contact details to the interviewers (but no financial details). These smaller firms (the median size was 270 employees) would not be known by name and are rarely reported in the business media.

The survey is targeted at plant managers in firms randomly drawn from the population of all public and private firms with between 100 and 5,000 employees in the manufacturing sector. The response rate was 45% and uncorrelated with firm performance. The interviews took on average of 50 minutes with the interviewers running an average of 78.5 interviews each, over a median of 3 countries.[11]

The overall sample consists of approximately 4,000 firms in Europe (France, Germany, Greece, Italy, Poland, Portugal, Sweden and the UK), Asia (China, India and Japan) and the US. The Italian sample consists of 202 firms, with an average employment of 606 employees.

[10] The other management practice questions related to shop-floor operations (lean manufacturing techniques), monitoring (tracking and reviewing of individual and factory performance) and targets (the breadth, realism and interconnection of goals).

[11] Detailed information on the interview process was also collected, including the interview duration, date, time of day, day of the week, and self-assessed reliability score, plus information on the interviewees' tenure in the company, tenure in the post, seniority and gender. Robustness tests including these plus interviewer fixed-effects yield results extremely similar to the ones reported here.

4 Managers' Characteristics

This section combines information from the four data sets to shed light on the characteristics of Italian managers. We present evidence on basic demographics, education and social background and a novel measure of attitudes towards risk.

4.1 Demographics

4.1.1 Age

The average age of Italian managers appears to be in line with the average age of their colleagues in other countries (see Figure 1: Age, International Comparison). The average Italian manager is 45 years old, which is rather similar to average manager employed in the UK and the US. Italian managers are younger than their Japanese counterparts (50 years old on average).

The Manageritalia dataset allows us to disaggregate age by type of manager and type of firm. Average age in the Manageritalia sample is 47 years (Table 1). Unsurprisingly, individuals with more senior roles tend to be older (49) (Figure 2). People in finance are slightly younger than people in sales and general management (46 vs. 47 years old). Multinationals tend to have slightly younger managers, but the differences are not statistically significant. The survey also shows that managers are significantly younger if the firm is owned by a family, *and* the manager is a member of the family. The average age of this specific type of family managers is 39, vs. 47 for managers working in a family firm, which are not members of the family.[12]

The CEO questionnaire sheds some light on the age distribution of the managers at the top of the largest Italian firms. Figure 3, shows that CEOs in the sample exhibit considerable variation in age. The average age is 54, while the youngest 5% of CEOs is younger than 41 and the oldest 5% is older than 67.

The extent of variation in the age distribution is consistent with previous findings in Prat and Sadun (2006) who compare the age profile of the CEO's of the top 40 Italian firms and the top 40 US firms. In their sample the average age is 58 in Italy and 56 in the US. However, the striking difference is in the dispersion: Italian top companies are much more likely to headed by managers that are quite young or quite old. While in the US most CEO's are between 50 and 60, in Italy there are twenty CEO's over 60 and 13 in their forties. [13]

The INPS data (see Figure 4) displays a slight upward trend in the age of Italian managers over the last 20 years: the median age goes from 45 in 1985 to 47 in 2004. Instead, age dispersion goes down: there are fewer young managers but the same share of old managers.

[12] The difference between family managers and the others is statistically significant at the 5% level.

[13] Lippi and Schivardi (2007)argue that the relatively large fraction of above-retirement age managers in Italy reflects the importance in Italy of relations and network in business and the fact that the stock of relation is increasing with age. Hence, firms may be willing to trade off efficiency against access to networks when in the their managerial turnover decisions. They also document a negative relation between manager age above a certain threshold and a firm TFP.

4.1.2 Gender

As in all countries we have data for, most managers are men.

In the CEP international comparison, Italy appears to be one of the worst performers in terms of gender equality (Figure 5). For example, only 1% of the managers interviewed in Italy were female. This is very close to the fraction of female managers in France and Japan, but significantly lower than the UK and the US (5%).

However, the proportion of female managers is much higher in the INPS data (to be discussed below) and in the Manageritalia sample (10%, Table 1), perhaps reflecting the different female participation in service vs. manufacturing industries. Interestingly, the Manageritalia dataset (Figure 6) shows that the gender gap is much smaller in finance than in sales or general management: the fraction of female managers is 20% in finance, vs. 6% in sales and general administration. This observation is somewhat surprising as finance is, at least in Anglo-Saxon countries, often perceived to be a male-oriented discipline, in comparison with marketing and strategy.[14]

In our sample of 121 top CEOs, only two are women. Such a strong gender imbalance at the top is found in most countries: for instance, only two of the US top-100 Fortune CEOs are women.[15]

Finally, according to INPS data, the importance of women in Italian management has improved markedly in the last twenty years. As Figure 7 shows, the ratio of women managers went from 6/7% in the late Eighties to over 12% in 2004. Do women face a glass ceiling? Namely, are they "allowed" into managerial positions but only as long as they are low ranking ones? If we restrict attention to the top quartile of mangers (defined by total pay), we find that women are less represented than in the profession at large. However, the share of women in the top quartile has grown tremendously in relative terms, going from 1% in 1985 to 8% in 2004.

4.1.3 National Origin

We know the place of birth of the Manageritalia members. About 4% of them were born outside Italy (Table 5). Multinationals are more likely to employ foreign-born managers, although the difference is not large. The fraction of foreign managers is 2% in domestic firms, and respectively 4% and 6% in Italian and foreign multinationals. Non-Italians tend to concentrate in senior positions and in the finance area. For example, 6% of managers in the finance area are foreign vs. the 3% in sales and marketing.

Regarding regional origin, the INPS data show that individuals are more likely to become managers if they are born in regions that have a high density of firms. For instance, 20% of the managers in the

[14] See for instance Wall Street Journal (2005). This article, entitled "Men Do Numbers, Women Do Strategy," built from interviews with recruiters and some statistics concludes that female MBA students are less likely to take finance courses and to apply to jobs in finance. The other regularity that appears from the Manageritalia data is that family firms are less likely to have female managers. On the other hand, if the manager is a family member, they are more likely to be female. This seems to indicate that family-run firms are less likely to hire women unless they are part of the family. We will come back to the issue of family ties in Section 4.2.

[15] See Gamba and Goldstein (2008) for an in-depth study of gender imbalance in Italian boards of directors. The share of female directors is much lower in Italy than in the US and in Northern European countries.

INPS records are born in Lombardia where 38% of the firms are registered. This suggests a strong local learning component in acquiring managerial abilities.

4.2 Managers' Background

4.2.1 Education

One of the most striking features of Italian managers is their relatively low level of formal education: just over 50% of the managers working in firms which were interviewed in the CEP survey had an undergraduate degree (Figure 8, upper panel). Among large European countries, only the UK has a similar proportion of college graduates in management (44%), while all other countries are characterised by a much higher proportion of college graduates. For example, French and US firms report on average 60% of college graduates in management.

This is only in part a reflection of the fact that Italian workers are on average less educated than workers in other countries. For instance, the average degree of workers who are not in managerial positions is 14% in Italy (Figure 8, lower panel). The figure is lower in Germany (12%) and France (13%) and almost the same in the US (15%).

The share of Manageritalia members with an undergraduate degree is almost exactly 50%. The percentage goes down for people working in sales and marketing (Figure 9). There appears to be important sectoral and regional differences. The share of managers with an undergraduate degree is as low as 20% in the travel industry and goes up to 65% in business services. The share is lowest in Northern regions, especially Veneto and Piedmont.

Whether a manager holds a college degree is correlated with a well specified socio economic background. For example, the occupation of the manager's father seems to be a good predictor for the presence of a college degree. Only 30% of the 117 managers who reported that their father was a blue collar worker hold a degree, vs. the 65% of managers who reported that their father was a manager, entrepreneur or another professional figure. Similarly, the fraction of managers with a college degree is 77% of those who reported that their father held a college degree, vs. the 44% of those who reported that their fathers interrupted their curriculum before university. The data also show that the presence of a college degree is more likely among foreign and younger managers[16], as well as for family managers (i.e. managers working for a family firm and belonging to the owning family).

Besides only a fraction of the managers holding a college degree, among those with one, the grade they obtained is just comparable to the mean grade of those holding a university degree. Managers average grade is 101.8 (the maximum grade being 110 with honours), slightly below the mean grade among the graduates in a representative survey[17]. Hence, in so far as college degree grades are correlated with ability, managers do not seem to be selected among the most able college graduates.

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[16] For example, 76% of foreign managers have a college degree (vs. 49% of Italian managers) and the percentage of managers with a college degree is 73% for managers below 40 years, 53% for managers between 40 and 50 years, and 30% for managers above 50 years.

[17] In the 2004 Survey of Household Income and Wealth, a representative household survey, the average grade among college graduates is 102 and the median is 104.

It is instructive to compare managers' demographic traits and education levels with those of other close categories such as executives (clerical employees with administrative tasks), professionals and self employed and entrepreneurs. For this we have relied on data from the Survey of Households Income and Wealth (SHIW)– a biannual survey run by the Bank of Italy on a large sample of Italian families. To obtain a reasonable number of observations on these categories we have pooled observations from the last three waves (years 2000, 2002 and 2004). Comparisons are shown in Table 2.[18] Managers are about 5 years older than other executives and professionals, more educated than these two categories (the share of managers with a degree is 15 percentage points larger than among executives and professionals) but they are more male oriented. On the other hand, compared to entrepreneurs, managers are a bit older and have a smaller share of women (10% versus 20%) but are much more educated: among entrepreneurs the share with a college degree is only 8%.

4.2.2 Family

Family firms are a key feature of the Italian economy. La Porta et al (1999), for example, report that 60% of Italian medium-sized publicly traded firms belong to a family (including both founders and second generations firms), vs. 10% in the US and 40 and 50% in France and Germany, respectively. The importance of family firms in the Italian economy is confirmed in the CEP survey. Table 3 shows that the fraction of family owned firms in Italy recorded in the CEP survey is 62%, significantly higher than Germany, France, the UK and the US, which range from 38% to 28%. First generation (i.e., firm where the CEO has still an active role) and second generation family firms are both over-represented in Italy compared to other countries, although the proportion of founder owned firms is slightly higher (37% vs. 25%).

The fraction of family firms is also very high in the Manageritalia survey (47%)[19], as we can see from Table 5. As one would expect, the manager is more likely to be a family member if the CEO is part of the family that owns the company and the firm is not a multinational. Senior managers are also more likely to be family members. Interestingly, the probability that the manager is part of the family goes down drastically if the firm is a Multinational – less so if the Multinational is headquartered in Italy.

4.2.3 Attitude towards Risk

Managers tend to be involved in larger, more complex and risk-intensive decisions than other workers. They also tend to operate within a complex web of formal and informal professional interactions. Their attitude to risk taking and to interpersonal trust may be useful in gauging their management style.

In order to identify their attitudes toward risk, we asked the managers two distinct questions. In the first question, we asked the managers to state explicitly their preference towards risk, choosing between four possible combinations of risk and profits (from low risk, low profit, to high risk, high profit). The second question differs because the managers were asked to state their preference between 10 different pairs involving a safe prospect and a risky one with differing combinations of risk and return, but they were not told explicitly which combination was riskier. In the analysis we

[18] Mean characteristics of managers in SHIW are very similar to those in the Manager Italia dataset; mean age is 47 years, the share of male managers is 89.9% and 42.6% hold a degree.

[19] Of these, 19% are founder owned and 28% are second generation family firms.

use a principal factor component of the two variables, and define as "risk" the resulting standardized variable.

With respect to risk, there are three clear patterns. The most risk-tolerant managers are in multinational firms, in firms owned by private equity groups and tend to be employed in the sales area (Figure 10). In section 0 we will come back to the pattern of risk tolerance and its relation to firm/job characteristics and we will show that it can be interpreted as an equilibrium selection phenomenon: more risk-tolerant managers are matched to jobs that involve steeper incentive schemes. Instead, the only pattern that emerges with respect to trust is that managers specializing in finance are less trusting than those in general management and sales.

5 Firms' Managerial Policies

The next step in our analysis sheds light on the incentive structure faced by Italian managers. We present evidence on several dimensions of incentives, ranging from explicit short term incentives related to objective measures of performance (i.e. bonus pay) to implicit long term incentives such as the role of personal relationships on the managers' career prospects.

In each section, we focus on the differences across different types of ownership structures (e.g. family vs. disperse shareholders), and between firms with international exposure vs. purely domestic companies. For the sake of simplicity, we focus our discussion on the differences emerging from the raw data (i.e. unconditional correlations). Most of the results that we discuss still hold if one adds a battery of controls. Table 11 and Table 12 explore the robustness of our results to the inclusion of additional controls for firm (e.g. size and industry) and manager characteristics (e.g. area of work, seniority).

5.1 International Comparison

The CEP management survey allows a direct comparison of the type of management practices adopted by medium sized Italian manufacturing firms. When we look at overall scores of the various indicators of managerial practises, the direct comparison with their international peers shows that Italian firms are similar to UK, and French firms, but significantly worse than Japanese, German, and US firms (Figure 11 , A).

However, the overall management scores hide an interesting heterogeneity between practices geared toward operational excellence, and those relative to people management, i.e. the selection, reward, hiring and promotion of the workforce.

All countries except the US score higher on operational rather than people management (Figure 11, B) and the difference is highest for France and Italy. Analyzing the different components of the people management variable separately, reveals that Italy ranks lowest or second lowest on several

personnel policies, ranging from hiring practices, to the use of appraisals and bonuses, and to talent management (Figure 11, C).[20]

5.2 Analysing People Management with the Manageritalia Survey

5.2.1 Recruitment

We define three classes of hiring channels based on the experience of the managers in our sample: the most impersonal one (head hunters, agencies, ads, or taken away from competitors) accounts for about 20% of the sample; a less impersonal one but still based on professional contacts (business contacts, self-referrals, recommendations) accounts for over 50% of the cases; finally, sample managers got their job through family and friends contacts in 26% of cases.

Figure 12 and Table 11 show that firm ownership, nationality and international exposure correspond to hiring practices.

In particular, the unconditional correlations in Figure 12 suggest that:

1. Compared to other ownership structures, firms with insider ownership (founder, family or other private individuals) are more likely to hire through informal networks and less likely to hire through market channels

2. Compared to foreign multinationals, Italian firms (both domestic and multinational) are more likely to hire through informal networks and less likely to hire through market channel.

Recruitment practices thus appear to depend on the company's national origin, with Italian firms more likely to use personal or even professional channels. Our data cannot say whether this is due to different corporate cultures or to the relative lack of contacts of non-Italian firms.

5.2.2 Appraisals

A key element of human resources management is a system to evaluate the performance and the professional growth of employees. This applies a fortiori to managers. We asked managers in our Manageritalia sample: (i) Whether there are regular appraisal meetings to evaluate their performance; (ii) How often the meetings are held; and (iii) How important those meetings are to determine promotions, bonuses, salary and firing decision. The answers to the three questions are reported graphically in Figure 13 and analysed in more detail in Table 11.

A first and – in our view – stunning result, is that almost half of the managers in our sample *never* face appraisal meetings. This is particularly striking in light of the fact that, as our time use survey (section 6.1) shows, top executives spend a large amount of time in meetings. Given the presence of a meeting-oriented culture, it is surprising that half of the firms decide to devote no meeting time at all to evaluating the path of their managers' talent.

[20] It is worth noting the Italian gap in people management persists even once we control for firms' size and sector of activity.

Patterns of assessment vary tremendously by class of firms, and these patterns are similar across the three questions. Figure 13 shows that:

1. The likelihood, frequency and importance of appraisals is lower in family firms. In contrast to the earlier findings regarding hiring channels, firms owned by the founder or other private individuals differ from family firms.

2. Compared to domestic firms, multinational firms put more emphasis on all three aspects of appraisals.

3. Among multinationals, US firms put the strongest emphasis on all three aspects of appraisals.

Table 11 further shows that the likelihood, frequency and importance of appraisals increase with managers' seniority. This is a somewhat surprising result, as one would expect junior managers to be more monitored (by senior managers). One interesting result is that the emphasis on appraisals does not depend on the functional area the manager belongs to. Firm size does not seem to matter either, once sector controls are included.

5.2.3 Bonuses

We ask managers whether their compensation package includes a bonus and how large that bonus is. Table 6 shows that 73% of our managers receive a bonus and the average bonus (including those who get zero) amounts to 15% of total compensation.

Figure 14 shows that firm ownership, nationality and international exposure matter both for the existence and the size of bonus payments. The figure highlights that:

1. Compared to other ownership structures, firms with insider ownership (founder, family or other private individuals) are less likely to offer performance bonuses and these account for a smaller share of total compensation.

2. Compared to multinational firms –especially if foreign-- domestic firms are less likely to offer performance bonuses and these account for a smaller share of total compensation.

The regression analysis in Table 11 allows us to compare the relative importance of ownership vs. multinational status. The evidence indicates that the latter dominates. Namely, there is no significant difference between insider and outsider ownership once multinational status is controlled for.

Table 11 also shows that bonuses are more important in larger firms and for younger managers. Finally, managers employed in sales are offered more powerful incentive schemes. This result should be interpreted together with the findings – in the previous section – that the emphasis on assessment is the same across the three functional areas. One possible explanation is that, compared to finance and general management, sales performance is easier to measure.

5.2.4 Promotions and Dismissals

Our survey contains a number of questions about the criteria for promotions and the criteria for dismissals.

Let us look first at promotions (Table 6 and Figure 15). Reassuringly, 95% of managers in our sample report that performance is an important factor in managerial promotions. This high level of positive

responses means that this question has limited ability to discriminate among firms (except in certain cases of inside ownership). Other important factors are tenure, namely number of years in the firm (36% of managers) and quality of the relationship with the owners (85%). A signal of a strong implicit incentive structure is the presence of a promotion fast-track for promising young managers, which can be seen as the opposite of promotion by tenure. Fast track systems are present in 37% of our firms.

Figure 15 highlights systematic differences between classes of firms. In particular:

1. Multinationals are less likely to promote on the basis of tenure, while no clear pattern emerges in terms of ownership types.

2. Multinationals are more likely to offer fast track promotions to star performers.

3. As one would expect, promotions depend on the relationship with the owners when the owners are insiders, with no significant difference between family, founder and privately owned firms.

Dismissals are analyzed in Table 6 and in Figure 16. A manager may leave the firm voluntarily (better job or personal reasons) or involuntarily (poor market conditions, problems with the owners, and poor performance).[21] It is interesting that the most common cause of involuntary separation is neither the state of the market (13%) nor the performance of the manager (26%) but the relationship with the owners.

Figure 16 shows that there is a stark difference among firm classes. The state of the market and managerial performance are significantly more important in multinational firms, especially if American (managers employed by US multinationals are 28 percentage points more likely to be dismissed because of poor performance than managers in other multinationals).

Managers in multinational firms are also much more likely to leave their firm because they find a better job. At this stage, this finding might admit both a negative interpretation (they are more likely to leave because they are less happy) and a positive one (they face more opportunities, either because they have more talent to start with or because they have more chances of growing). As we shall see in section 6.4, the evidence on job satisfaction militates against the negative interpretation.

Figure 16 also reveals that firm ownership is correlated with reasons for dismissal. In particular we see that managers are less likely to leave the firm because of poor performance and more likely to leave the firm because of poor relationships with the owners when the firm is owned by a family or its founder.

The regression analysis in Table 12 again allows us to assess the relative importance of ownership vs. multinational status. The evidence indicates that the latter dominates. Namely, there is no significant difference between insider and outsider ownership once multinational status is controlled for.

[21] Obviously, we expect the majority of our involuntary separations to take the form of a resignation rather than an actual dismissal, which in Italy only occurs in extreme conditions.

5.3 The Evolution of the Incentive Structure: Evidence from INPS

According to the INPS Database, the pay (in real terms) of Italian managers has increased in the last 20 years by about 70% while the pay of managers at the bottom decile has more than doubled (Figure 18). Compensation does not seem to be significantly different across firm size classes (Figure 17)

The structure of managerial compensation has changed dramatically. In 1985, almost no Italian manager received a variable pay component (Figure 19). In the end of the Eighties the share of managers with bonus increased quickly over 80%. The bonus has also become a more important part of total pay, around 15% for the median manager; furthermore for a 10% of the sample bonus shares accounts for more than one third of total pay.

To gain additional insight into the dynamics of incentives, we focus on two cohorts of managers: those who were 35-44 years old in 1985 and those who were 35-44 years old in 1995. We follow them for ten years.

One important point to bear in mind is that we only know whether an individual paid contributions to INPS. When a manager leaves our sample, there can two possibilities: (1) He is no longer working (in which case, he may draw a pension); (2) He is still working but he does not appear in the INPS database (either because he is self-employed, has a job in the government sector or because he works abroad). The interpretation of the findings in this section depends in part on what one think that a manager does when he drops out of the INPS sample. While some of the individuals who leave management do become successful entrepreneurs, we hypothesize that this accounts for a small fraction. The others – those who retire (we are focusing on relatively young managers) or those who downsize to freelancing – are likely to suffer a monetary loss.

Figure 20 depicts the fraction of managers in a given cohort who are still employed (as managers or as other kinds of non-independent workers) after *n* years. The hazard rate is high: after five years, 30% to 40% of our managers have disappeared from the sample. The survival rate was systematically higher for the 1985 managers than for the 1995 managers.

We also compute the pay dynamics for the two cohorts under consideration (Figure 21 and 22). The first two graphs are obtained under the (optimistic hypothesis) that managers who drop out of the sample face the same salary distribution as those who stay in the sample: this means that we can just drop the missing observations. The last two graphs instead correspond to the most pessimistic scenarios: managers who leave the INPS sample receive a zero salary. We normalize the total pay of a manager in the base year (either 1985 or 1995) and we study its evolution in the next ten years.

