Managerial capital at the top: evidence on CEOs time use and firm performance in India.

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Abstract

Managerial practices are a key determinant of firm productivity, and yet little is known about the managerial capital of the top executives who shape these practices. Using a novel survey instrument, we record with unparalleled detail the activities undertaken by 357 Chief Executive Officers of listed Indian manufacturing firms over a specific, exogenously chosen, window of time. Our preliminary findings reveal substantial heterogeneity in the way CEOs use their time along three dimensions: (i) their focus on firm employees vs. outsiders, (ii) their focus on different functional areas and (iii) whether their schedule is planned in advance. Matching our time use data with the firms' balance sheets reveals that firms' productivity is higher when CEOs work longer hours but not all CEOs' time is equally productive. In particular, the correlation between total hours worked and output is entirely driven by planned time with firm employees, especially those belonging to the functional areas of production, finance, and labour relations.

Introduction

Firm productivity is a core engine of economic growth and development. Growth accounting exercises reveal that productivity differences account for a large share of the differences in income per-capita across the world (Caselli 2005, Hall and Jones 1999) and micro studies indeed confirm that the productivity of firms in developing countries is generally low. A recent strand of the literature has emphasized the importance of differences in managerial practices in explaining the cross and within country productivity differentials (Bloom and Van Reenen 2010, Bloom, Genakos, Sadun and Van Reenen, 2011), yet little is known about the managerial capital of top executives who shape these practices.

Our paper provide evidence on CEOs' managerial capital by investigating how they allocate their time between different activities. Understanding the allocation of executives' time has been at the core of management research for almost fifty years (Drucker 1966). Misallocation of CEO time has also recently been recognized to be a key limiting factor for firm growth across Indian manufacturing firms (Bloom at al, 2011). Yet, to date very little is known on the precise nature of CEO activities, and virtually nothing is known about the different behaviours of top managers in developing countries. Firm datasets typically contain no information on managerial time use, while existing studies of managerial time use are mostly based on very few observations and are not matched to firm level outcomes.¹

To fill this gap we use a novel survey instrument that allows us to record with unparalleled detail the activities undertaken by 357 Chief Executive Officers of listed Indian manufacturing firms over a specific, exogenously chosen, window of time. For one week, a representative of our team worked in close phone contact with the CEOs or their personal assistants to develop a time-use diary by collecting information on all activities that lasted longer than fifteen minutes.

For each activity, we asked basic questions about its type (meeting, phone call etc.), the type of people who were involved, the location, the start and end time, and scheduling horizon. Our enumerators – fifteen MBA students from top universities in Mumbai –recorded each piece of information provided over the phone and reconstructed the CEO calendar for that particular week.

To complement the time use data we also asked basic questions about the CEOs' personal background and the characteristics of their firms, and we matched these to balance sheet data from ORBIS and a rich set of state specific information on labor legislation, credit markets and infrastructure.

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¹ For example, ethnographic managerial studies such as Mintzberg (1972) and Kotter (1999), have provided a wealth of information on the daily activities of small sample of managers in the US, but their limited sample size and inherent selection bias (managers were selected based on their "effectiveness" or whether they had a connection to the researcher), pose severe challenges to the interpretation and generalizability of these studies In addition, managerial studies have not tried to explicitly link differences in time use choices with performance outcomes, nor have they attempted to systematically understand the motives behind different managerial behaviours.

The purpose of our study is threefold: (i) to document heterogeneity in time use (ii) to shed light on the correlation between different patterns of time use and firm performance, (iii) to shed light on the determinants of time use, exploiting in particular cross-state differences in in laws, regulations, financial development, infrastructure and institutions. This report presents a preliminary analysis of issues (i) and (ii).

This reports is organised as follows. Section 2 describes our sampling and data collection methodology, together with the characteristics of CEOs and their firms. Section 3 describes the basic patterns of time use, showing that CEOs exhibit considerable variation on several dimensions, from total hours worked, to planning style. Section 4 provides evidence on whether the CEOs time use patterns are correlated to their overall effort (proxied by total hours worked) and to firm performance.