The first point to note is that, in both cohorts, managers face strong intertemporal incentives. In the optimistic scenario a top-quarter performer (manager at the 25^{th} percentile of total pay) earns, after ten years, over 50% more than a bottom-quarter performer. In the pessimistic scenario, a bottom-performer ends up very quickly (after two years) with a zero salary.

In either case, this kind of dynamic variation appears to be larger than year-by-year variation in bonuses. For instance, in 1995 top-quarter performers received a 17% bonus while bottom performer received an 8% bonus. Compare this 7-point difference to the 50% difference (minimum) due to dynamic effects.

There is a notable difference in the pay dynamics for the two cohorts. In both the optimistic and the pessimistic scenario the same pattern emerges: the 1985 cohort had a more favourable income profile than the 1995 cohort, possibly reflecting different overall growth rates of the economy over the two decades. In the period under consideration, a median performer in the 1985 cohort could expect a 60% pay (in the good scenario) and a 10% pay increase in the bad scenario). A median performer in the 1995 cohort faced a 40% increase in the good scenario and would find himself without a job in the bad scenario.

6 Fidelity vs. Performance: Managers' Selection, Effort and Outcomes.

The analysis of personnel policies among our sample firms reveals two distinct models. Some firms adopt a *performance model*, whereby managers are hired through formal channels, they are assessed regularly and rewarded, promoted and dismissed on the basis of objective measures of performance. Other firms instead adopt a *fidelity model* of managerial talent development: they hire managers on the basis of personal or family contacts, they do not assess their performance formally, and they reward them based on the quality of their relationship with the firm's owners.

The analysis also reveals that non-family firms and multinationals are more likely to adopt the performance model, whereas family firms and firms that operate exclusively in the domestic market tend to adopt the fidelity model.

In this section we assess whether and how the type of managerial model affect the selection of managers into the firm, their effort and behaviour, their income and job satisfaction and ultimately the firm's performance.

We have shown that personnel policies vary across firms on four key dimensions, namely, hiring practices, appraisals and promotions, bonuses and dismissals. Within these, we can distinguish between incentives that are explicitly based on managers' performance such as bonuses and fast track promotions and those that are based on the relationship between the managers and the firm owners, such as hiring through the informal network of family and friends.

For brevity we develop two indexes that summarize our personnel policy variables. The first index is the principal component of all performance related measures, such as bonuses, appraisals and merit based promotions. The variable is increasing in the intensity of use of performance rewards. We label this "Performance Index".

The second index, which we label "Fidelity Index", captures the importance of good personal relationship with the owners of the firm for the professional career of the managers. This is defined as the principal component factor of the variables recording the role of personal relationship with the owners for promotion and firing decisions, and the cases in which the manager was hired through personal (family or friends) contacts. The "Fidelity Index" is higher for firms that rely more heavily on personal contacts and relationships with the owners.

Table 8 and Table 9 show summary statistics of the two incentive indexes. In Table 8, moving from the 25th to the 75th percentile of the performance index coincides with an increase in the probability of having an explicit incentive scheme and with the proportion of the bonus, which goes from 9.48%

to 16.70% of the salary. There is also a significant increase in the probability of having a formal appraisal system in place (from 23% to 75% of the firms) and a slight increase in the relevance of the appraisals. Table 9 reports a similar exercise for the fidelity index. Moving from the 25th to the 75th percentile of the variable implies a significant increase in the frequency of managers' leaving due to bad personal relationship with the owners, a dramatic increase in the proportion of managers being hired through family or friends, while there is no change in the relevance of good personal relationship with the owners for promotions.

6.1 Selection

We start by analyzing whether different managerial policies attract managers that differ systematically on key characteristics, such as education and risk aversion.

Table 15 shows that the fidelity model and the performance model are indeed associated with different selection methods. Performance-based firms hire on the basis of observable signals of quality rather than personal connections, and hence they put a premium of education, both university degrees and executive training.

Columns 1 to 6 in Table 15 clearly indicate that managers who are hired by firms with high performance indexes are more likely to have a college degree and more likely to have completed executive education.

Performance-based incentive scheme involves a certain risk, because it rewards success and punishes failure. Highly risk-averse individuals prefer to work for fidelity-based firms. Columns 7 to 9 in Table 15 support this conjecture. Risk attitudes are strongly linked with the matching of managers to firms. More risk-tolerant managers are found in firms with higher performance indexes. For example, from column (9) we can see that a standard deviation change in the performance index is associated with a 9.1% standard deviation change in the variable risk. On the other hand the fidelity index measure typically enters the regression with much smaller and insignificant coefficients.

It is interesting to know that – with two exceptions to be discussed shortly – firm ownership is not correlated with the managers' risk aversion coefficients in column (9). This means that firm-specific differences appear to work only through the choice of incentive schemes.

The two exceptions to the last statement are manager-owned firms and Italian multinational: they both seem to attract more risk-tolerant individuals. While for the first exception there is an obvious explanation that has to do with the equity stake, the reason behind the second exception is not clear.

6.2 Effort

Next, we analyze the impact of different personnel policies on managerial effort. To measure effort we asked managers how many hours a week they work and how often they work over the weekend. Table 6 shows that the average manager works 54 hours per week and works a little over a weekend a month.

Table 14 reveals that the incentive policy of the firm affects managers' effort. Managers with higher-powered incentives work longer hours and are more likely to be at work over the weekend. For example, one standard deviation change in the performance index variable is associated with 1.3

more hours worked per week (2.3% of mean hours worked) and 0.08 more weekends worked per month (8% of mean number of weekends worked). For hours, the coefficients on the type of the firm are not significantly different from zero, indicating that the only effect that the type of firm has is through the incentive scheme offered. Instead in the case of weekends, there is a direct effect: managers in multinationals and firms with family CEOs are significantly less likely to show up on weekends.

Interestingly, managers' effort (both in terms of hours and weekends worked) is negatively correlated with the fidelity index. A standard deviation change in the variable is associated with a decline of almost one hour work per week, and a decline of 0.05 weekends worked per month.

Other variables that affect effort are: functional area (higher effort in sales, and partly general management), nationality (foreign-born managers put in more hours), and gender (men are more likely to work weekends). Contrary to what one might expect, younger managers do not seem to work harder.

6.3 Use of Time

Our findings indicate that managers who work for firms that reward on the basis of performance tend to work more hours per week. A key question is whether they essentially do more of the same type of work or whether their "style" differs substantially. In this section we describe and analyze a survey that was purposely designed to collect detailed information on the managers' use of time.

6.3.1 Data Description

Our questionnaire contains detailed information on the CEO use of time every day over a five days week. This allows us to compute the number of hours worked in a week, the number of activities performed and the allocation of time across different types of activities.

Figure 24 shows that most CEOs work between 40 and 60 hours per week, with an average of 47.8. Figure 25 shows that this time is divided across several activities. The average CEOs engages in 35 different activities per week, namely about 7 per day. There is however substantial variation in the number of activities performed by different CEOs. At one end of the distribution, the 5% of CEOs on the left tail engages in 20 activities per week, at the other end, the 5% of CEOs on the right tail of the distribution engages in 54 different activities per week.

Figure 26 shows that most activities last between 50 and 100 minutes, with an average of just under one and a half hours. Taken together Figure 25 and Figure 26 show that the variation in total hours worked is explained mostly by a larger number of activities. Namely, CEOs who work longer hours engage in more activities rather than devoting longer to a similar number of activities.

Figure 27 shows how CEOs allocate their working hours across different types of activities. CEOs spend half of their time in meetings, with the average meeting lasting just over one and a half hours (94.5 minutes). The analysis of individual observations reveals substantial variation across different CEOs. For the 5% of CEOs who engage in the fewest meetings, these only take 26% of their time, On the other hand, the 5% of CEOs that engage in the most meetings, devote 76% of their time to these. The second most common activity, taking 14% of the average CEO time is "working alone", an umbrella type activity that brings together all working tasks the CEO performs alone, such as reading

documents or preparing materials for a meeting. For this activity too we note that there is substantial variation across different CEOs. At the bottom of the distribution, 5% of CEOs spend no time working alone. At the top, 5% of the CEOs spend 36% of their time working alone. The third most common use of time is travel, with an average share of 12%. The remaining 25% of time is almost equally split between phone calls, video and teleconferences, participation to public events and business luncheons. All of these exhibit substantial variation across different CEOs.

As discussed in section 3.2 the questionnaire collects detailed information on all the activities the CEO was engaged in for longer than 15 minutes. For these "main" activities we know the number of participants, their type, the location, the planning horizon and the frequency. We describe this information in Figure 28. For activities that involve other parties, we classify these as "insiders" if they're employees of the firm and "outsiders" if they are not. Activities can be undertaken alone, with insiders, with outsiders or both. On average, CEOs spend 62% of their time with insiders and 38%with outsiders. Among insiders, CEOs on average spend most of their time with representatives of finance (16%) and marketing (15%). Among outsiders, the two top categories are consultants (22%) and clients (15%); interestingly, CEOs spend an equal amount of time dealing with financial intermediaries and politicians, which absorb each 7% of their time .

Not surprisingly, most of the CEOs' activities take place at the firms' head quarters rather than in other locations. CEOs indeed spend two thirds of their time at the headquarters. A further quarter is equally divided between time spent in other offices of their firm and in other firms located in Italy. The remaining 6% is spent abroad.

Figure 29 shows that CEOs devote half of their time to activities that are not held regularly. The remaining half is almost equally split between activities that are held weekly, monthly and annually.

Figure 30 shows that if other parties are involved, there tends to be only a few of them. On average, CEOs spend 80% of their time in activities that involve fewer than 10 people, and half of this is spent on activities that involve only 1 or 2 participants.

Figure 31 shows that most of the CEOs time is spent in activities that are not planned far in advance, namely for one week or less. Interestingly, about $1/5^{th}$ of the CEOs' time is devoted to activities that are not planned at all.

6.3.2 Do CEOs of Different Age Cohorts Use their Time Differently?

We use regression analysis to investigate whether CEOs of different age cohorts differ systematically in hours worked and use of time. We state that we find evidence of differences by age only when we can reject the hypothesis that the estimated coefficient of age is equal to zero at the 90% confidence level or higher.

We first address the question of whether CEOs work longer hours, either because they engage in more activities or spend longer time on each activity. The answer to all three questions is negative. We do not find a statistically significant effect of age on either variable. The magnitude of the estimated effects is very small. For instance we find that compared to a 54 years old (the average age of CEOs in the sample) a 64 years old works 20 minutes less per weeks, is engaged in one less activity and spends 2 more minutes on each activity.

Next, we analyse whether age affects the allocation of time across different types of activities. This and all other results are reported in Table 7.

We find that for the main activities, that is meetings, travels and time spent working alone, CEOs of different cohorts behave similarly. We only observe some variation in the use of communication devices. Younger CEOs use video and teleconferencing more frequently and phone calls less frequently compared to their older counter parts. The difference is substantial: the share of time spent on video and teleconferencing is twice as large for CEOs who are ten years younger than average (44 year olds) compared to CEOs who are ten years older than average (64 year-olds).

A rather interesting pattern emerges when we compare the share of time spent with different categories of people. Older CEOs spend relatively less time with insiders, especially with those belonging to the areas of marketing and finance. The estimates indicate that a CEOs who is ten years younger than average spends 21% of his time with finance and 20% with marketing representatives. This difference can reflect differences in managerial styles across cohorts or a more pronounced need to collect information about the firm by meeting insiders for younger, less experienced managers. In comparison, the same figures for a CEO who is ten years older than average are 15% and 12%. In contrast, we find that CEOs of different ages allocate their time across different categories of outsiders in a similar way.

Our analysis also reveals that younger CEOs are also more likely to spend more time at the firm's headquarters rather than at other firms' sites. The differences between a 44 and a 64 years old CEO is 12 percentage points.

Finally, we find no evidence that age is correlated with the frequency at which activities take place or the time horizon over which they are planned. Regardless of their age, CEOs devote the majority of their time to activities that are not held regularly and are either unplanned or scheduled in for a week or less.

6.3.3 Do CEOs who Work Longer Hours Use their Time Differently?

The final part of our analysis aims to establish whether CEOs who work longer hours exhibit a systematically different time use pattern. As in the previous section we employ regression analysis and we state that we find evidence of differences only when we can reject the hypothesis that the estimated coefficient of weekly hours is equal to zero at the 90% confidence level or higher. All results are reported in Table 7.

The analysis of time spent on different type of activities reveals a striking difference on the division between meetings and time spent working alone. CEOs who work longer hours spend relatively less time in meetings and more time working alone. The estimates indicate that a CEO who works 10 hours longer than average per week spends 56% of his time in meetings and 18% working alone. In comparison, a CEO who works 10 hours less than average per week spends 64% of his time in meetings and 12% working alone.

Differences also emerge when we compare the share of time spent with different categories of people. CEOs who work longer hours spend relatively less time with outsiders. The estimates indicate that a CEO who works 10 hours longer than average per week spends 35% of his time with outsiders. In comparison, a CEO who works 10 hours less than average per week spends 47% of his time with outsiders. The difference is mostly driven by the fact that CEOs who work longer hours spend relatively less time with consultants. The estimates indicate that a CEO who works 10 hours longer than average per week spends 19% of his time with consultants, whereas this share increases to 27% for CEOs who work 10 hours less than average.

The analysis reveals no significant difference in the frequency with which activities are held and in their geographical location. Regardless of the length of their working week CEOs spend most of their time on activities that do not take place regularly and are located at the firm's headquarters.

The analysis however indicates that CEOs who work longer hours tend to meet with more people at any given time. The estimates indicate that a CEO who works 10 hours longer than average per week spends 34% of his time in activities that involve one or two people instead of activities that involve three or more. In comparison, a CEO who works 10 hours less than average per week spends 43% of his time in activities that involve one or two people only.

The other significant difference concerns the planning horizon. Overall, CEOs spend most of their time on activities that have been planned for a week or less, but CEOs who work longer hours spend relatively more time on unplanned activities. A CEO who works 10 hours longer than average per week spends 22% of his time in unplanned activities, whereas these only take 16% of the time of CEOs who work 10 hours less than average per week.

6.4 Compensation and Job Satisfaction

The next step of our analysis investigates whether different managerial systems are associated with different levels of pay and job satisfaction.

The average yearly fixed salary in our Manageritalia sample is a little less than 100,000 euros. As we saw in section 5.2.3, the average bonus amounts to about 15% of the fixed salary. In Table 14, columns 4 to 6 show the fixed compensation that the manager receives (fixed salary but not bonus) as a function of firm-specific variables and worker-specific variables. The most interesting variable from our viewpoint is the incentive policy, which appears with a positive and significant coefficient. This means that firms who provide high-powered incentive schemes must compensate managers for the additional risk they incur. According to the regression results in column (6), a standard deviation increase in the performance index is associated with a cost of approximately €5,700 (5.7% of the mean salary). Interestingly, the fidelity index appears with an insignificant coefficient in the salary regression. The difference between the two indexes is statistically significant, indicating that managers who are rewarded for performance are paid more than those who are rewarded for fidelity.

Firm ownership does not have a direct effect on compensation, except for two smaller categories: other (government and cooperative pay less) and manager-owned (which pay more). As before this means that the type of the firm influences compensation only through the choice of the incentive scheme. Age, education and seniority play a positive role. There does not seem to be gender discrimination.

Where are managers happiest? According to column 9, Table 14, only three variables are significant. Managers at more senior level report higher job satisfaction. For example, going from middle to top managers is associated with a 8.5% increase in job satisfaction. Managers who are family members appear to be happier too, and this effect is very strong (33% increase according to column 9). Interestingly, explicit incentives appear with a positive and significant coefficient in the job satisfaction regression (0.051 significant at the 5% level), while the fidelity index measure enters with a negative (albeit insignificant) coefficient. This may reflect excess demand for managerial jobs that provide high powered incentives, namely if managers with low powered incentives were fully

compensated along other dimensions -e.g. shorter working hours- we should not observe a difference in the level of reported job satisfaction.

6.5 Managerial Policies and Firm Performance

Previous studies (e.g. Bloom and Van Reenen, 2007) show that better managed firms tend to be more productive, grow faster and provide higher returns on capital employed. In this section, we quantify the economic relevance of the performance and fidelity indexes built using the Manageritalia survey.

For this purpose, we analyse the conditional correlation of the performance index with a host of firm level accounting variables.[22] The results of this exercise are summarized in Tables 16 and 17.

We look at several outcome measures: a) 3 years sales growth, b) 3 years employment growth, c) return on capital employed (ROCE). In these tables, errors are clustered at the firm level to account for autocorrelation patterns of unknown forms in the residuals.

The correlations between the growth measures and the incentive variable are generally positive and significant, especially when we look at the 3 years growth rates of sales and employment. For example, in Table 16, column 4, a one standard deviation increase in the performance index measure is associated with a positive increase of 0.041 percentage points in 3 years sales growth (this corresponds to a 14% increase relative to the mean). Similarly, in Table 17, column 8, a one standard deviation increase in the performance index measure is associated with a positive increase of 0.045 percentage points in 3 years employment growth (this corresponds to a 24% increase relative to the mean). Incentives are also always positively associated with the return on capital measure (Roce). For example, column (4) of Table 17 suggests that a one standard deviation increase in the performance index is associated with an increase of 2.9 percentage points in the Roce measure (12% relative to the mean).

Interestingly, the fidelity index is typically uncorrelated with any of the variables considered in this exercise. For example, in Table 17, column 4, the coefficient on the fidelity index is -0.004, with a standard error of 0.013. A similar picture emerges when we look at employment growth and return on capital employed.

Finally, we did not find evidence of a positive correlation between labour productivity and any of our incentives or fidelity indexes. This may well reflect the lack of any statistical correlation between our summary measures and productivity, as well as the problematic measurement of productivity in the service sector.

[22] These are drawn from the Amadeus database. See Bloom, Sadun and Van Reenen (2008) for details. We were able to match 569 (of the original 603) firms with Amadeus, The period covered by the accounting dataset goes from 2000 to 2005. All regressions are clustered at the firm level to correct for serial correlation of unknown form and include three digits SIC dummies.

7 Conclusions

According to our data, the performance model is associated to better outcomes than the fidelity model. This is true for selection: managers are more qualified and more able to bear risk. It is also true for managers' behaviour the workplace: they are paid better, they work harder and they are happier. And, it is also true for firms: they grow faster and they have higher return on capital. If that is the case, why don't all firms move to the performance model?

There are two main lines of explanation, depending on whether one thinks that firms that are currently relying on the fidelity model are *unwilling* or *unable* to switch to the performance model.

The first explanation has to do with *corporate governance*. According to it, the owners of some firms do not pursue only commercial success. They have other objectives as well, like corporate control: they are willing to sacrifice profits in order to maintain their grip on the firm. A classical case is that of the family firm, where the owners may want to reserve some of the best jobs for family members, even if they are not the most qualified applicants. In such firms, securing the fidelity of (non-family) managers is essential. Part of their informal job description is to nurture and assist family members. As this task is difficult to measure, formal assessments are eschewed and rewards are based on the long-term display of fidelity.

The second explanation relates to *corporate culture*. Firms may realize that they are not offering managers the right incentive system, but they are unable to switch to the performance model. Recruiting, assessing, and rewarding high-level professionals such as managers are not trivial tasks. They presuppose a corporate culture based on explicit long-term planning and focused on human capital development. It is possible that such know-how is lacking in family firms and domestic firms (although our size controls show that it is not just an issue of dimension). The cultural explanation may be particularly applicable to the difference between multinational and domestic firms. The fact that Italian firms who operate in other countries seem to be able to adopt a performance model may indicate that the kind of corporate culture that is needed for doing business in an international environment is also conducive to better incentive systems.

Our two potential explanations have different policy implications. If the governance story is predominant, one should question the ownership mode. There is already a flourishing debate (see literature review) on the relative merits of family firms. Our results would then add to the debate by showing that on one dimension – managerial talent – family firms are at a disadvantage.

If instead one believes more in the cultural story, then there are two implications. First, we should welcome foreign multinationals (or at least stop making their life difficult) and we should encourage our firms to acquire an international dimension. Second, we should invest in creating the know-how that is necessary for implementing the performance model. How such knowledge can be acquired is an open question, but it is likely to be related to the role of education.

One of the striking results of our research is the low level of education of Italian managers. In other countries, especially the United States, academe has played a tremendous role in shaping the behaviour of today's managers. Top universities have invested large amounts of resources in developing business schools. For decades, there has been a feedback cycle between university and business: business school professors research issues of interest to business and future managers attend MBA courses.

Such feedback loop seems to be much weaker in Italy. Universities have invested less in business programs, which is reflected in international rankings. According to the Financial Times 2008 survey, the best Italian MBA program is ranked 48th in the world (in comparison, the best UK program is 2nd, the best French program is 6th, the best Spanish one is 7th). The FT also ranks the best 40 European master programs in management: none of them is Italian.[23]

It is unclear whether the missing link is due to the demand side (Italian firms do not hire management graduates, perhaps because of the governance reasons discussed above) or to the supply side (Italian universities are unable to create effective programs). Certainly, it is surprising that, within the existing pool of Italian graduates, firms do not appear eager to hire managers who have earned top marks during their university career.

What future awaits the Italian managerial class? Our analysis reveals two contrasting trends. On the one hand, the fact that there is no systematic age difference between managers who are rewarded for performance and managers who are rewarded for fidelity, indicates that a new generation of fidelity-oriented managers is being trained. Only time will tell whether this generation is able to tackle the challenges that the Italian productive system faces.

On the other hand, performance bonuses have become much more relevant in the last decade, and one might expect this trend to continue, possibly matched by similar increases in other components of the performance model, such as hiring and firing practices based exclusively on individual performance. In addition, our evidence does suggest that Italian firms with global exposure tend to abandon the fidelity model. To the extent that the process of globalization will encourage more domestic firms to operate abroad, or equivalently, will select only firms that are able to operate in foreign markets, we can expect the performance model to prevail.