1. Methodology and Sample Description

1.1 Sample

We collected information from over 357 corporate leaders from small, medium and large companies located in different regions in India to ensure an accurate representation of listed companies in the Indian manufacturing sector.

Our sampling frame is based on 8,000 listed manufacturing firms based in India and reporting their data on Orbis, an extensive data set providing company level accounts and additional information on more than 100 million firms in the world. We restricted the sample to firms that appeared to be still active (i.e. not bankrupt) and reported at least some accounting data since 2006. Finally, we decided to focus only on firms headquartered in Indian states that accounted for at least 3% of overall GDP in 2009² and with at least \$2 million in sales in their latest available year with accounting information. These conditions restricted our sample to approximately 3,500 firms. We subsequently hired two full time RAs based in Mumbai, working from the premises of the Harvard Business School India Research Center (IRC), to gather detailed contact information on the CEOs of the extracted companies. This included verifying their names, finding their phone numbers and emails, and establishing a first contact with their personal assistants (PAs). This preliminary work resulted in a sample of 1,955 companies. Of these, 368 resulted not to be eligible for the interviews (the reasons for non eligibility included recent bankruptcy, the company not being in manufacturing or being listed anymore).

1.2 Data collection.

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² This excluded firms located in Assam, Bihar, Chandigharh, Chattisgarh, Dadra, Daman and Diu, Goa, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Orissa and Uttarakhand.

Data were collected between May 1st 2011 and July 31st 2011 by a team of fifteen analysts recruited among MBA students from the leading Business School in Mumbai during their summer break. Besides the analysts, the research team included two supervisors and one project manager.

Data were collected through phone interviews. Each analyst was allocated a random list of about 70 companies, and was in charge of calling up the numbers of his or her list and convincing the CEO to participate in the survey. Analysts could offer only two possible (randomly allocated by us) weeks for the data collection in order to minimize bias in the response week (i.e. CEOs might have decided to report only very busy or relatively free weeks). By the end of the project, 1,062 companies had been contacted, and from these we were able to collect 367 interviews in total, with a response rate of 34% (367/1,062).

The data collection was performed over a week, with details as follows. On the first day of the week, the analyst would call the CEO's PA in the morning, in order to gather information on the planned agenda for the day. The analyst would call again in the evening, to gather information on the actual activities undertaken by the CEO during the day (hence checking off activities that were planned but did not happen), and the activities planned for the following day. The second day, the analyst would call the PA only in the evening, again to collect data on the actual activities undertaken during the day, and the planned agenda for the next day. This pattern would continue until the end of the week. On the last day of the data collection, the analysts were instructed to talk directly with the CEO for about 30 minutes to make sure that the activity data collected through the PA was accurate. Finally, each interview was checked off at the end of the week by one supervisor, who would make sure that the data was complete in every field, and that the analysts had codified all the activities according to the survey protocol.

Besides the time use data, analysts also collected a wide range of firm level information, such as firm employment and ownership, CEO and respondent characteristics. We also asked them to collect additional data the firm hierarchy at top managerial levels.

1.3 Firms and their CEOs

Table 1 reports means and standard deviations on a number of key characteristics of the sample firms and their CEOs. The average firm in our sample has 1230 employees, but the distribution is skewed to the left, as the median firm has 450, and the firm at the 75th percentile has 1000. Over three quarters of the sample firms are owned by their founders or his family. Eighty percent export their products and only sixteen percent are subsidiaries of foreign multinationals. The sample firms are located in fifteen different states. Among these, Maharashtra has the highest concentration (36%) followed by Gujarat (15%). Figure 1 illustrates the distribution of firms by state.