[23] Things are better in executive education. Bocconi's program is ranked 5th in Europe and 15th in the world.

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Table 1: Basic Characteristics: Managers

Variable	Frequency	Mean	SD
Age	603	46.98	7.12
Male (%)	603	89.88	0.30
Degree (%)	603	50.08	0.50
Honors (%)	302	11.92	0.32

Managers' Fathers

Variable	Frequency	Mean	SD
Father's Degree (%)	603	15.92	0.37
Father Blue Collar Worker (%)	545	21.47	0.41
Father Teacher, Retailer, clerk	545	35.05	0.48
Father Manager, Entrepreneur	545	43.49	0.50

Table 2: Basic Characteristics: Executives, professional and entrepreneurs (SHIW sample)

Executives

Variable	Frequency	Mean	SD
Age	540	42.58	921
Male (%)	540	74.26	0.44
Degree (%)	540	30.00	0.46

Professionals & self employed

Variable	Frequency	Mean	SD
Age	462	43.97	11.17
Male (%)	462	82.90	0.30
Degree (%)	462	34.60	0.50

Entrepreneurs

Variable	Frequency	Mean	SD
Age	374	44.14	11.68
Male (%)	374	79.68	0.40
Degree (%)	374	8.02	0.27

The data from the Survey of Household Income and Wealth (SHIW) pool the last three waves 2000, 2002 and 2004 and refer to the private sector.

Table 3: Family Ownership in the CEP Survey						
	Italy	**France**	**Germany**	**Japan**	**UK**	**US**
Family ownership (Founder and Family)	62	28	38	26	32	28
Founder	37	23	33	23	24	18
Family	25	5	5	3	8	10

Table 4: Labour Market

Variable	**Frequency**	**Mean**	**SD**
Managers hired through (%):			
Professional contacts	603	52.24	0.50
Family or friends	603	20.07	0.40
Head hunter, hiring agency, advertisment	603	26.20	0.44
Other	603	1.49	0.12
Frequency of Managerial turnover due to:		0.00	
Poor market conditions	603	13.76	0.34
Problems with owners	603	33.17	0.47
Failure to meet objectives	603	26.04	0.44
Better offer	603	47.43	0.50
Personal reasons	603	36.15	0.48
Number of firms preeviously worked by the manager	603	0.95	1.07
Manager received job offer in the past three years (%)	603	70.81	0.46

Table 5: Firm Characteristics

Ownership		
	Frequency	**%**
Cooperative	22	3.65
Dispersed Shareholders	147	24.38
Government	27	4.48
Managers	13	2.16
Private Equity	31	5.14
Private Individuals	78	12.94
Founder	116	19.24
Family	169	28.03

Family Firms (169)		
	Mean	**SD**
Family CEO (%)	0.66	0.47
Family members in management (number)	1.83	1.00

Multinational Firms		
	Frequency	**%**
Domestic	255	42.29
Italian MNE	125	20.73
Foreign MNE	223	36.98
Country of Origin of Foreign MNEs		
France	30	13.51
Germany	51	22.97
Netherlands	13	5.86
Japan	16	7.21
UK	16	7.21
US	60	27.03
Other	36	16.21

Note: Australia (1), Austria (1), Belgium (7), Denmark (4), Finland (1), Israel (1), South Africa (1), South Korea (1), Spain (3), Sweden (7), Switzerland (5)

Foreign Managers			
	Frequency	**Mean**	**SD**
Domestic	255	0.02	0.15
Italian MNE	125	0.04	0.20
Foreign MNE	233	0.07	0.26

Table 6: Managers at Work

Effort

Variable	Frequency	Mean	SD
Weekly Hours Worked	603	53.71	7.87
Monthly Weekends Worked	603	1.19	1.10

Promotions

Variable	Frequency	Mean	SD
Factors relevant for promotions			
Tenure	603	0.36	0.48
Performance	603	0.95	0.22
Relationship with the owners	603	0.84	0.37
Fast tracks for star performers (%)	603	0.37	0.48
Managers promoted internally (%)	603	0.39	0.49

Remuneration

Variable	Frequency	Mean	SD
Wage	603	98963.52	29548.15
% Firms with Bonus Scheme	603	0.73	0.45
Percentage Bonus	603	14.93	14.63

Appraisals

Variable	Frequency	Mean	SD
% Firms with Appraisals	598	0.53	0.50
Yearly Appraisals Frequency	598	1.00	1.29
Appraisals important for:			
Promotions	323	0.63	0.48
Bonus	323	0.62	0.49
Wage	323	0.58	0.49
Firing	323	0.43	0.50
Other	323	0.20	0.40

Job Satisfaction

Variable	Frequency	Mean	SD
Manager is very Happy (%)	603	0.50	0.50

Table 7: CEOs' Use of Time by Age Cohort and Working Hours

		1	2	3	4	5	6	7
			Implied Values for:				Implied Values for:	
Dependent Variable:		Age Coefficient	"Average" CEO	CEO 10 who is years younger than average	CEO 10 who is years older than average	Hours Coefficient	CEO who works 10 more hours per week than average	CEO who works 10 fewer hours per week than average
Activities:								
	Total Number	-0.103 (.090)	26.5	27.5	25.5	.480* (.092)	31.3	21.7
	Mean Duration	.219 (.323)	90	88.2	92.2	.886* (.313)	99	81
Share of time spent in:								
	Meetings	-.002 (.002)	.60	.62	.58	-.004* (.002)	.56	.64
	Working alone	.003 (.002)	.15	.12	.18	.003* (.001)	.18	.12
	Phone Calls	.001* (.001)	.07	.06	.08	.001 (.001)	.08	.06
	Conference Calls	-.002* (.001)	.05	.07	.03	-.001 (.001)	.04	.06

CEOs' Use of Time by Age Cohort and Working Hours (continued)

Share of time spent with:								
	Insiders	-.002	.62	.64	.60	.004*	.66	.58
		(.002)				(.002)		
	Finance	-.003*	.18	.21	.15	-.001	.17	.19
		(.002)				(.002)		
	Marketing	-.004*	.16	.20	.12	-.002	.18	.14
		(.002)				(.002)		
Share of time spent with:								
	Outsiders	.002	.38	.36	.40	-.004*	.34	.42
		(.002)				(.002)		
	Consultants	.000	.23	.23	.23	-.004*	.19	.27
		(.002)				(.002)		
Share of time spent on activities:								
	With 1-2 people	-.003	.39	.39	.36	-.005*	.34	.43
		(.002)				(.003)		
	Held irregularly	-.001	.50	.51	.49	-.002	.48	.52
		(.003)				(.003)		
	At firm's HQ	-.006*	.67	.73	.61	.004	.71	.63
		(.002)				(.003)		
	Unplanned	.002	.19	.21	.17	.003*	.22	.16
		(.002)				(.001)		

Notes: Coefficients in columns (2) and (5) are obtained by regressing the variables in column (1) on age and weekly hours in deviation from their respective means. Robust Standard errors are reported in parenthesis. A * indicates that we can reject the hypothesis that the coefficient is equal to zero at the 90% confidence level or higher. Columns (3), (4), (6) and (7) use the coefficients in columns (2) and (5) to compute the mean value for CEOs of different age cohorts and different working hours. Statistically significant differences are reported in red. For the last set of variables in column (1) the omitted categories are: (i) with 3 or more people, (ii) held weekly, monthly or annually, (iii) held at another site, another firm in Italy and another firm abroad (iv) planned 1, 2 or 4 weeks in advance.

Table 8:Performance Index

Percentile Performance Index	Existence Bonus	Percentage Bonus	Existence Appraisals	Fast tracks for star performers
1st-25th	0.00	0.00	0.27	0.12
26th-50th	0.86	9.48	0.23	0.31
51st-75th	1.00	16.70	0.75	0.34
76th-100	0.99	32.78	0.86	0.70

Table 9: Fidelity index

Percentile Fidelity Index	Turnover for bad relationship with ownership	Hiring through informal contacts	Importance of relationship with owners for promotions
1st-25th	0.26	0.09	0.00
26th-50th	0.00	0.00	1.00
51st-75th	1.00	0.00	1.00
76th-100	0.30	1.00	1.00

Table 10: Manager Characteristics

Dependent Variable	(1) ln(Age)	(2) Gender (Male=1)	(3) Nationality (Foreign=1)	(4) Education (College Degree=1)	(5) Family (Family Manager=1)	(6) Risk (Principal Component)	(7) Trust (Generally Trust People=1)
ln(Employment)	0.008*	0.007	-0.000	0.026	-0.003	-0.032	0.005
	(0.005)	(0.008)	(0.006)	(0.016)	(0.015)	(0.032)	(0.017)
Area=General Administration	-0.016	0.125***	-0.038	-0.008	-0.009	0.166	0.142**
	(0.017)	(0.043)	(0.024)	(0.063)	(0.090)	(0.127)	(0.065)
Area=Sales and Marketing	0.033**	0.149***	-0.046*	-0.141***	-0.073	0.301***	0.123**
	(0.016)	(0.038)	(0.025)	(0.054)	(0.070)	(0.107)	(0.055)
Seniority	0.063***	0.006	0.032**	0.062	0.072	-0.018	0.028
	(0.013)	(0.029)	(0.016)	(0.049)	(0.049)	(0.102)	(0.050)
Ownership = Internal	-0.035*	0.028	0.021	0.048	-	0.063	0.023
	(0.020)	(0.038)	(0.028)	(0.064)		(0.132)	(0.066)
Ownership = Other	0.002	0.009	-0.004	0.019	-	0.208	-0.009
	(0.028)	(0.050)	(0.033)	(0.084)		(0.192)	(0.092)
MNE	-0.019	0.007	0.021	0.092	-0.161***	0.133	0.072
	(0.018)	(0.038)	(0.022)	(0.060)	(0.055)	(0.122)	(0.059)
USA MNE	-0.018	0.069	0.020	-0.018	-0.016	0.243	-0.038
	(0.024)	(0.052)	(0.038)	(0.078)	(0.060)	(0.161)	(0.085)
Italian MNE	0.001	-0.019	-0.005	-0.074	0.068	0.102	-0.000
	(0.020)	(0.041)	(0.027)	(0.064)	(0.061)	(0.132)	(0.065)
Ownership=Founder	0.024	0.019	0.002	-0.044	-	0.139	-0.015
	(0.020)	(0.035)	(0.028)	(0.065)		(0.128)	(0.067)
Ownership=Private Equity	0.022	-0.032	-0.001	-0.117	-	0.173	0.031
	(0.031)	(0.069)	(0.040)	(0.109)		(0.212)	(0.107)
Ownership=Manager	0.096**	0.016	-0.023	-0.235*	-	0.608**	-0.189
	(0.042)	(0.088)	(0.026)	(0.141)		(0.295)	(0.145)
Ownership=Private Individuals	0.027	-0.120**	0.020	-0.152*	-	0.072	0.034
	(0.024)	(0.055)	(0.032)	(0.077)		(0.135)	(0.075)
Observations	603	603	603	603	603	603	603
Dummies regions	yes	yes	yes	yes	yes	yes	yes
Dummies sectors (sic 2)	yes	yes	yes	yes	yes	yes	yes

Table 11: Recruitment, Appraisal and Bonuses

Dependent Variable	(1) Manager Hired through Market	(2) Manager Hired through Family or Friends	(3) Presence of Appraisals	(4) Yearly Frequency of Appraisals	(5) Importance of Appraisals	(6) Presence of Bonus	(7) ln(Bonus Percentage+1)
ln(Employment)	0.009	0.004	0.025	0.023	0.062*	0.034**	0.078*
	(0.014)	(0.012)	(0.016)	(0.041)	(0.037)	(0.014)	(0.043)
Area=General Administration	-0.044	0.017	-0.012	0.027	-0.060	0.014	0.136
	(0.056)	(0.048)	(0.061)	(0.154)	(0.136)	(0.061)	(0.184)
Area=Sales and Marketing	-0.090*	0.015	0.013	0.151	-0.032	0.108**	0.376**
	(0.052)	(0.042)	(0.053)	(0.142)	(0.120)	(0.048)	(0.149)
Seniority	0.013	0.031	0.105**	0.267**	0.301***	0.038	0.245*
	(0.042)	(0.037)	(0.048)	(0.131)	(0.111)	(0.049)	(0.145)
Ownership = Internal	-0.014	0.095**	-0.126**	-0.406**	-0.250*	-0.037	-0.174
	(0.062)	(0.046)	(0.064)	(0.168)	(0.147)	(0.054)	(0.168)
Ownership = Other	0.008	0.008	-0.018	-0.165	0.087	-0.037	-0.233
	(0.084)	(0.062)	(0.087)	(0.230)	(0.213)	(0.076)	(0.227)
MNE	0.160***	-0.140***	0.224***	0.027	0.371***	0.252***	0.739***
	(0.054)	(0.043)	(0.059)	(0.147)	(0.130)	(0.051)	(0.154)
USA MNE	0.033	0.011	0.126*	0.608***	0.454**	0.044	0.155
	(0.081)	(0.056)	(0.069)	(0.204)	(0.180)	(0.051)	(0.180)
Italian MNE	-0.132**	0.042	-0.063	0.108	-0.123	-0.087*	-0.294*
	(0.057)	(0.046)	(0.064)	(0.156)	(0.144)	(0.052)	(0.162)
Ownership=Founder	-0.046	-0.012	0.113*	0.463***	0.163	0.051	0.126
	(0.054)	(0.055)	(0.064)	(0.177)	(0.133)	(0.062)	(0.185)
Ownership=Private Equity	0.136	0.078	-0.038	-0.050	0.019	0.016	0.211
	(0.100)	(0.076)	(0.109)	(0.279)	(0.274)	(0.074)	(0.241)
Ownership=Manager	-0.214***	-0.110	0.010	0.032	-0.042	0.112	0.489
	(0.067)	(0.122)	(0.158)	(0.316)	(0.314)	(0.122)	(0.417)
Ownership=Private Individuals	-0.083	0.017	0.120*	0.375*	0.199	-0.044	-0.160
	(0.064)	(0.064)	(0.072)	(0.194)	(0.152)	(0.067)	(0.205)
Family Manager	-0.331***	0.646***	-	-	-	0.124	0.254
	(0.071)	(0.097)				(0.113)	(0.380)
Male	0.018	-0.064	-	-	-	0.009	0.213
	(0.062)	(0.061)				(0.065)	(0.196)
Degree	0.032	-0.049	-	-	-	0.000	0.011
	(0.041)	(0.037)				(0.040)	(0.126)
ln(Age)	-0.321**	-0.145	-	-	-	-0.312**	-1.346***
	(0.127)	(0.131)				(0.135)	(0.429)
Observations	603.000	603.000	598	598	598	603	603
Dummies regions	** p<0.05	*** p<0.01"	yes	yes	yes	yes	yes
Dummies sectors (sic 2)			yes	yes	yes	yes	yes

Table 12: Promotions and Dismissals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Promotions are based on:			Fast racks for Star Performers (0/1)	*Manager Dismissals due to:*			
Dependent Variable	**Performance**	**Tenure**	**Relationship with Owners**		**Failure to Meet Objectives**	**Bad Market Conditions**	**Bad Relationships with Owners**	**Better Offer**
ln(Employment)	-0.001	-0.014	0.001	0.006	0.011	0.008	0.050***	0.046***
	(0.005)	(0.016)	(0.010)	(0.017)	(0.015)	(0.010)	(0.015)	(0.015)
Area=General Administration	-0.042	-0.001	-0.064	0.129**	0.077	0.037	0.108*	0.073
	(0.038)	(0.064)	(0.047)	(0.063)	(0.056)	(0.049)	(0.059)	(0.062)
Area=Sales and Marketing	0.027	-0.017	0.017	-0.002	-0.034	-0.006	-0.071	0.028
	(0.026)	(0.053)	(0.039)	(0.052)	(0.048)	(0.041)	(0.050)	(0.054)
Seniority	0.061**	-0.023	-0.041	0.077	-0.025	-0.057	-0.084*	-0.086*
	(0.029)	(0.048)	(0.039)	(0.049)	(0.042)	(0.039)	(0.046)	(0.050)
Ownership = Internal	0.011	-0.031	0.136***	-0.059	0.008	0.008	-0.002	-0.007
	(0.023)	(0.064)	(0.051)	(0.063)	(0.058)	(0.046)	(0.063)	(0.063)
Ownership = Other	-0.072	0.100	0.085	-0.111	-0.002	0.003	-0.082	-0.033
	(0.055)	(0.080)	(0.066)	(0.090)	(0.083)	(0.066)	(0.084)	(0.092)
MNE	-0.010	-0.129**	-0.036	0.100*	0.093*	0.033	0.068	0.129**
	(0.024)	(0.059)	(0.044)	(0.058)	(0.053)	(0.043)	(0.054)	(0.059)
USA MNE	0.002	0.009	0.006	-0.038	0.281***	0.056	0.057	0.128*
	(0.038)	(0.075)	(0.066)	(0.079)	(0.077)	(0.069)	(0.080)	(0.077)
Italian MNE	0.026	-0.011	0.011	-0.020	-0.019	-0.034	0.003	-0.010
	(0.022)	(0.062)	(0.050)	(0.062)	(0.059)	(0.049)	(0.063)	(0.065)
Ownership=Founder	-0.005	-0.026	-0.001	0.024	-0.059	-0.020	-0.054	0.004
	(0.022)	(0.064)	(0.043)	(0.061)	(0.053)	(0.041)	(0.060)	(0.063)
Ownership=Private Equity	0.043*	0.043	0.013	-0.090	-0.046	0.146	-0.094	-0.062
	(0.025)	(0.098)	(0.087)	(0.097)	(0.100)	(0.093)	(0.105)	(0.110)
Ownership=Manager	0.074**	0.012	-0.357**	0.024	-0.090	-0.068	0.054	0.142
	(0.032)	(0.167)	(0.144)	(0.161)	(0.139)	(0.085)	(0.138)	(0.148)
Ownership=Private Individuals	-0.077**	0.095	-0.025	0.103	-0.023	0.060	0.023	0.050
	(0.037)	(0.073)	(0.050)	(0.077)	(0.065)	(0.059)	(0.067)	(0.076)
Observations	603	603	603	603	603	603	603	603
Dummies regions	yes	yes	yes	yes	yes	yes	yes	yes
Dummies sectors (sic 2)	yes	yes	yes	yes	yes	yes	yes	yes

Table 13:Managers' Effort

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	**Monthly Weekends Worked**			**Weekly Hours Worked**		
ln(Employment)	0.045	0.046	0.039	0.622***	0.525**	0.611**
	(0.034)	(0.035)	(0.039)	(0.219)	(0.225)	(0.251)
Area=General Administration	0.386***	0.384***	0.375***	2.185**	1.722*	1.590
	(0.133)	(0.134)	(0.137)	(0.996)	(0.982)	(1.000)
Area=Sales and Marketing	0.408***	0.391***	0.325***	2.275***	1.979**	2.057**
	(0.117)	(0.120)	(0.123)	(0.804)	(0.809)	(0.830)
Seniority	0.121	0.108	0.115	1.273*	0.945	1.275
	(0.103)	(0.106)	(0.110)	(0.770)	(0.776)	(0.779)
Ownership = Internal	-0.224	-0.173	-0.228	0.172	0.949	0.532
	(0.138)	(0.143)	(0.151)	(0.973)	(0.977)	(1.012)
Ownership = Other	-0.212	-0.206	-0.224	-2.903**	-2.553*	-2.188
	(0.180)	(0.183)	(0.194)	(1.341)	(1.330)	(1.390)
MNE	-0.216*	-0.312**	-0.364***	0.554	-0.113	0.239
	(0.116)	(0.126)	(0.135)	(0.841)	(0.903)	(0.941)
USA MNE	0.143	0.170	0.231	-0.906	-1.197	-1.367
	(0.176)	(0.176)	(0.184)	(1.114)	(1.065)	(1.103)
Italian MNE	0.018	0.039	0.092	-0.450	-0.488	-0.715
	(0.131)	(0.137)	(0.146)	(0.927)	(0.936)	(0.949)
Ownership=Founder	0.075	0.055	0.070	0.313	0.228	0.437
	(0.138)	(0.143)	(0.150)	(0.948)	(0.961)	(1.035)
Ownership=Private Equity	0.378*	0.363*	0.285	1.183	1.530	0.823
	(0.211)	(0.214)	(0.222)	(1.578)	(1.553)	(1.579)
Ownership=Manager	-0.002	-0.057	-0.024	0.420	-0.718	-0.576
	(0.333)	(0.332)	(0.356)	(2.218)	(2.158)	(2.118)
Ownership=Private Individuals	-0.065	-0.099	-0.089	-1.098	-1.623	-1.923
	(0.146)	(0.153)	(0.167)	(1.174)	(1.177)	(1.190)
Family Manager	0.418	0.268	0.290	-0.410	0.018	0.271
	(0.309)	(0.329)	(0.342)	(1.877)	(2.005)	(2.144)
Male	0.286*	0.259*	0.266*	2.632**	2.238*	2.367**
	(0.152)	(0.155)	(0.161)	(1.146)	(1.174)	(1.204)
Degree	0.007	0.033	0.038	-0.676	-0.867	-1.160
	(0.094)	(0.095)	(0.100)	(0.672)	(0.674)	(0.717)
ln(Age)	-0.272	-0.282	-0.265	-2.542	-1.693	-2.899
	(0.325)	(0.341)	(0.364)	(2.236)	(2.329)	(2.412)
Performance index		0.101**	0.087*		1.340***	1.255***
		(0.049)	(0.051)		(0.345)	(0.358)
Fidelity index		-0.067	-0.055		-0.830**	-0.793**
		(0.045)	(0.047)		(0.323)	(0.333)
Observations	603	603	603	603	603	603
Dummies regions and sectors (sic2)	No	No	Yes	No	No	Yes

Table 14: Managers' Pay and Job Satisfaction

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent Variable	**Total Remuneration (including bonus)**			**Fixed Remuneration (excluding bonus)**			**Job Satisfaction**		
ln(Employment)	1677.553	291.984	675.640	1139.984	742.214	1180.863	-0.005	-0.009	-0.009
	(1039.282)	(972.758)	(1012.917)	(800.033)	(824.080)	(859.803)	(0.014)	(0.014)	(0.016)
Area=General Administration	2622.465	-1007.859	912.858	-1401.542	-2259.954	-509.091	0.122**	0.101	0.127**
	(4412.681)	(3922.074)	(4034.494)	(3282.114)	(3262.550)	(3304.834)	(0.061)	(0.062)	(0.064)
Area=Sales and Marketing	-2147.701	-7077.785*	-6539.979*	-5729.869*	-6998.517**	-6914.487**	0.068	0.048	0.055
	(4070.240)	(3728.451)	(3832.124)	(3061.625)	(3108.384)	(3161.684)	(0.054)	(0.055)	(0.058)
Seniority	19456.800***	16163.813***	15736.888***	14502.149***	13727.796***	13479.937***	0.100**	0.103**	0.084*
	(3406.352)	(2983.762)	(3057.903)	(2471.928)	(2474.731)	(2510.065)	(0.046)	(0.048)	(0.049)
Ownership = Internal	-8560.338*	-4113.656	-4262.425	-4206.103	-2999.643	-3536.649	-0.090	-0.092	-0.074
	(4599.136)	(4129.261)	(4467.523)	(3342.019)	(3417.218)	(3593.425)	(0.061)	(0.062)	(0.067)
Ownership = Other	-14691.226**	-11402.059**	-9937.148*	-9534.613**	-8972.402**	-7829.128*	-0.001	-0.014	-0.001
	(5727.036)	(5040.234)	(5191.117)	(4093.013)	(4111.802)	(4149.371)	(0.085)	(0.088)	(0.094)
MNE	7336.900*	-6320.777*	-4999.345	950.280	-3947.566	-3362.439	-0.009	-0.056	-0.041
	(3779.159)	(3721.589)	(4094.814)	(2835.334)	(3056.321)	(3376.631)	(0.053)	(0.056)	(0.061)
USA MNE	7171.387	4624.500	2732.513	3980.880	3717.252	1995.026	0.006	-0.012	-0.010
	(5496.307)	(4977.695)	(5187.932)	(3898.015)	(3967.478)	(4086.162)	(0.079)	(0.080)	(0.085)
Italian MNE	1452.830	7503.192*	6885.647	4100.728	6437.762*	6191.936*	0.051	0.075	0.067
	(4655.711)	(4318.268)	(4522.406)	(3433.923)	(3518.790)	(3625.106)	(0.059)	(0.061)	(0.064)
Ownership=Founder	2369.650	-3043.072	-3505.458	-112.770	-2078.624	-2112.538	0.112*	0.109*	0.113*
	(4540.292)	(3898.521)	(4003.099)	(3400.570)	(3339.910)	(3408.384)	(0.062)	(0.064)	(0.067)
Ownership=Private Equity	3060.635	2204.564	5200.536	1185.079	1281.255	3179.799	0.080	0.065	0.039
	(7719.390)	(7278.733)	(7585.565)	(5423.821)	(5362.209)	(5490.960)	(0.100)	(0.101)	(0.108)
Ownership=Manager	38188.260***	28697.931***	29189.839**	23198.848***	19979.621***	21177.976**	0.188	0.148	0.132
	(11651.609)	(10589.723)	(11709.058)	(6946.790)	(7367.759)	(8224.237)	(0.151)	(0.153)	(0.163)
Ownership=Private Individuals	553.990	-1881.988	-148.291	1609.338	876.619	2913.958	0.087	0.094	0.126*
	(5188.283)	(4918.156)	(5437.018)	(4183.396)	(4361.596)	(4729.567)	(0.069)	(0.070)	(0.076)
Family Manager	-7154.389	-9316.284	-12293.978	-7933.846	-9125.993	-11520.655	0.190	0.299**	0.329**
	(11815.280)	(12222.198)	(12181.738)	(7519.558)	(8734.683)	(8517.786)	(0.137)	(0.140)	(0.148)
Male	4626.505	2684.027	5563.706	-219.093	-302.126	2346.258	0.076	0.059	0.069
	(5133.846)	(5263.647)	(5269.523)	(4344.420)	(4442.634)	(4360.962)	(0.068)	(0.069)	(0.071)
Degree	12981.695***	9976.702***	7551.257**	10951.248***	9772.985***	7736.184***	-0.023	-0.037	-0.025
	(3270.201)	(2981.233)	(3205.865)	(2375.310)	(2428.527)	(2567.270)	(0.043)	(0.044)	(0.047)
ln(Age)	31196.044***	49096.940***	50286.047***	38942.561***	43295.099***	45596.989***	0.227	0.256*	0.335**
	(10579.254)	(10108.055)	(10397.360)	(7695.317)	(8228.588)	(8359.445)	(0.147)	(0.153)	(0.161)
Performance index		18513.147***	19089.435***		5097.190***	5735.695***		0.048**	0.051**
		(1564.749)	(1577.273)		(1296.024)	(1300.284)		(0.022)	(0.023)
Fidelity index		65.305	1108.447		-528.117	359.006		-0.026	-0.029
		(1336.717)	(1402.818)		(1118.363)	(1169.536)		(0.022)	(0.023)
Observations	603	603	603	603	603	603	603	603	603
Dummies regions and sectors (sic2)	No	No	Yes	No	No	Yes	No	No	Yes

Table 15 - EDUCATION AND INCENTIVES

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	College Degree (0/1)			Executive Education			Risk Tolerance		
ln(Employment)	0.019	0.017	0.033**	0.031**	0.024	0.024	-0.015	-0.028	-0.031
	(0.014)	(0.015)	(0.016)	(0.015)	(0.015)	(0.017)	(0.029)	(0.030)	(0.032)
Area=General Administration	-0.049	-0.047	-0.039	0.032	0.025	0.003	0.195	0.171	0.131
	(0.059)	(0.061)	(0.061)	(0.060)	(0.060)	(0.063)	(0.121)	(0.125)	(0.129)
Area=Sales and Marketing	-0.131***	-0.129**	-0.129**	0.035	0.013	0.008	0.336***	0.300***	0.307***
	(0.050)	(0.052)	(0.052)	(0.053)	(0.054)	(0.055)	(0.104)	(0.108)	(0.110)
Seniority	0.103**	0.096**	0.121**	0.032	0.012	0.039	-0.006	-0.011	0.020
	(0.047)	(0.048)	(0.048)	(0.047)	(0.049)	(0.050)	(0.099)	(0.102)	(0.107)
Ownership = Internal	-0.045	-0.033	0.015	0.020	0.036	0.064	-0.003	0.041	0.048
	(0.059)	(0.060)	(0.063)	(0.060)	(0.061)	(0.062)	(0.126)	(0.127)	(0.132)
Ownership = Other	0.003	0.007	0.023	0.009	0.007	-0.012	0.104	0.164	0.231
	(0.079)	(0.079)	(0.080)	(0.083)	(0.083)	(0.088)	(0.188)	(0.193)	(0.200)
MNE	0.049	0.035	0.065	0.181***	0.104*	0.154**	0.137	0.097	0.054
	(0.051)	(0.055)	(0.059)	(0.053)	(0.058)	(0.062)	(0.108)	(0.122)	(0.132)
USA MNE	-0.027	-0.039	-0.046	0.023	0.014	-0.019	0.244*	0.226	0.205
	(0.070)	(0.071)	(0.075)	(0.074)	(0.074)	(0.077)	(0.146)	(0.152)	(0.156)
Italian MNE	-0.076	-0.073	-0.071	-0.166***	-0.137**	-0.175***	0.073	0.104	0.130
	(0.056)	(0.058)	(0.060)	(0.059)	(0.061)	(0.062)	(0.123)	(0.130)	(0.133)
Ownership=Founder	0.005	-0.015	-0.028	-0.063	-0.091	-0.110*	0.172	0.134	0.149
	(0.059)	(0.062)	(0.064)	(0.062)	(0.064)	(0.066)	(0.122)	(0.123)	(0.128)
Ownership=Private Equity	-0.146	-0.140	-0.091	0.196**	0.168*	0.186**	0.111	0.131	0.196
	(0.093)	(0.094)	(0.095)	(0.089)	(0.089)	(0.093)	(0.196)	(0.198)	(0.205)
Ownership=Manager	-0.072	-0.114	-0.145	0.032	-0.019	-0.024	0.692***	0.680**	0.663**
	(0.127)	(0.124)	(0.125)	(0.148)	(0.149)	(0.163)	(0.267)	(0.274)	(0.290)
Ownership=Private Individuals	-0.028	-0.049	-0.117	0.021	0.001	-0.020	0.140	0.127	0.107
	(0.068)	(0.071)	(0.076)	(0.070)	(0.073)	(0.075)	(0.125)	(0.130)	(0.135)
Family Manager	0.045	0.001	-0.053	0.076	-0.014	-0.054	-0.015	0.128	0.010
	(0.135)	(0.145)	(0.148)	(0.135)	(0.154)	(0.167)	(0.306)	(0.307)	(0.314)
Male	0.110*	0.115*	0.117*	-0.019	-0.042	-0.013	0.079	0.068	0.014
	(0.064)	(0.068)	(0.069)	(0.068)	(0.070)	(0.075)	(0.125)	(0.127)	(0.132)
ln(Age)	-1.000***	-0.980***	-0.974***	-0.184	-0.115	-0.123	-0.847***	-0.670**	-0.911***
	(0.126)	(0.136)	(0.142)	(0.136)	(0.144)	(0.153)	(0.289)	(0.300)	(0.321)
Degree							0.016	0.011	0.008
							(0.087)	(0.090)	(0.093)
Performance Index		0.025	0.018		0.092***	0.085***		0.085*	0.090*
		(0.022)	(0.022)		(0.022)	(0.023)		(0.050)	(0.052)
Fidelity Index		0.002	0.007		0.011	0.013		0.006	-0.008

		(0.022)	(0.022)		(0.021)	(0.022)		(0.044)	(0.044)
Observations	603	603	603	603	603	603	603	603	603
Dummies regions and sector (sic2)	No	No	Yes	No	No	Yes	No	No	Yes

Table 16: Three Years Sales and Employment Growth (2000-2005)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	**Sales Growth**				**Employment Growth**			
Performance index	0.041***	0.039***	0.042***	0.041***	0.046***	0.046***	0.045***	0.045***
	(0.013)	(0.013)	(0.014)	(0.014)	(0.014)	(0.015)	(0.015)	(0.015)
Fidelity index	-0.005	-0.004	-0.005	-0.004	0.006	0.007	0.007	0.007
	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)	(0.014)	(0.014)	(0.014)
Ownership = Internal		-0.030		-0.032		-0.005		-0.005
		(0.035)		(0.036)		(0.037)		(0.038)
Ownership = Other		-0.014		-0.017		0.009		0.005
		(0.062)		(0.062)		(0.054)		(0.053)
MNE			0.004	-0.005			0.018	0.015
			(0.034)	(0.038)			(0.034)	(0.039)
USA MNE			-0.024	-0.025			-0.033	-0.033
			(0.054)	(0.053)			(0.054)	(0.054)
Italian MNE			-0.008	-0.001			0.015	0.017
			(0.035)	(0.037)			(0.035)	(0.038)
Area=General Administration	0.005	0.009	0.003	0.007	-0.018	-0.017	-0.019	-0.019
	(0.037)	(0.039)	(0.038)	(0.039)	(0.038)	(0.040)	(0.039)	(0.040)
Area=Sales and Marketing	-0.075***	-0.069**	-0.076***	-0.070**	-0.054*	-0.053	-0.055*	-0.054
	(0.028)	(0.029)	(0.029)	(0.030)	(0.031)	(0.033)	(0.032)	(0.033)
Seniority	-0.109***	-0.108***	-0.109***	-0.107***	-0.037	-0.037	-0.036	-0.036
	(0.029)	(0.029)	(0.030)	(0.029)	(0.028)	(0.028)	(0.028)	(0.028)
Observations	1992	1992	1992	1992	1945	1945	1945	1945
Number of Firms	415	415	415	415	445	445	445	445

Table 17: Return on Capital Employed (2004-2005)

	(1)	(2)	(3)	(4)
Year in Sample	**2004-2005**			
Performance index	2.458**	2.540**	2.904**	2.900**
	(1.151)	(1.127)	(1.218)	(1.203)
Fidelity index	0.093	0.047	-0.125	-0.095
	(1.191)	(1.216)	(1.220)	(1.230)
Ownership = Internal		0.398		0.022
		(3.562)		(3.669)
Ownership = Other		2.111		1.690
		(4.444)		(4.468)
MNE			-3.563	-3.653
			(3.099)	(3.355)
USA MNE			2.109	2.089
			(5.718)	(5.765)
Italian MNE			0.294	0.397
			(3.718)	(4.083)
Area=General Administration	4.579	4.292	4.538	4.389
	(2.947)	(2.958)	(2.942)	(2.966)
Area=Sales and Marketing	3.994	3.762	3.930	3.927
	(2.653)	(2.769)	(2.612)	(2.759)
Seniority	-1.905	-1.885	-2.037	-2.055
	(2.065)	(2.067)	(2.145)	(2.136)
Observations	832	832	832	832
Number of Firms	460	460	460	460

Figure 1: Age, International Comparison

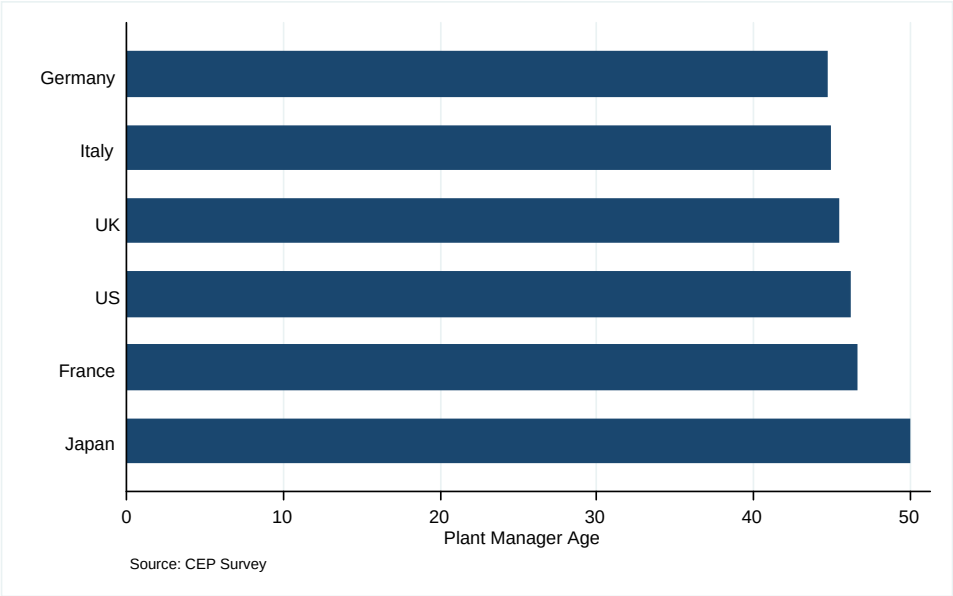
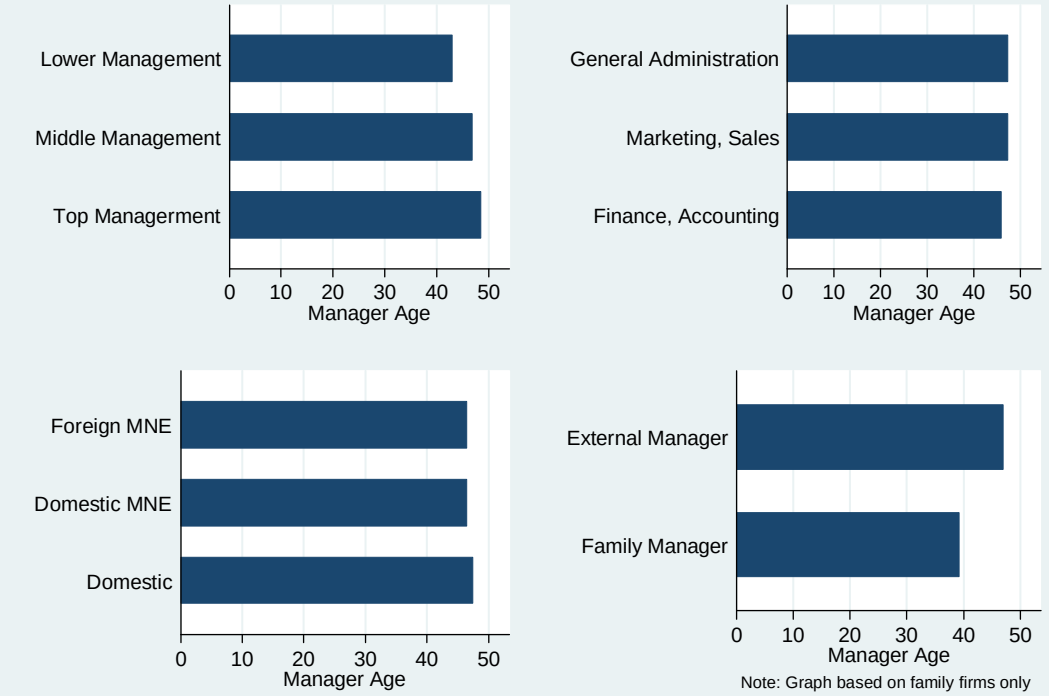