Turning to CEOs, Panel B shows that the average CEO is 50 years old and has been holding the same position for 13 years, and working for the same firm for 19. Compared to their counterparts from the UK and US, Indian CEOs thus have remarkably long tenures and job stability. This is partly determined by the fact that 68% of CEOs belong to the family who owns the firm, and most firms are family owned, and these have longer tenures (15 years). The average tenure of non-family CEOs is however also very long

by Anglo-Saxon standards. The non-family CEOs in our sample have an average tenure of 8 years and have been with the firm for 15.

Several of the sample CEOs hold an MBA (41%) and have experience working or studying abroad (37%). A sizeable minority also holds positions in other firms (29%) or sits on other firms' boards (43%).

3. A week in the life of an Indian CEOs

3.1 Different CEOs work different hours and meet different people.

Table 2 illustrates that the average CEO reports activities for a total of 46 hours in the sample week. Of these, 43.4 hours are spent in activities that last longer than 15 minutes each and are thus recorded by our analysts. Ten percent of these activities are classified as "personal", or non-business related, leaving an average of 39 recorded work hours, namely an average of 8 hours per day over a five-day week.

Figure 2 illustrates that there is considerable variation in hours worked. Executives in the bottom quartile work for up to 33 hours per week while executives in the top quartile work for over 45 hours. The data also reveals that the distribution of work hours is balanced across business days. The average number of hours spent at work are slightly higher on Monday and Tuesday (8.6 each), decreasing gradually on Wednesday, Thursday and Friday (8.5, 8.3, and 8.1, respectively). Just over one fifth of the executives interviewed indicated work activities during the weekend, spending an average of 6.8 hours at work on Saturday and/or Sunday.

A key challenge we face is that our measure of time use over a week might be a very noisy proxy of time use during a longer period, that is reflect random shocks that affected the CEOs in the particular week we survey them rather than their "style". To shed light on this issue we ask the CEOs to rank whether the week could be considered "representative" in a scale 1-10. Reassuringly, the heterogeneity in hours worked and in most of the dimensions described below is the same when we restrict he sample to the 60% of CEOs who score the survey week as highly representative (9 or 10 out of 10), thus ruling out that the heterogeneity we observe merely reflects shocks that hit the CEOs on survey week.

Table 3 divides hours worked by type of activity. Our analysts recorded precise information about the types of activities CEOs were involved in, such as meetings, phone and conference calls, site visits, public events, travelling, or working alone. During the hours reported, the majority of time (56%) is spent in meetings in person. The next two more frequent activities are "e-meetings" (a combination of calls, emails and conference calls) and working alone, each accounting for 12% of the average CEO time. Visiting production sites and travelling account respectively for 6% and 7% of their time.

Figure 3 shows that the mean values hide a substantial amount of heterogeneity; for instance, the bottom quartile of CEOs spends up to 47% of their time in meetings and the top quartile 68% or more. Yet, the distribution of the time share of meetings lies almost entirely to the right of the next two more frequent activities (e-meetings and work alone), suggesting that meetings take the lion share of time for all CEOs in our sample.

For activities that involved other people, our analysts collected information on their affiliation, namely whether these were employees of the firms, e.g. marketing directors, or outsiders, e.g. clients. Table 3 shows that the average CEOs spends 43% of his time with employees of the company, 19% with outsiders and 11% with both types together, while the rest of their time is spent working alone.

3.2 Different CEOs give different priorities to different functional areas

Table 4 groups the people CEOs interact with in seven functional areas, from production to government. Not surprisingly given that these are manufacturing firms, individuals related to production activities (logistics, business unit directors, R&D directors, suppliers) take the largest share of CEOs time- about 9 hours per week, or 35% for the average CEO. These are followed by sales, finance and management.

Figure 4 shows that the share of time that CEOs dedicate to these different functions exhibits considerable variation. For instance CEOs in the bottom quartile spend a fifth of their time with representative of production, CEOs in the top quartile almost one half. Figure 4 also show that the densities of the time shares for the three most important functions (production, sale and finance) overlap over a sizeable chunk of the support, suggesting that despite being in the same broad sectors, CEOs in our sample give different priorities to different functional areas.