Figure 2: Age, Manageritalia Survey



Source: Manageritalia Survey

Figure 3: Age, CEOs' age distribution

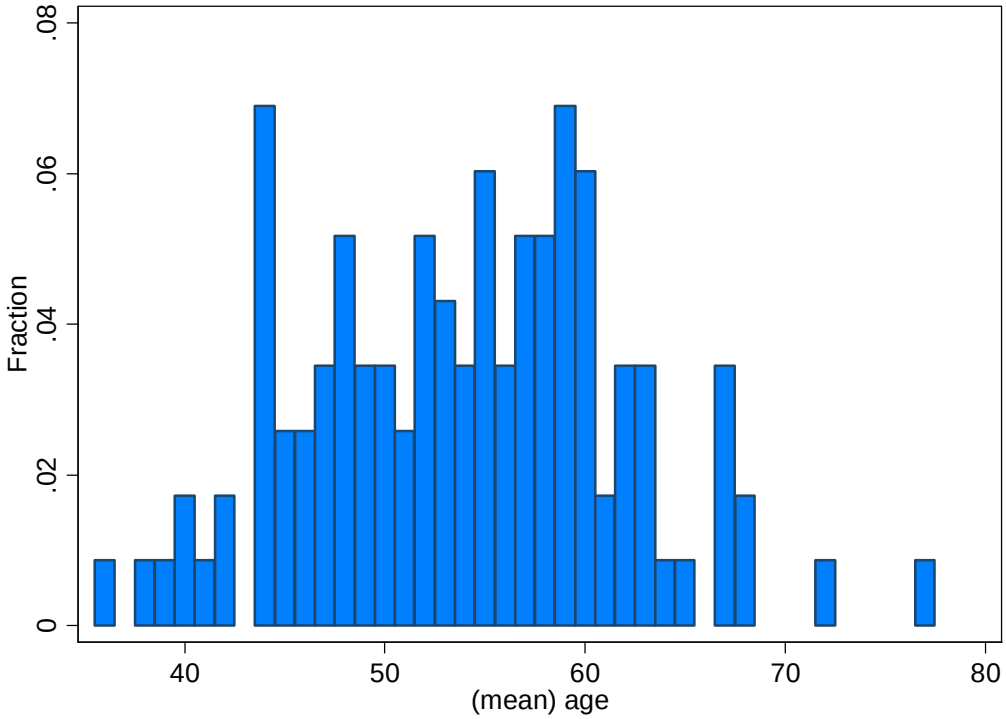


Figure 4: INPS, Age Profile over Time

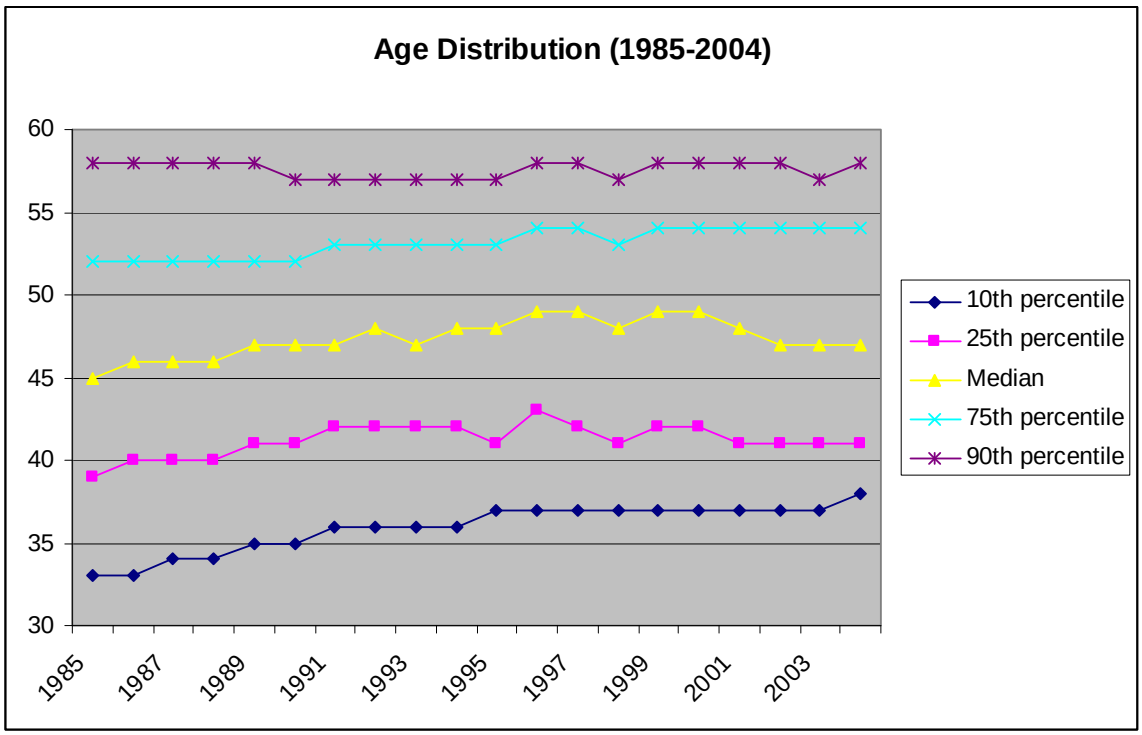
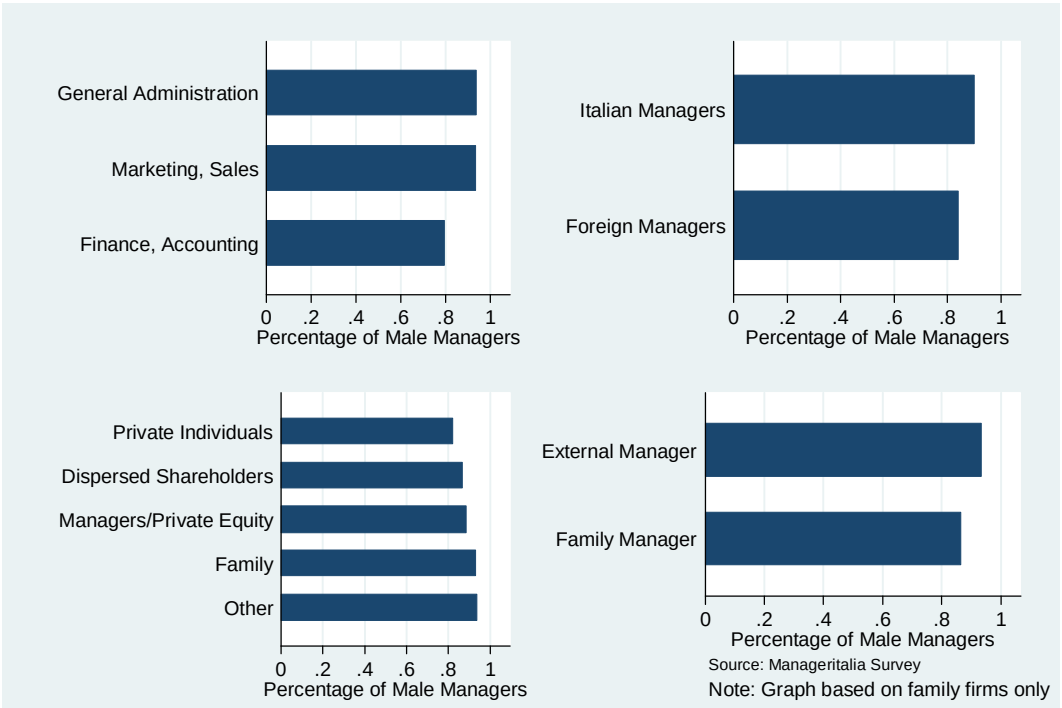


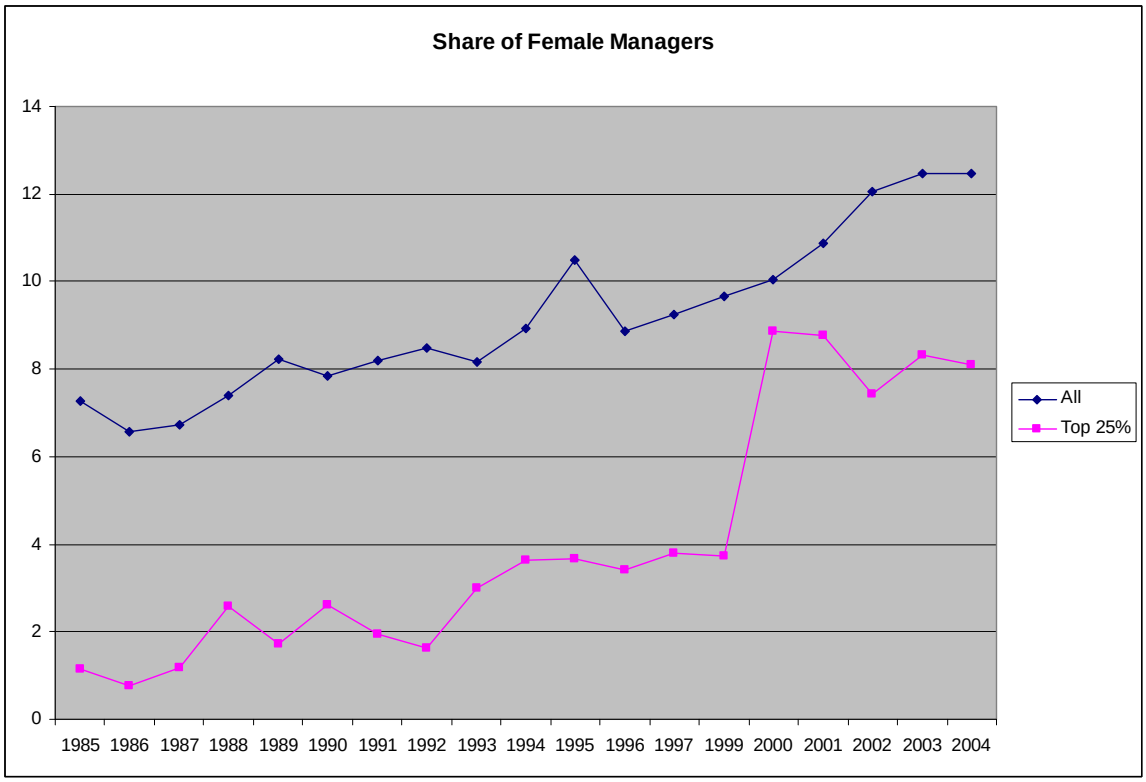
Figure 5: Gender, International Comparison

Figure 6: Gender, Manageritalia Survey



Source: Manageritalia Survey

Figure 7: INPS - The Evolution of Gender Bias



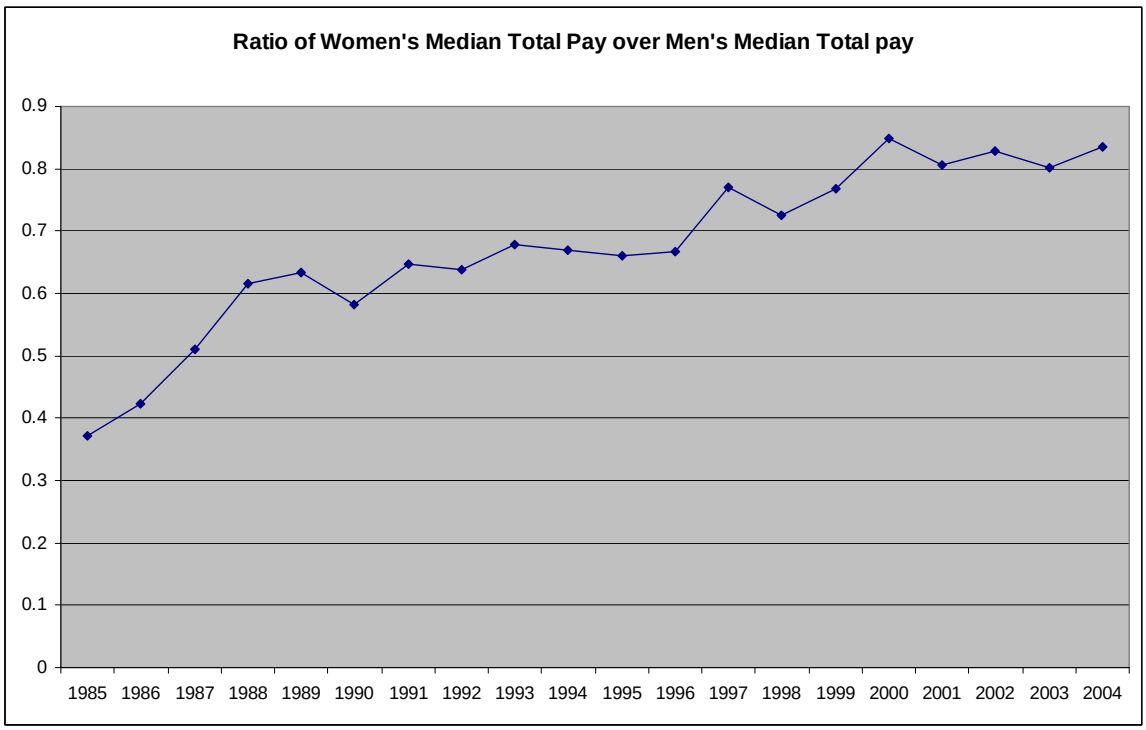
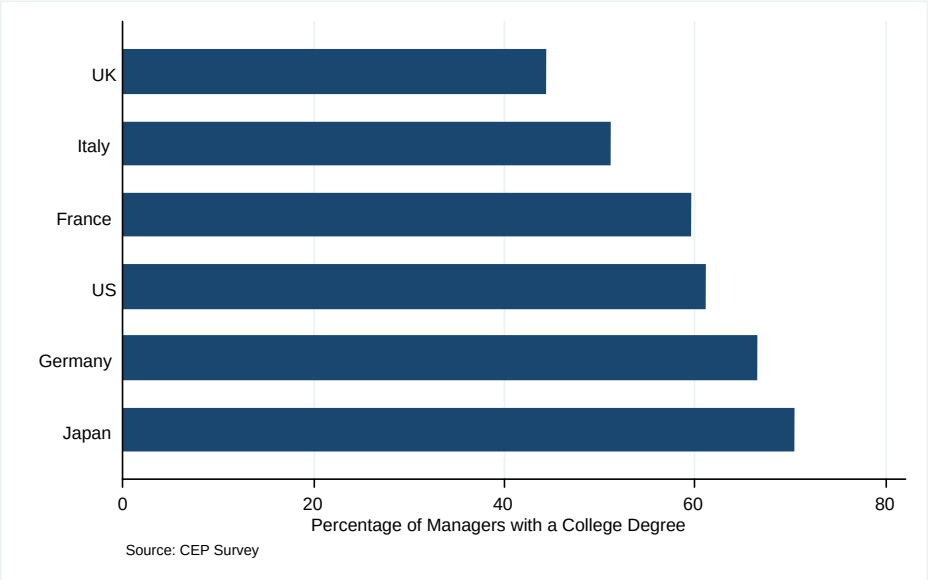


Figure 8: Education, International Comparison



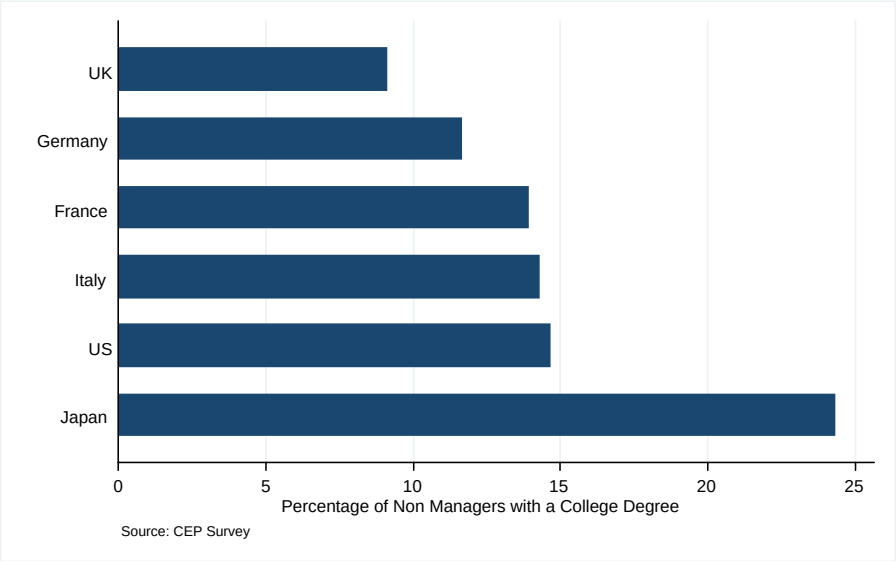
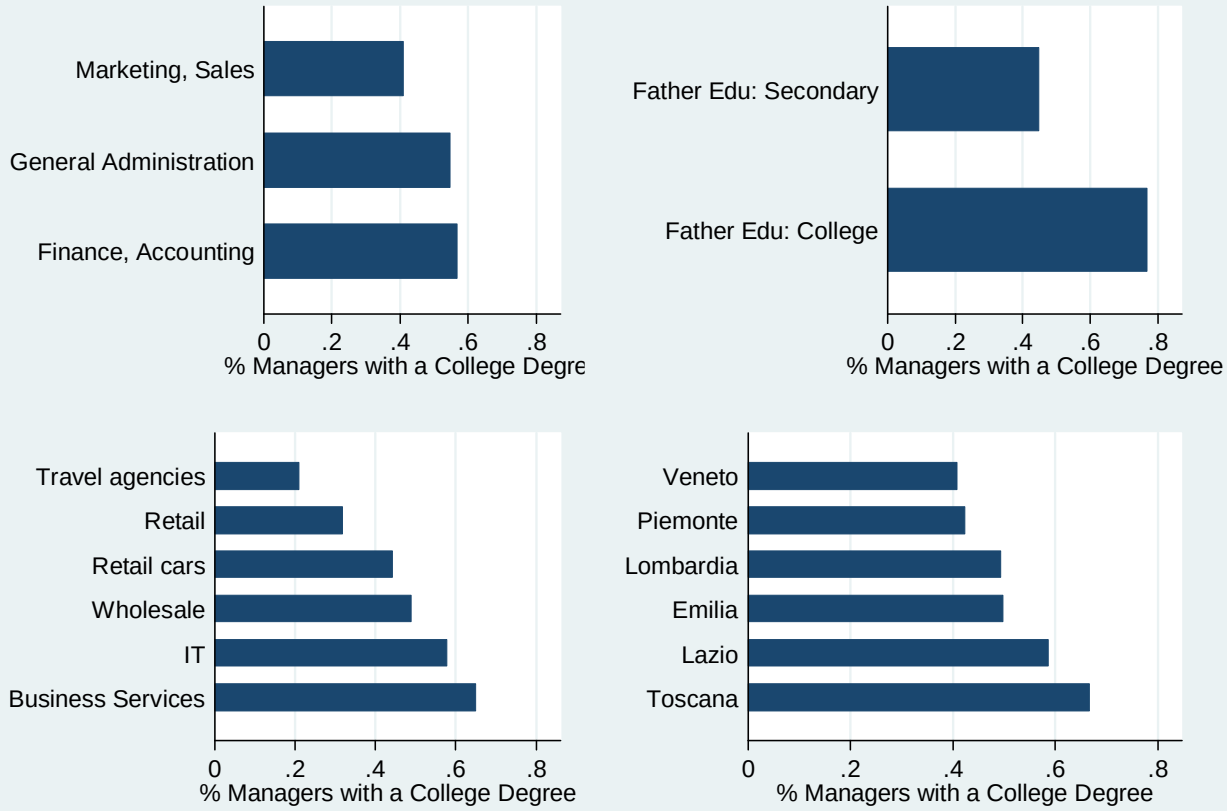
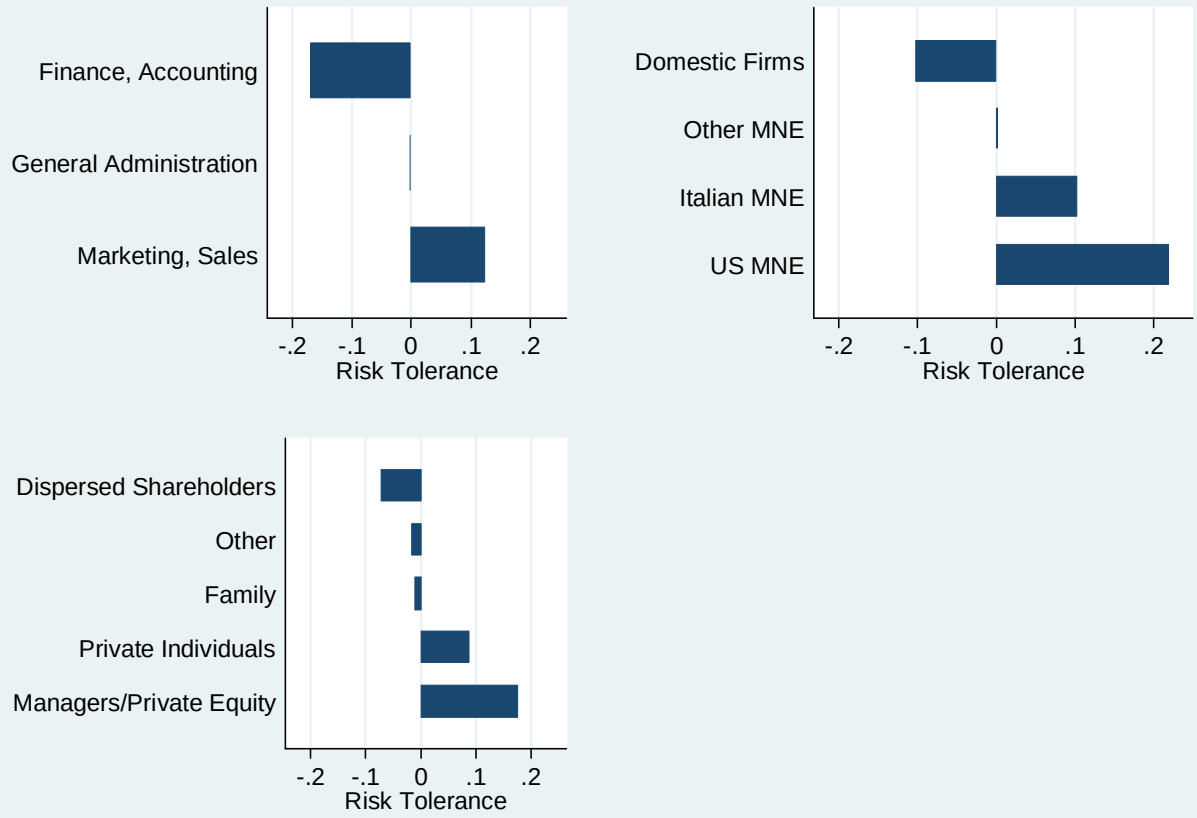


Figure 9: Education, Manageritalia Survey



Source: Manageritalia Survey

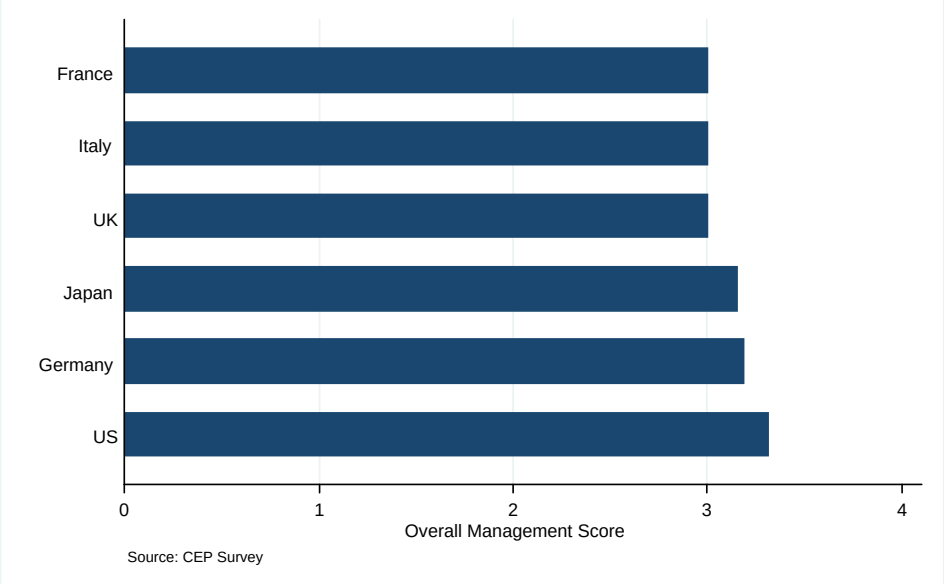
Figure 10: Risk Tolerance



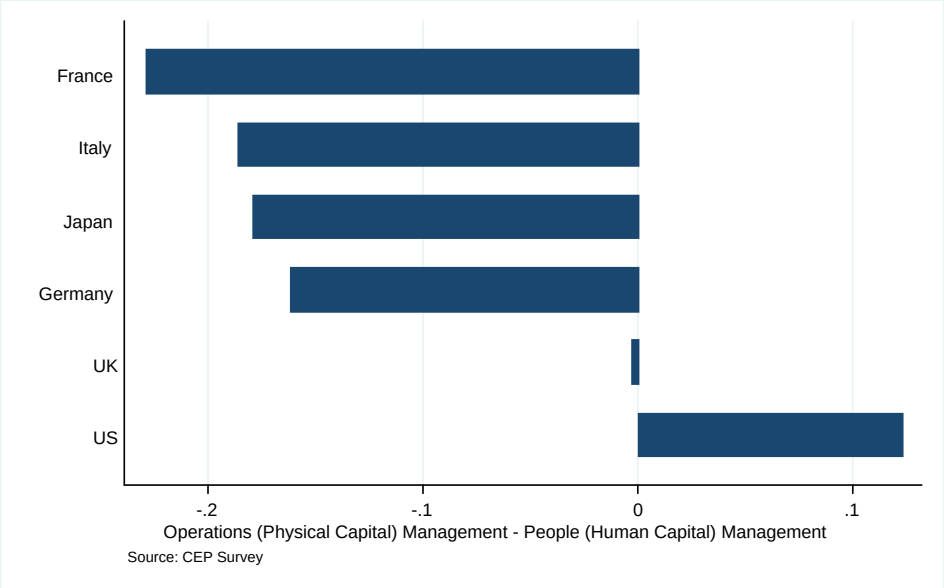
Source: Manageritalia Survey

Figure 11: International comparison:

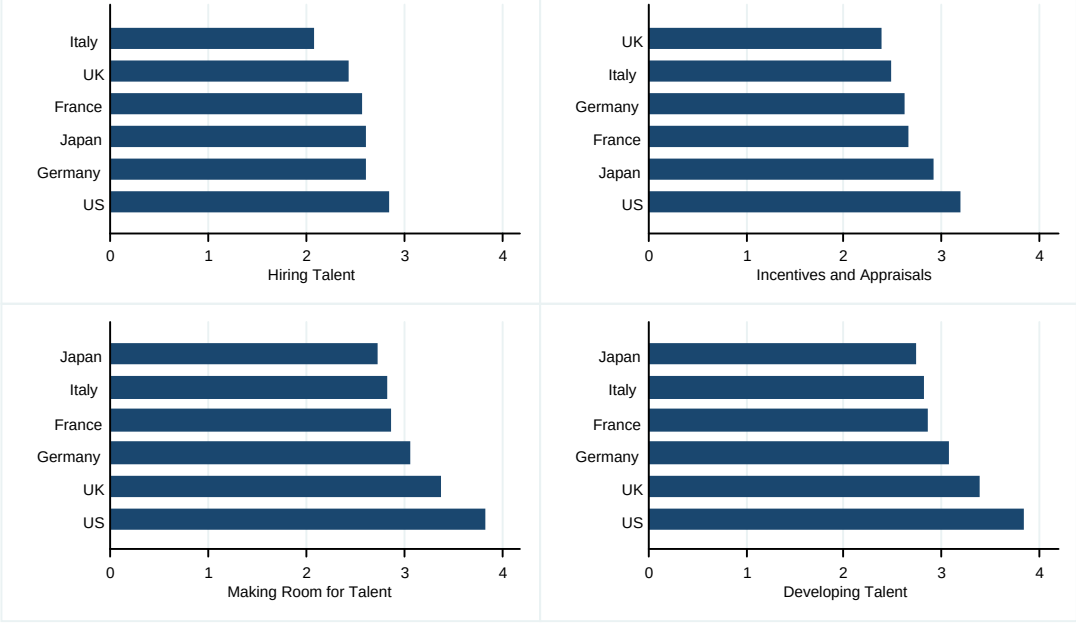
A. Overall Management Score



B. Difference Between Operations score, People management score



C. People Management in Detail



Source: CEP Survey

Figure 12: Recruitment, Manageritalia Survey

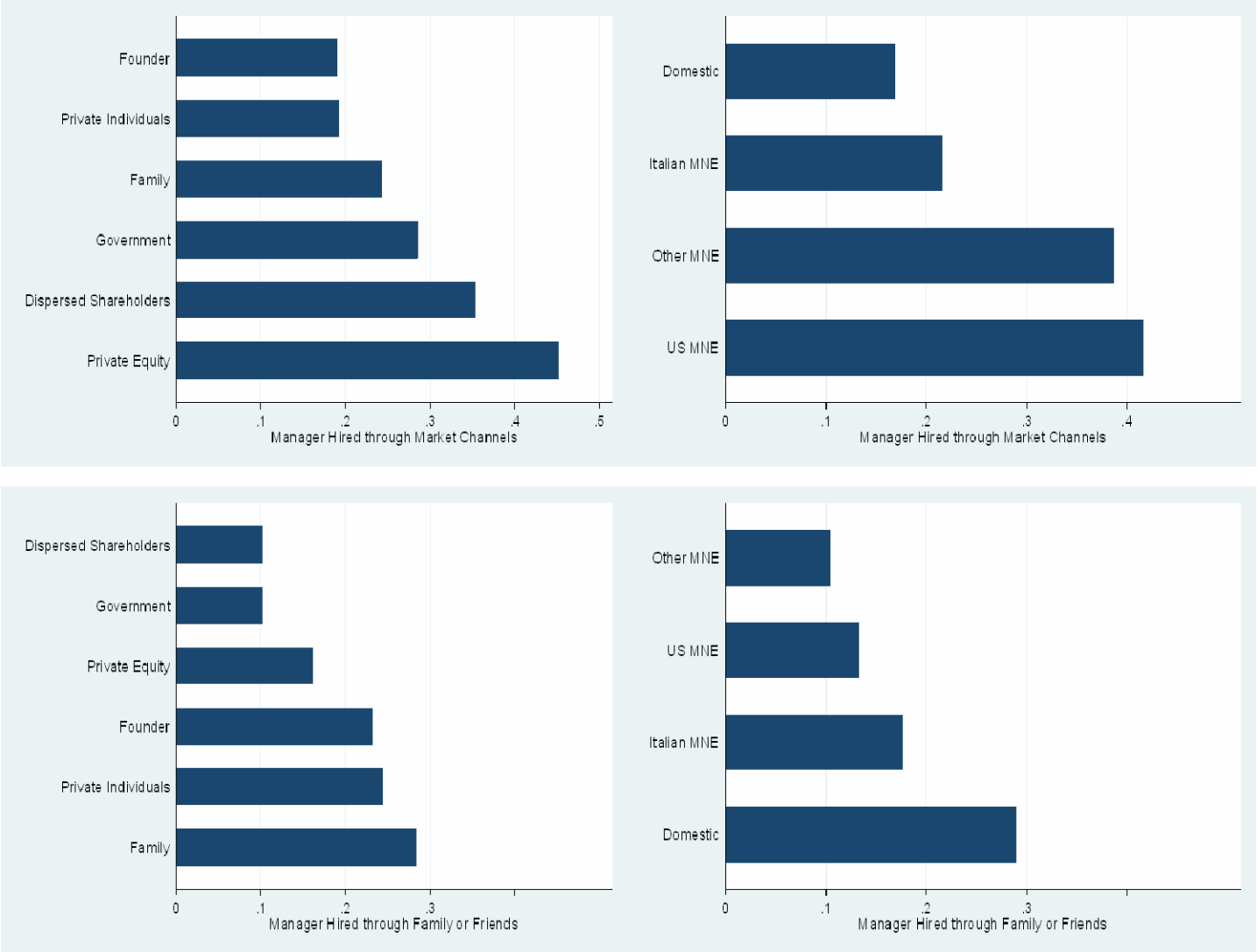


Figure 13: Appraisals, Manageritalia Survey

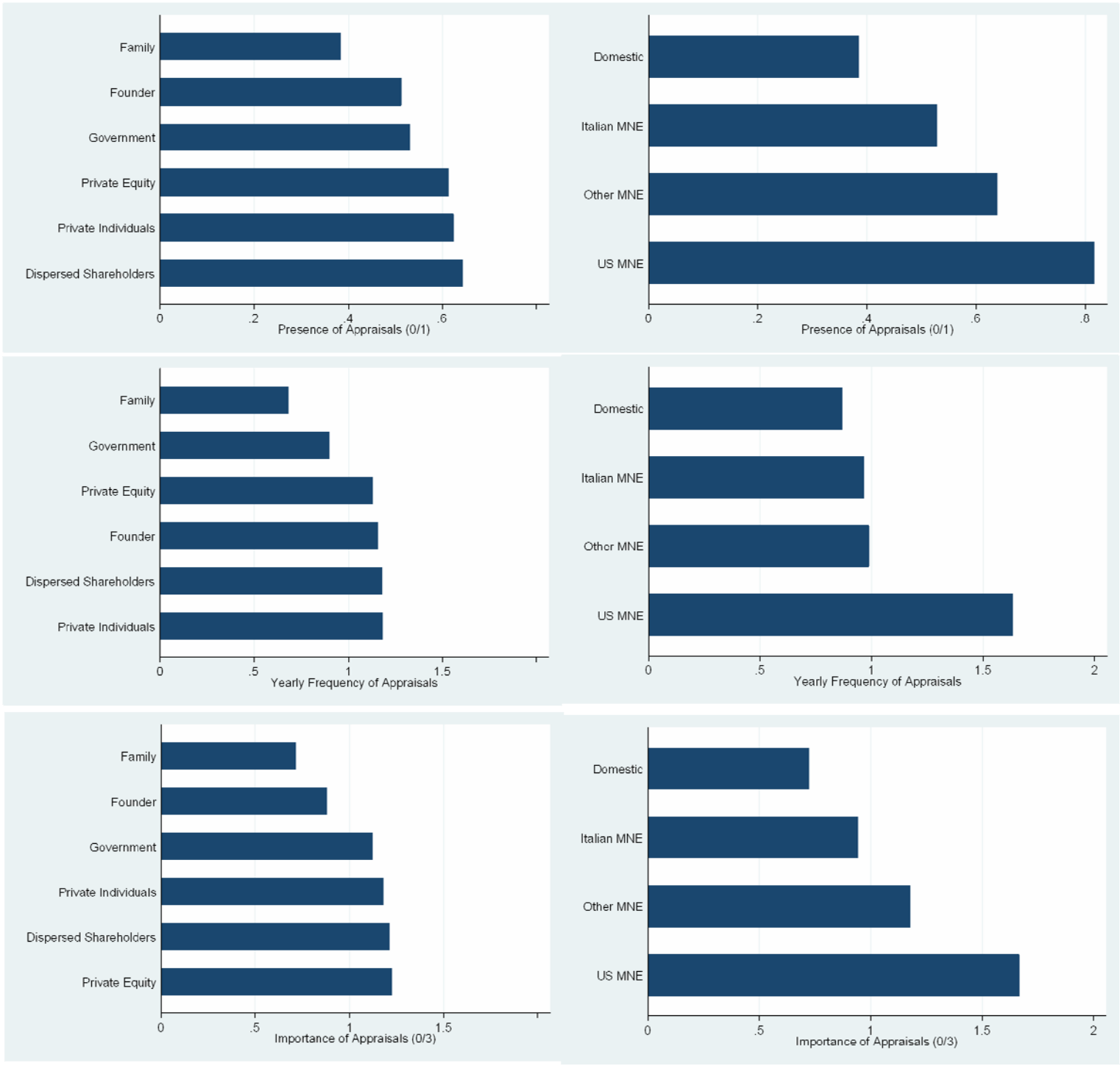


Figure 14: Bonus

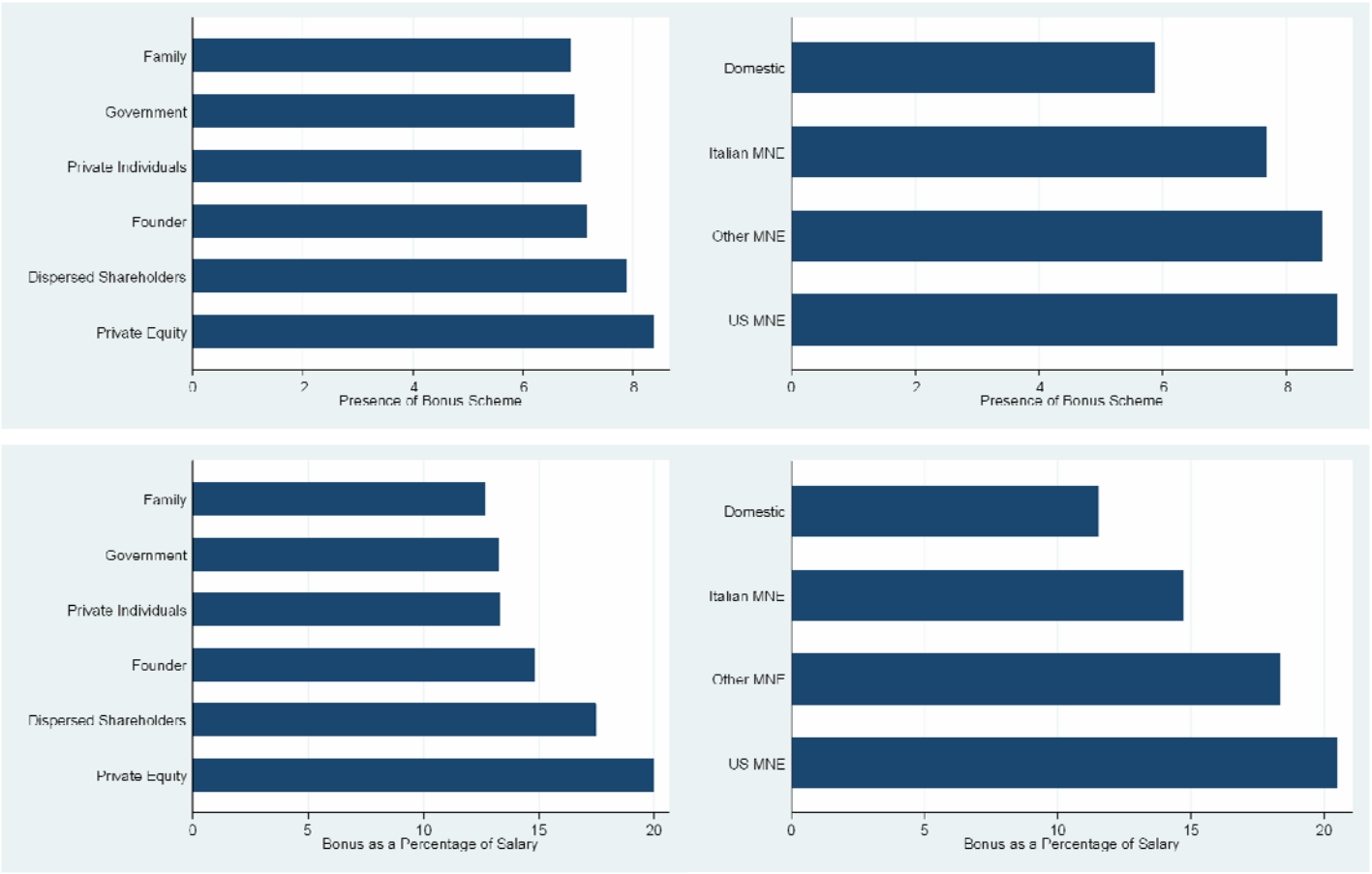


Figure 15: Promotions

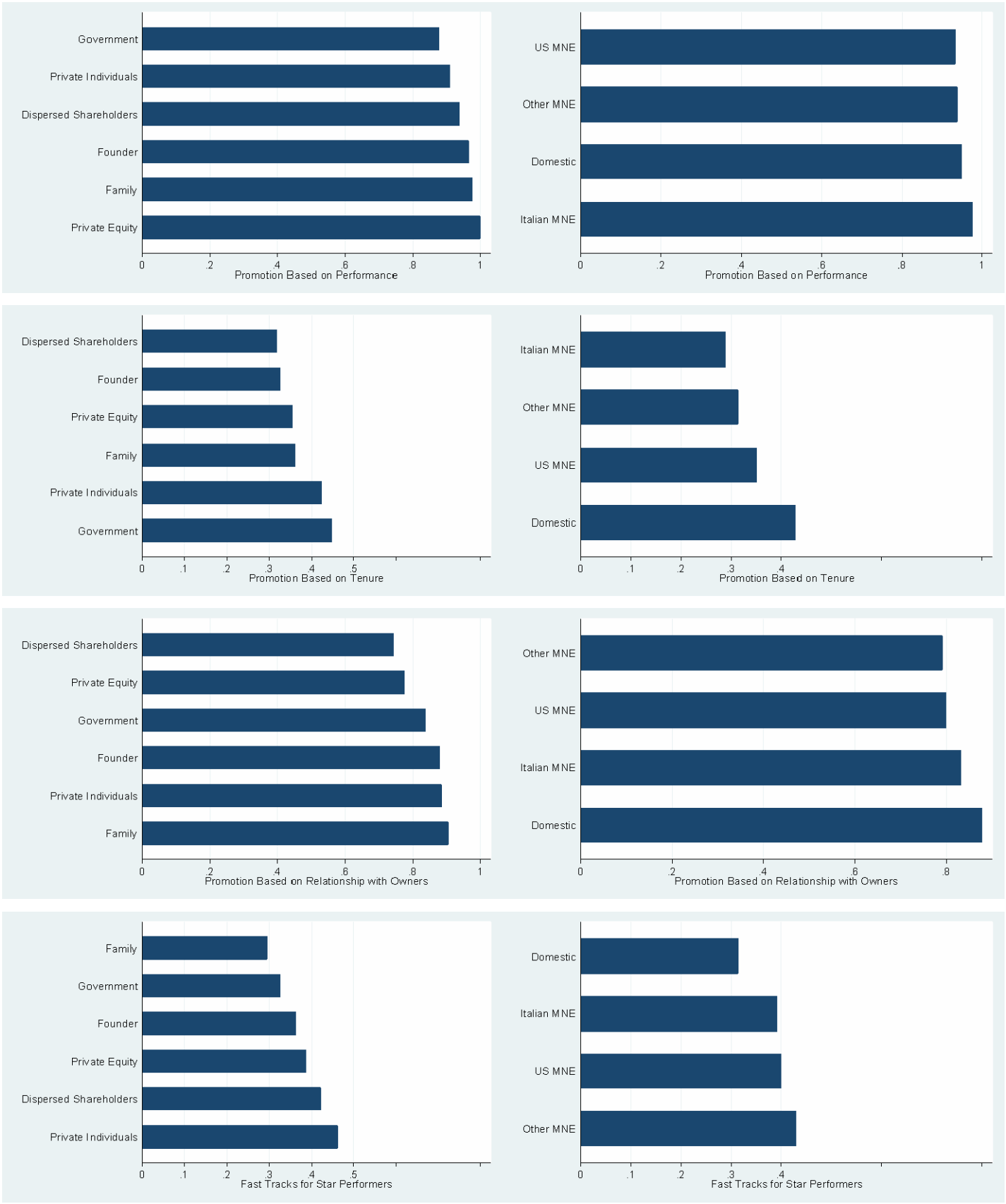


Figure 16: Manager Turnover

Figure 17: INPS - The Evolution of Pay by Firm Size