The second panel of Table 4 reports the bivariate correlations between hours spent with different functional areas. The panel reveals a pattern of complementarity and substitutability across functions, for instance CEOs who devote more hours to production devote less to sales and management but more to labor, whereas hours spent with government officials take time from core activities of production and especially sales but are associated with more hours spent with lawyers both internal and external to the firm.

3.3 Most CEOs plan their schedule, a sizeable minority does not.

Finally, we collect information about planning horizons, namely whether the activities were scheduled ahead of time. Surprisingly, Table 5 shows that the average CEO spends one in three hours (13 hours over the course of one week) in activities that were not planned in advance. The percentage is the same for activities that involve the CEO alone or with other people, suggesting that a sizeable share of meetings is not pre-planned. We note that neither the mean nor the variation is due to CEOs whom we interview in an "unusual" week. The 60% of CEOs who score the survey week as highly representative spend a sizeable 30% of their time in unplanned activities and the share increases to 36% those who score the week as not perfectly representative.

Figure 5 illustrates that different CEOs plan to different extents. At the extremes, 10% of the CEOs spend over 90% of their time in planned activities, whereas 10% of them spend over 60% of their time on activities not scheduled ahead of time.

Table 5, Panel B, shows that planning is correlated with other activity characteristics, for instance, planned activities are longer, involve more participants and participants from two functional areas or more. Further analysis, not reported for reasons of space, shows that: (i) sector and state differences

account for 1% of the variation in planning and that (ii) the type of participant is not correlated with planning, namely the probability of an activity being planned is the same whether this involves employees of the firms or outsiders, production people or sales representatives. Taken together, these findings suggest that the choice to plan is determined by CEO or firm characteristics, rather than the different nature of interactions (as it would be if, e.g., planning with bank officials would be easier than planning with politicians). In line with this, CEOs who are more likely plan one type of activity (e.g. meetings with firm employees) are also more likely to plan others (e.g. meetings with outsiders). Finally, a simple regression of hours planned on two digits industry codes and state fixed effects reveals that these explain just 1% of the total variation, thus casting doubts on the assumption that planning preferences are dictated by the characteristics of the environment.

3.4. CEOs who work longer hours have different priorities

Taken together, Tables 2-5 make precise that different CEOs use their time in very different ways. We observe substantial variation in total hours worked, how these are allocated to different constituencies and different functional areas, and whether these are planned in advance or determined on the same day.

Table 6 brings these two dimensions together to explore whether CEOs who work harder allocate their time differently. The table reports elasticities of hours in different types of activities to hours worked controlling for two-digit sector and analyst fixed effect. Panel A shows that CEOs who work longer hours spend proportionately more time with insiders and outsiders together, and proportionately less time with outsiders alone. Panel B shows that the correlation between hours worked and type of participant is highest for production (for each extra hour worked 50 more minutes are spent with production) followed by labor relations. The correlation is lowest for government and legal affairs, namely CEOs who work longer hours spend proportionately less time with representatives of these functions.

Finally, the table shows that the time devoted to both planned and unplanned activities increases proportionately with hours worked, whereas CEOs who work longer hours spend proportionately more time meeting many people from different functional areas at the same time, and in longer activities.

4. Time use and firm performance

To provide evidence on the link between time use and firm performance we estimate a rough production function, using sales as a measure of output and the CEOs' time use and number of employees as inputs. Table 7 reports the estimates of elasticities, controlling for analysts and 2-digit industry fixed effects.

Reassuringly column 1 shows that the CEO's time is a productive input. The elasticity of sales with respect to hours worked is 1.08, precisely estimated at conventional levels, suggesting that a one percentage point increase in hours worked increases sales by 1.08 percentage points. The impact of CEOs' time is very close to that of the size of the workforce (1.06).