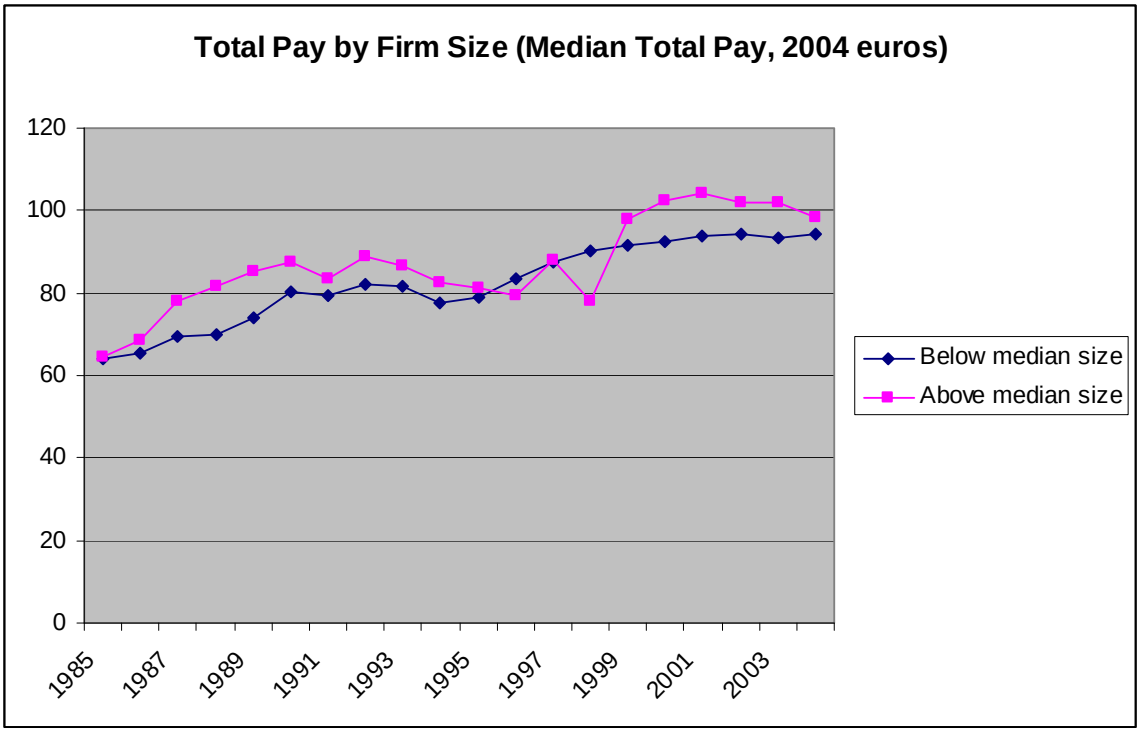


Figure 18: INPS – Managerial pay Over Time

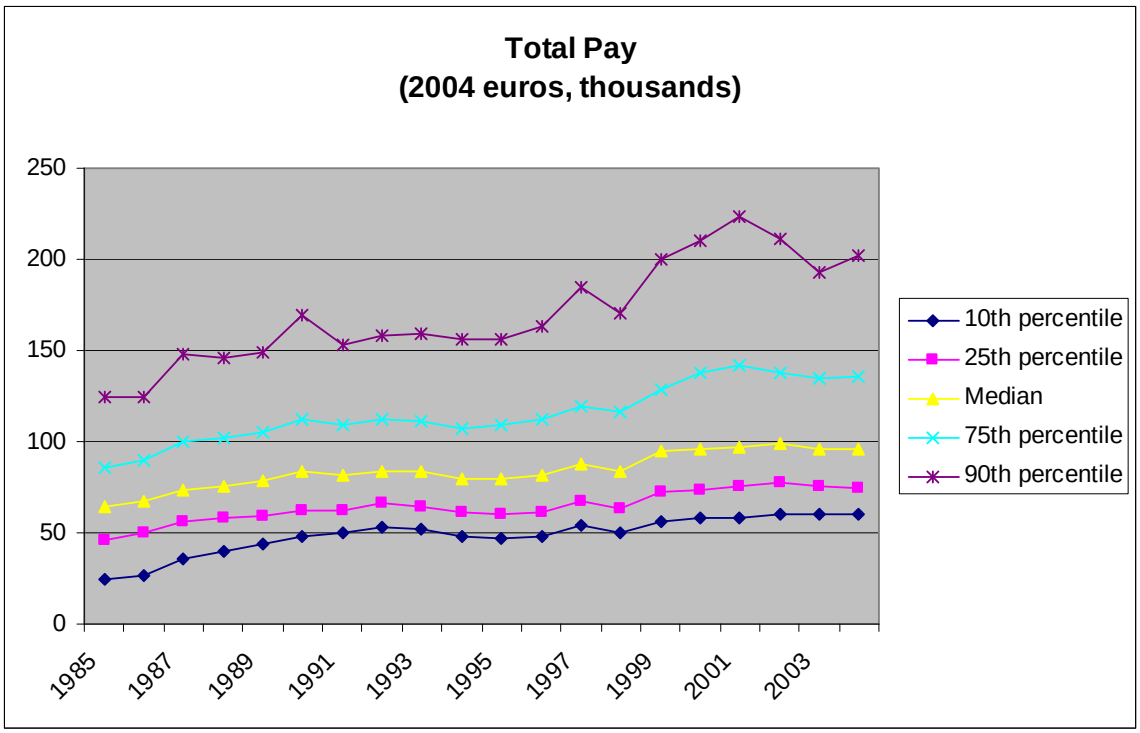
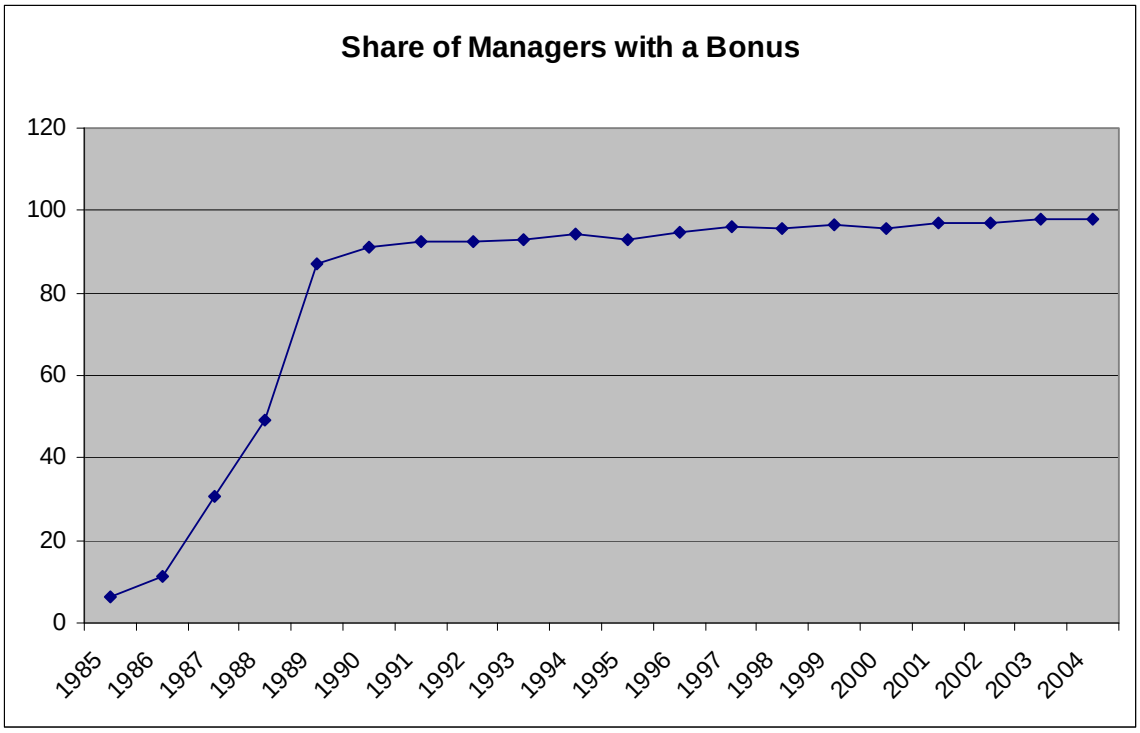


Figure 19: INPS - Importance of Bonus over Time



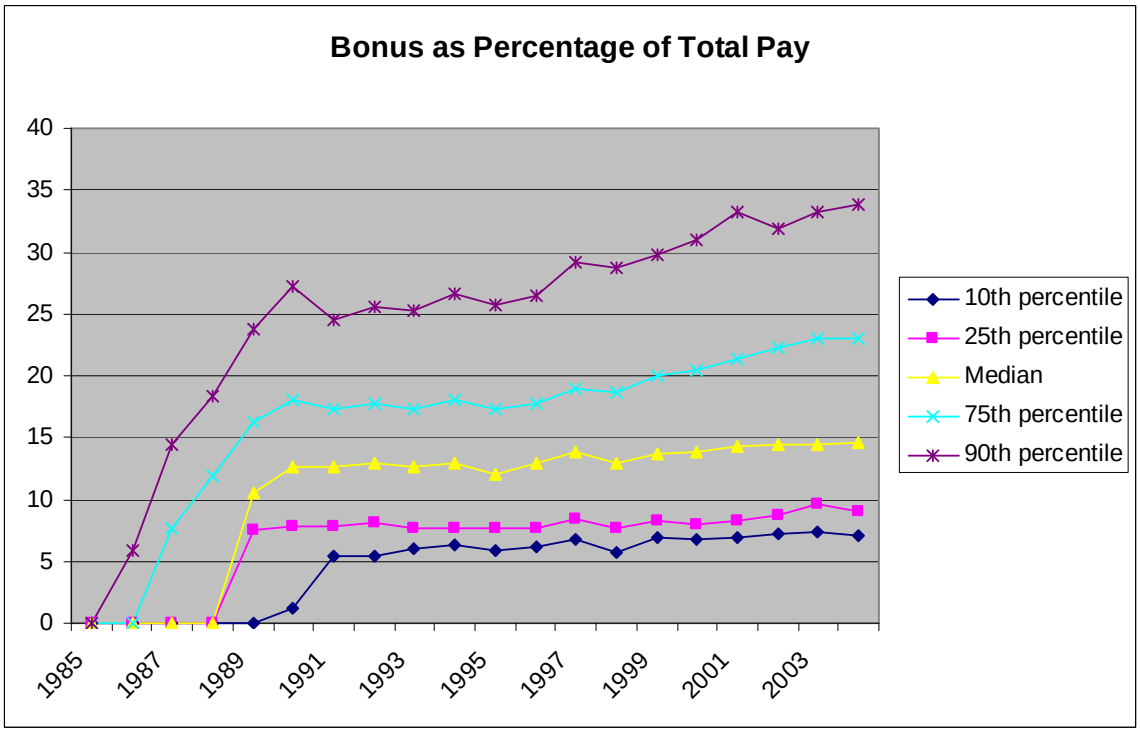


Figure 20: Surivival Rates for Cohorts of Managers

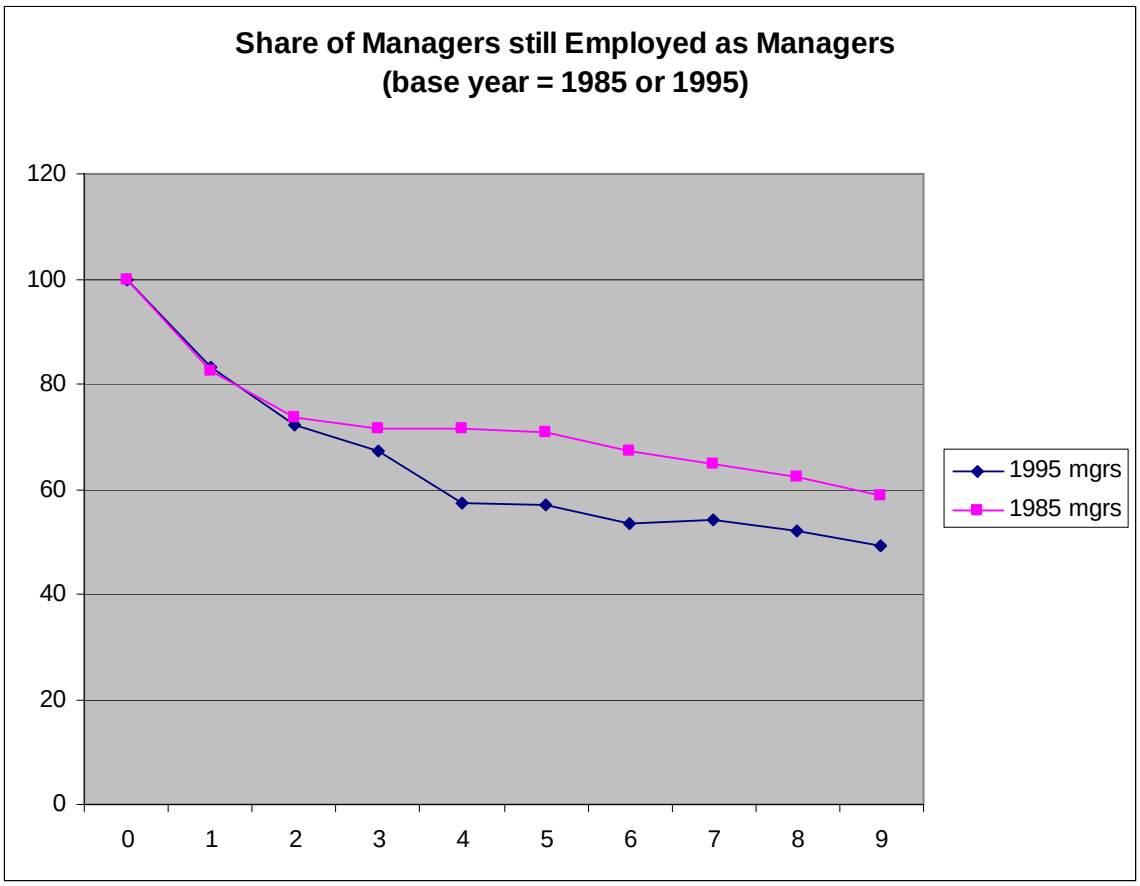
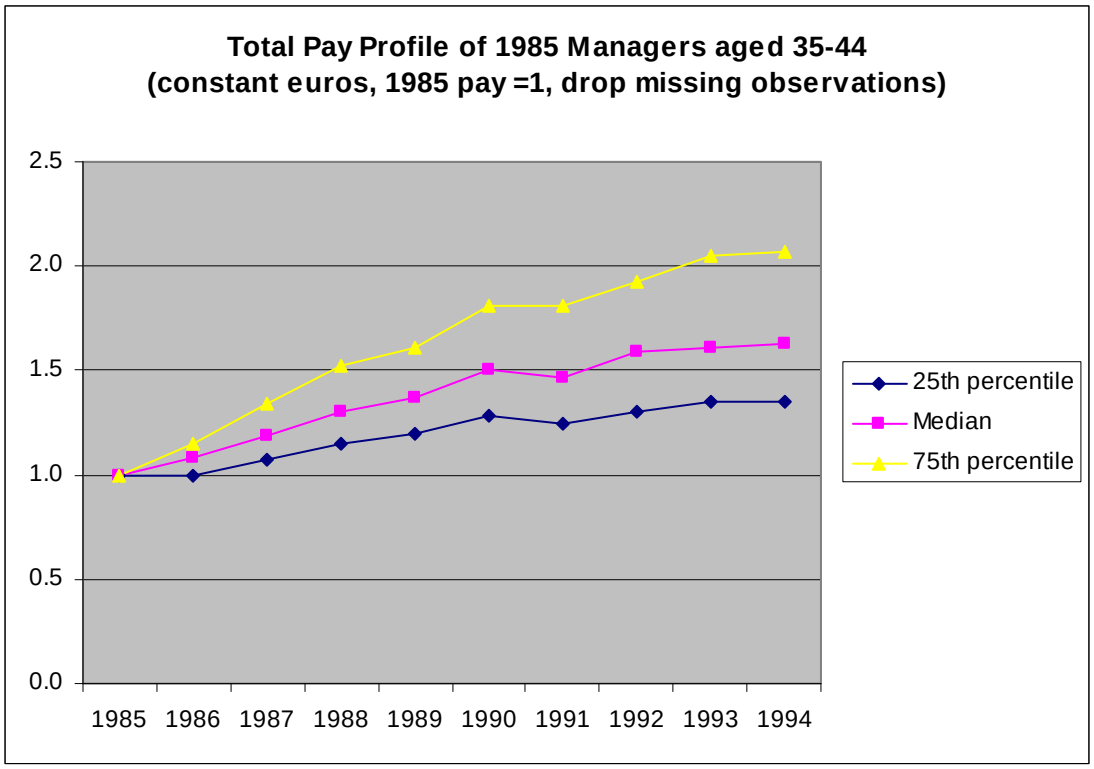


Figure 21: Pay Dynamics (Dropping Missing Observations)



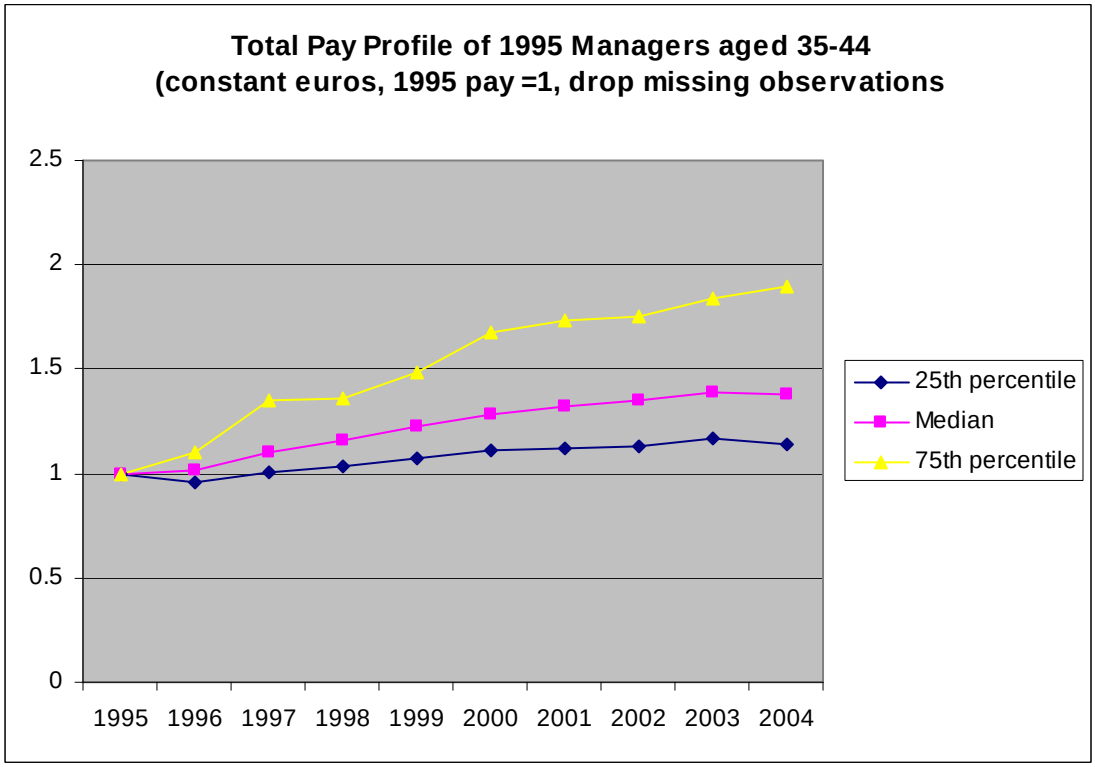
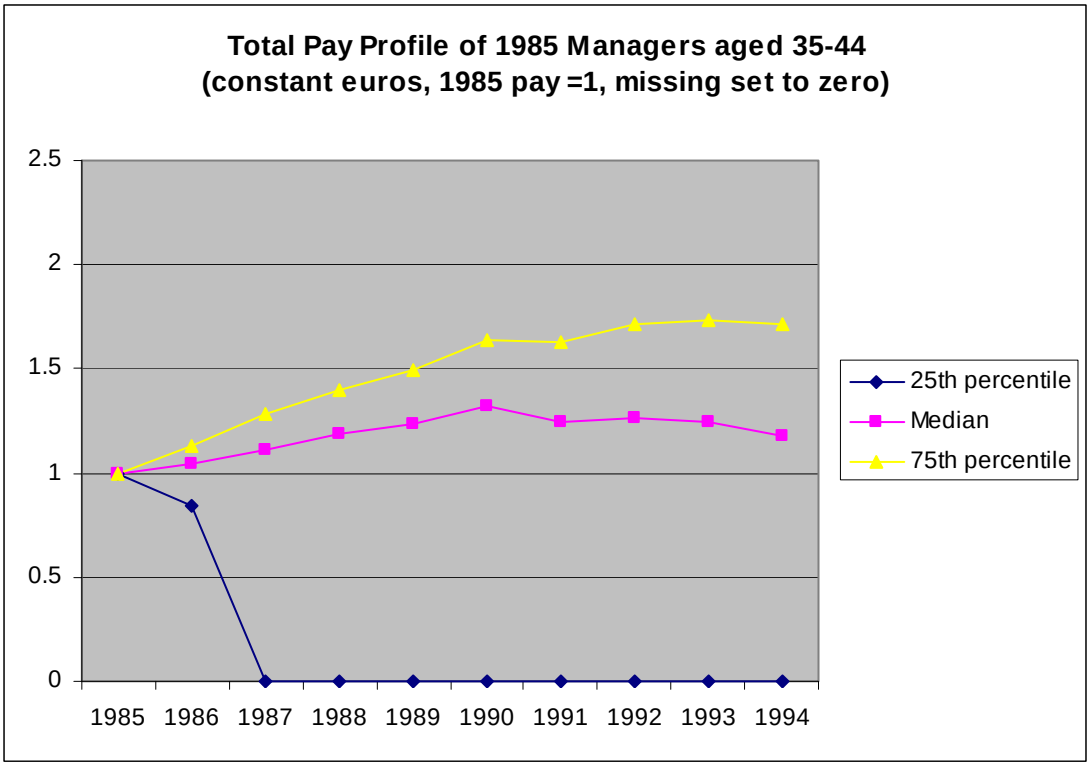


Figure 22: Pay Dynamics (Replacing Missing Observations with Zeros)