More interestingly, column 2 shows that the correlation between CEO time and output is entirely driven by hours spent in planned activities. The correlation between output and hours and hours spent in unplanned activities is .08 and precisely estimated. Considering that CEOs are paid for all their hours, regardless of planning, this indicates that unplanned hours make a loss for the firm. The fact that the coefficient is zero, as opposed to negative, rules out that this is driven by the fact that planning is more difficult in firms that are facing difficulties.

Column 3 provides further evidence that not all CEOs' time is equally productive. We divide hours worked between those spent alone, and those spent with different combinations of outsiders and firm employees'. Column 3 shows that only time spent with the latter is positively correlated with output, a one-percent increase in time spent with insiders (with insiders and outsiders) is associated with a .61 (.21) percent increase of output; of these only the first is significant at conventional levels. The correlation between output and time alone/with outsiders is small and negative.

Column 4 combines the two dimensions of time use, and shows that the correlation between total hours worked and output is entirely driven by <u>planned time with firm employees</u> (with or without outsiders). The other time uses are either uncorrelated or in some cases, e.g. unplanned time with outsiders, negatively correlated with output.

Columns 5 divides participants into functional areas. The estimates show that time spent dealing with production, finance and labour issues is positively correlated with productivity, while the others are not.

Column 6 divides hours by functional area and planning horizon, and presents a more nuanced picture. In particular, planned time spent with production and finance is positively correlated with output whereas unplanned time spent with these functions is negatively correlated with output. On the other hand, time spent with government and legal affairs has exactly the opposite pattern. Planned hours are negatively correlated with output, while unplanned hours are positively correlated with output. This suggests that in successful firms CEOs plan their meetings with the core functions of production and finance. In contrast, CEOs of low productivity firms spend more time "putting out fires" in unplanned meetings with the finance and production and devote more planned time to non-core functions such as government officers and lawyers.

5. Future research

Our preliminary analysis indicates that planning plays a potentially interesting role in understanding performance differences between firms. We find that firms' productivity is higher when CEOs work longer hours but not all CEOs' time is equally productive. In particular, the correlation between total hours worked and output is entirely driven by planned time with firm employees, especially those belonging to the functional areas of production, finance, and labour relations. Planning also appears to be associated with other management style dimensions, such as the duration and size of meetings.

Preliminary analysis indicates that firm, industry and state institutional characteristics are weakly correlated with the extent to which CEOs engage in planning, suggesting that planning is not shaped by external constraints. Future research will focus on understanding the causes and consequences of different management styles across CEOs — with a particular emphasis on planning horizon — taking advantage of exogenous shocks to the cost of CEO time and to the demand for unplanned vs. planned time (e.g. adverse weather, sport events, religious festivals).

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TABLE 1: Firm and CEO characteristics

Panel A: Firm		Panel B: CEO	
Number of employees	1230	Age	50.6
	(4226)		(9.6)
Family owned	.41	Tenure as CEO	12.8
	(.49)		(9.7)
Founder owned	.37	Tenure in firm	19.1
	(.48)		(10.6)
Export	.81	Belongs to the family	.68
	(.39)		(.46)
Multinational	.16	MBA	.41
	(.37)		(.49)
Headquarters in (top 5):		Experience abroad	.37
Maharashtra	36%		(.47)
Gujarat	15%	Holds position in other firms	.29
Dehli	8%		(.45)
West Bengal	7%	Sits on other boards	.43
Andhra Pradesh	7%		(.50)