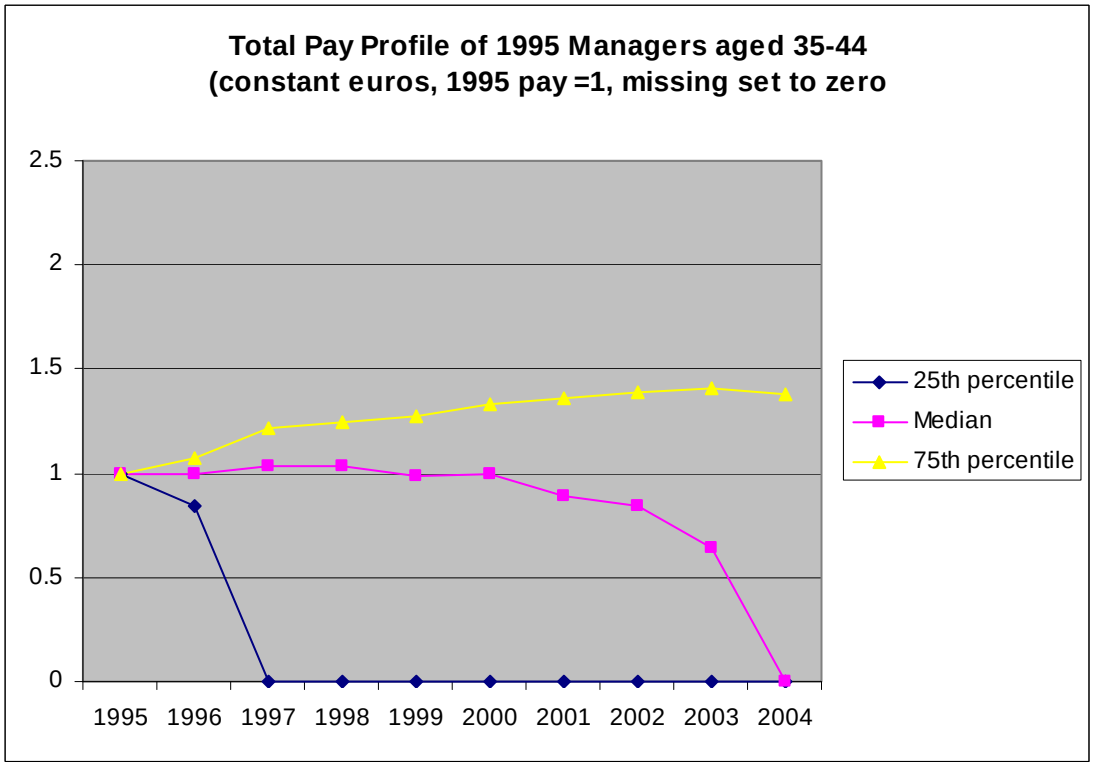


Figure 24: Hours worked by sample CEOs

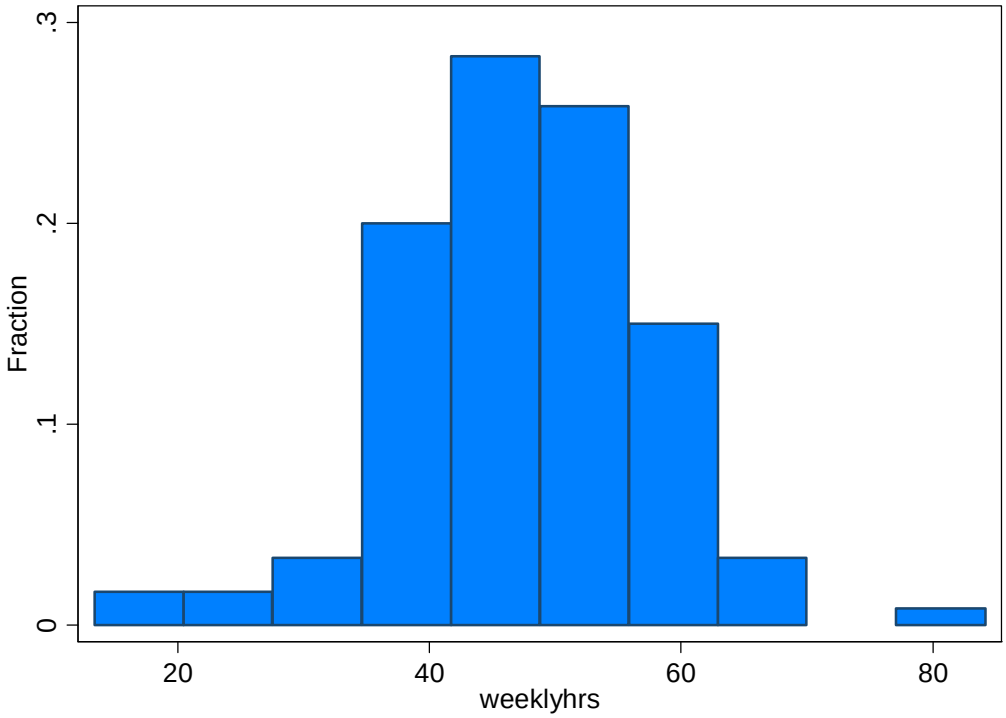


Figure 25: CEOs' number of activities per week

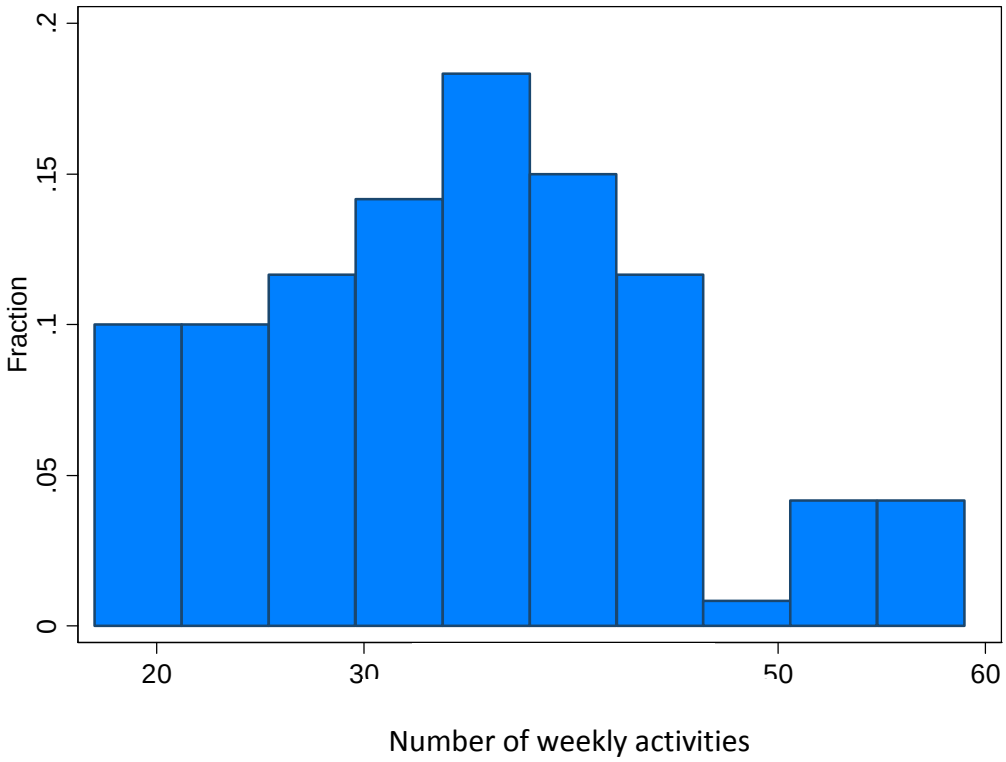


Figure 26: CEOs' mean duration of activities

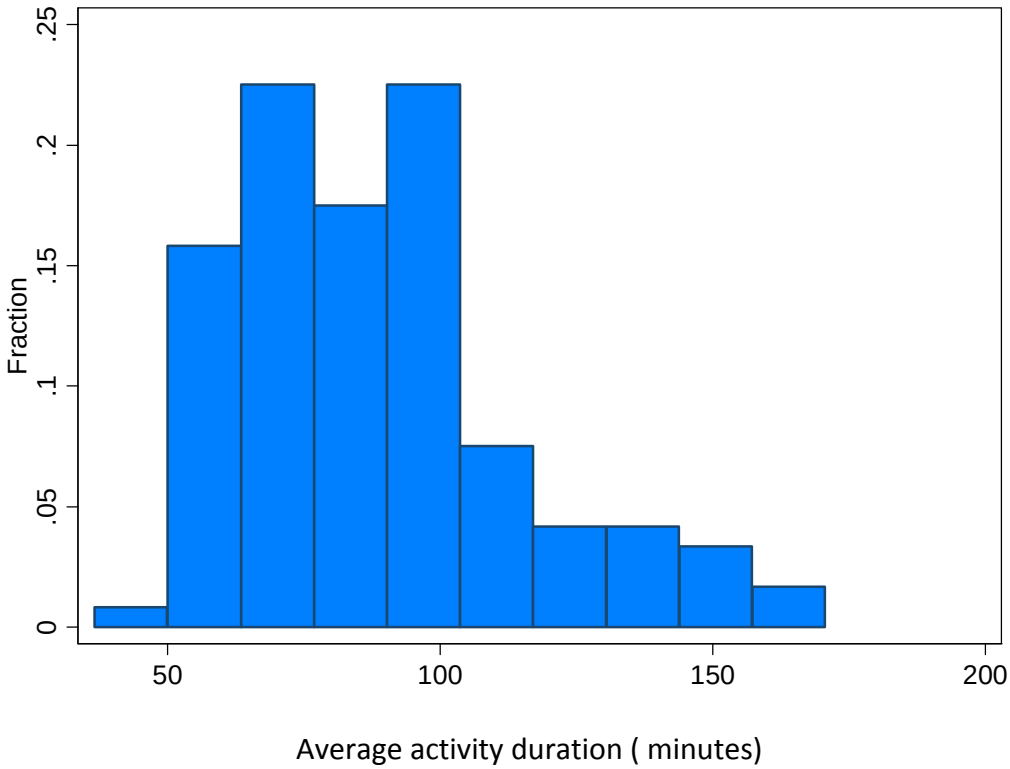


Figure 27: CEOs' Use of Time

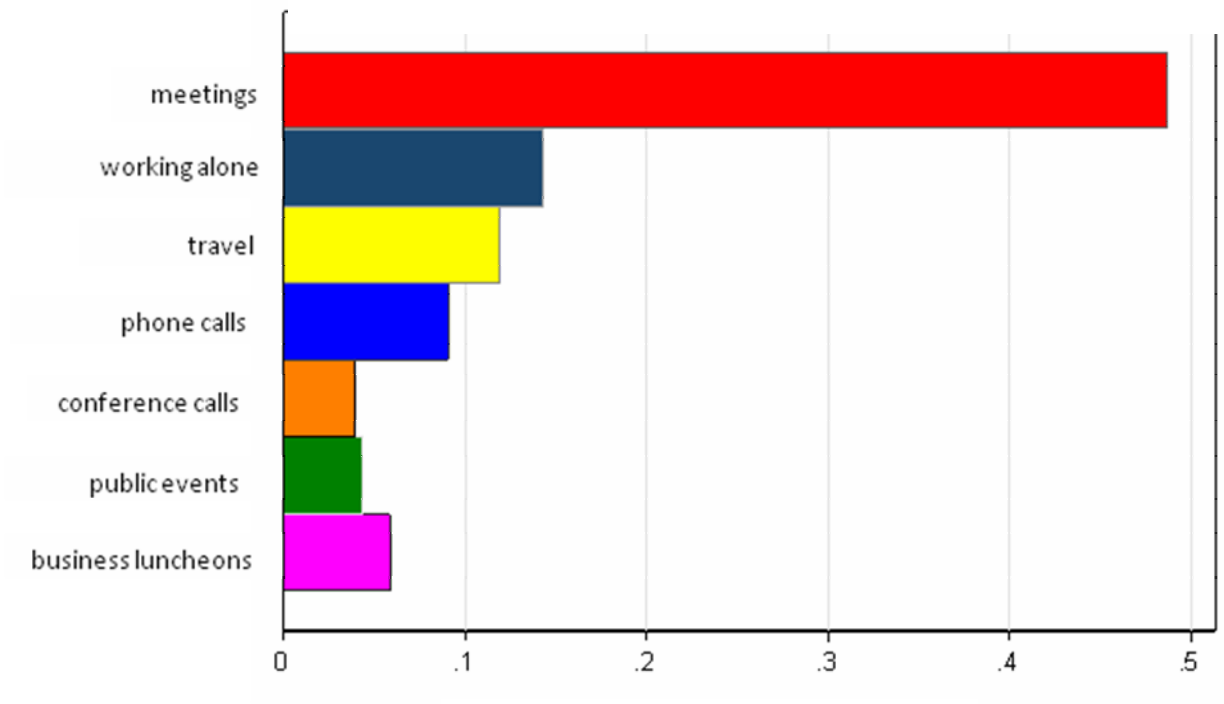
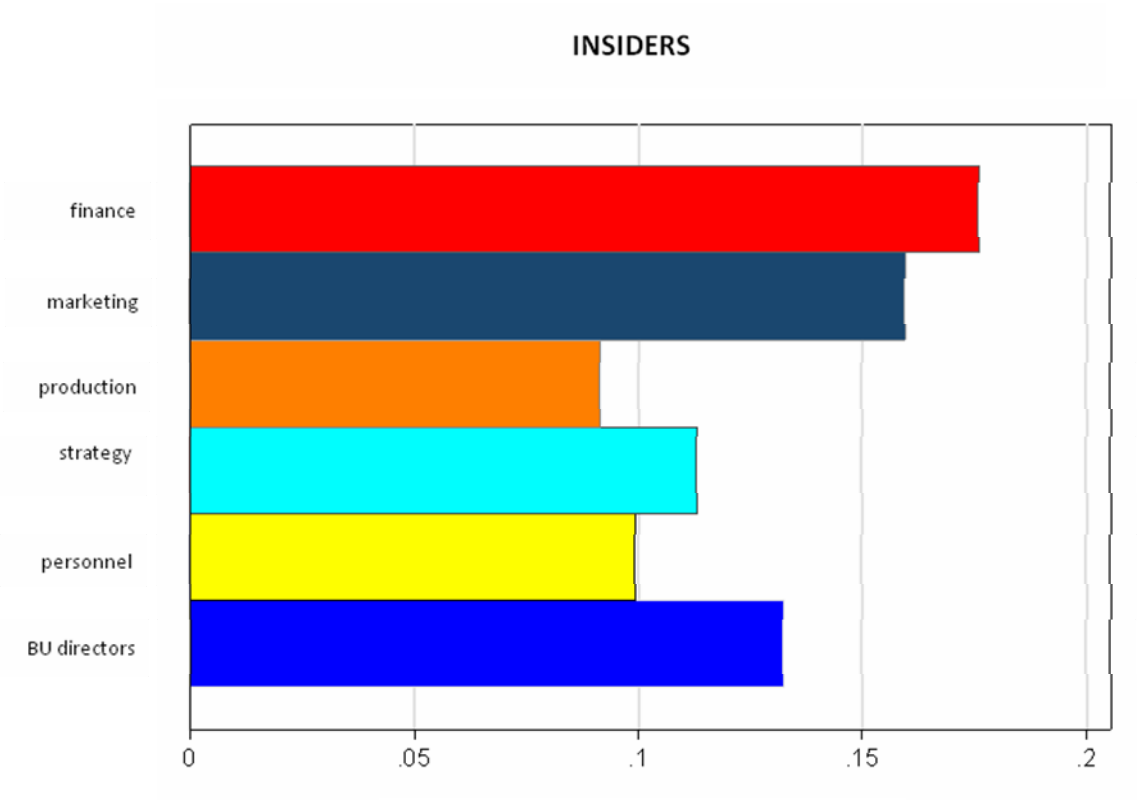


Figure 28: CEOs' use of time by type of participants



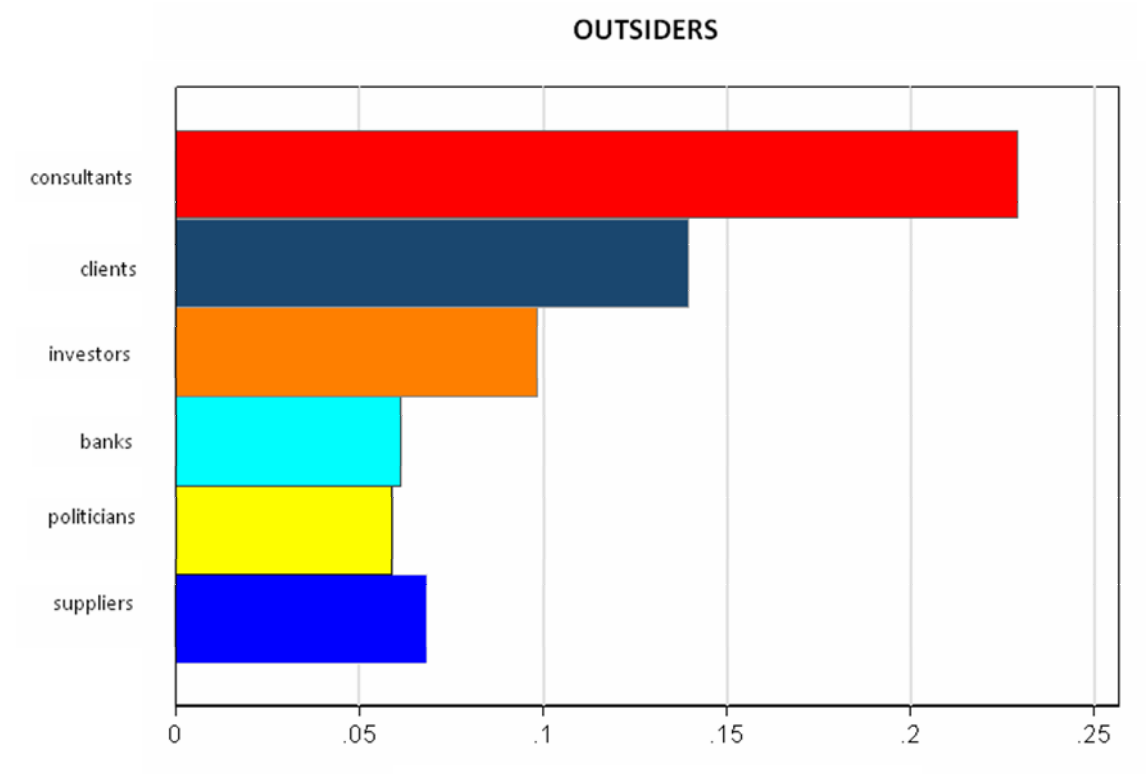


Figure 29: CEOs' use of time by frequency of activity

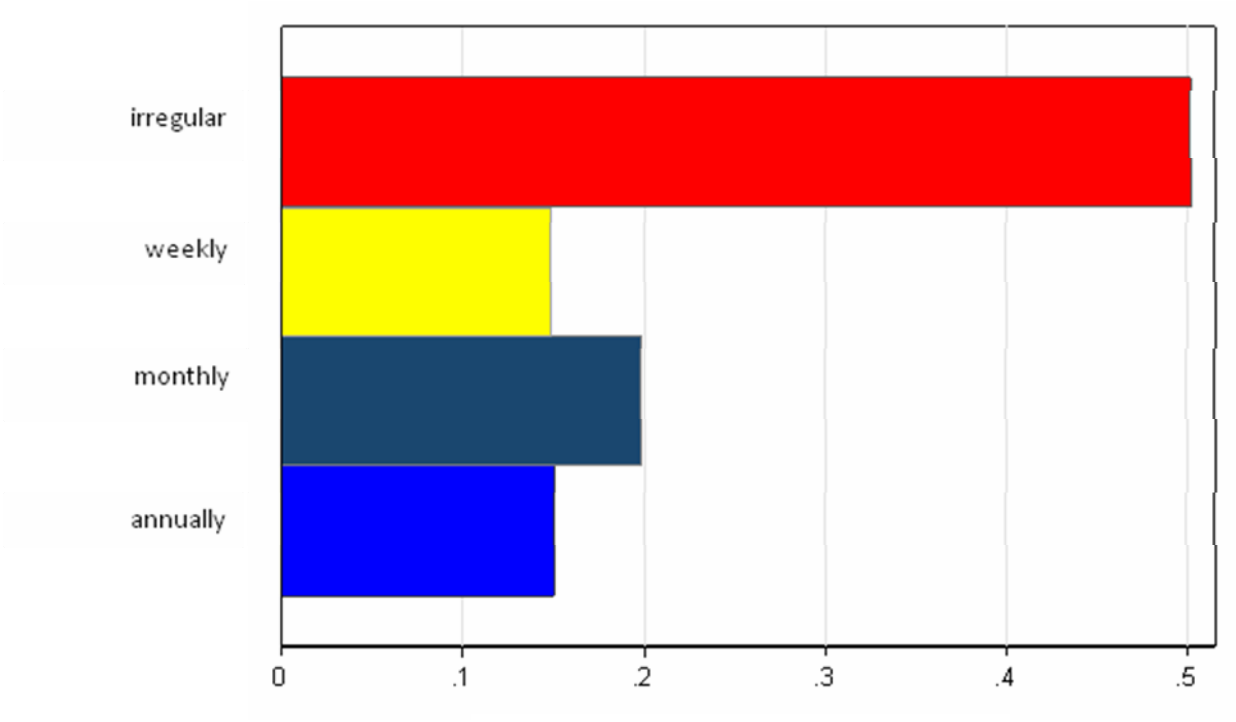


Figure 30: CEOs' use of time by scheduling horizon

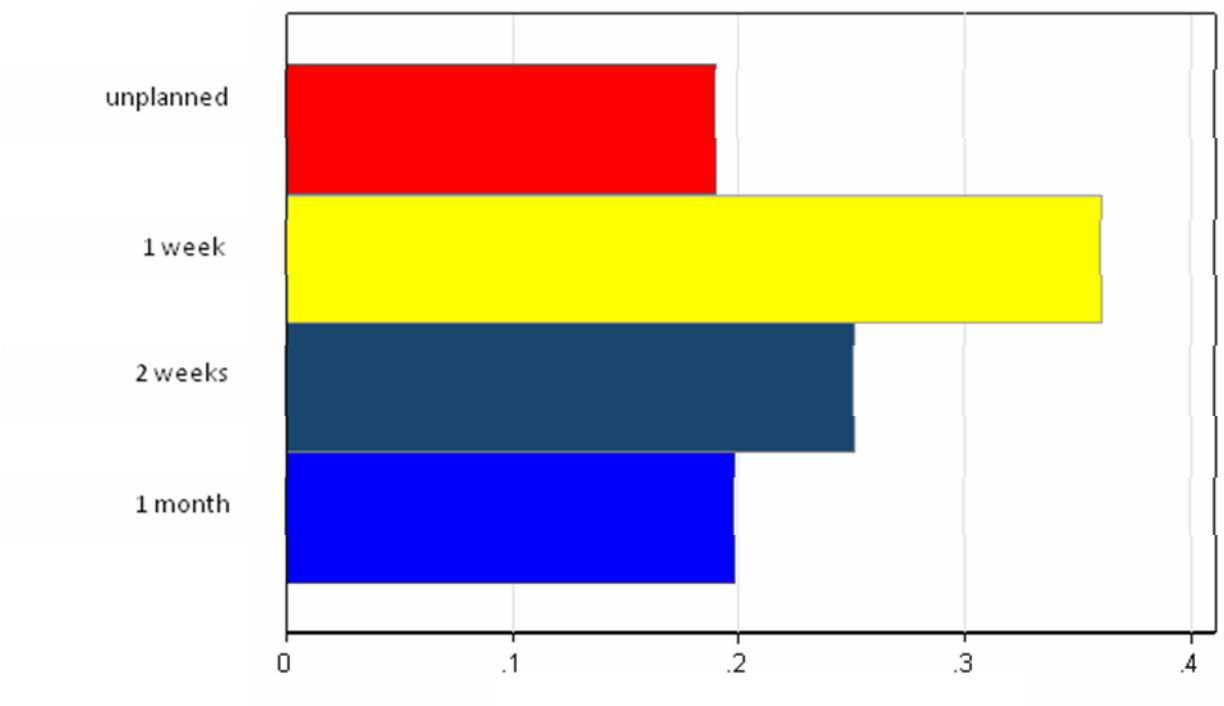


Figure 31: CEOs' use of time by number of participants