Figure 1: Geographical Coverage

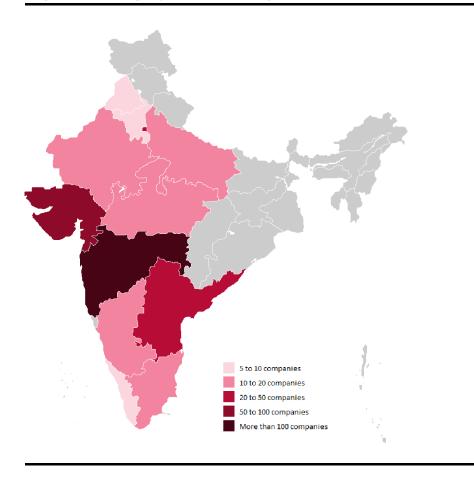


Table 2: Total hours reported, recorded and worked

		First	Third
	Mean	Quartile	Quartile
Hours reported	46.2	39.8	51.5
	(9.5)		
Hours recorded	43.4	37.5	48.5
	(8.9)		
Hours devoted to personal activities	4.4	1.5	5.6
	(4.2)		
Hours worked (incl work related travel)	39.1	32.8	44.2
	(9.4)		

Figure 2: Total Hours Worked

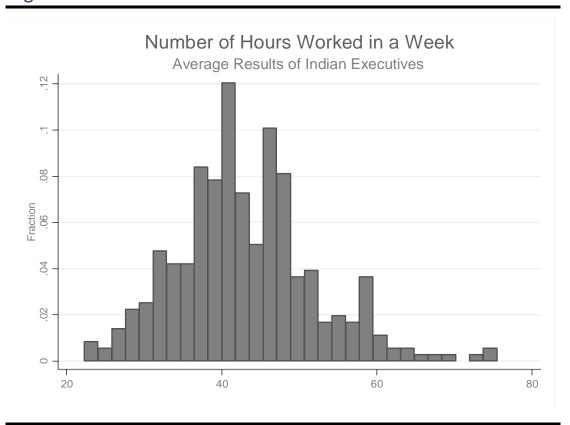
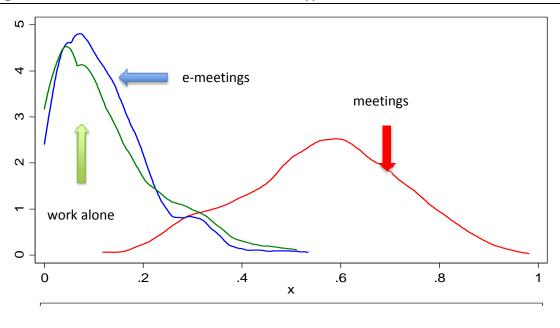


Table 3: Share of time devoted to different types of activities and participants

Type of activity		Origin of participants	
Meetings	.56	Inside the firm	.43
	(.16)		(.17)
E-meetings*	.12	Outside the firm	.19
	(.09)		(.14)
Working alone	.12	Both insiders and outsiders	.11
	(.11)		(.11)
Site visits	.06		
	(.09)		
Travel	.07		
	(.09)		

^{*}E-meetings includes phone calls, emails and conference calls

Figure 3: Share of time devoted to different types of activities



Share of time

Table 4: Time devoted to different functions

A. MEANS	_		_				<u>. </u>
	Production	Sales	Finance	Management	Labor	Legal	Government
Average hours	9.9	5.7	3.8	2.1	1.1	.45	1.0
	(6.0)	(4.3)	(3.1)	(2.6)	(1.7)	(1.1)	(1.9)
Average share	.35	.20	.13	.07	.04	.02	.04
	(.17)	(.14)	(.10)	(.09)	(.06)	(.04)	(.07)
B. CORRELATIONS							
	Production	Sales	Finance	Management	Labor	Legal	Government
Production	1.0						
Sales	10*	1.0					
Finance	06	.03	1.0				
Management	14*	11*	.02	1.0			
Labor	.07	.04	.02	03	1.0		
Legal	10*	07	.10*	.07	.01	1.0	
Government	04	17*	01	.02	.03	.13*	1.0

Definitions:

Production=business unit directors, production, suppliers; Sales= marketing division, clients; Finance=finance division, banks, investors; Management=strategy division, external consultants; Labor=human resource division, unions, employee associations Legal= legal division, external lawyers; Government= compliance division, government officials, politicians

Figure 4: Share of time devoted to different functions

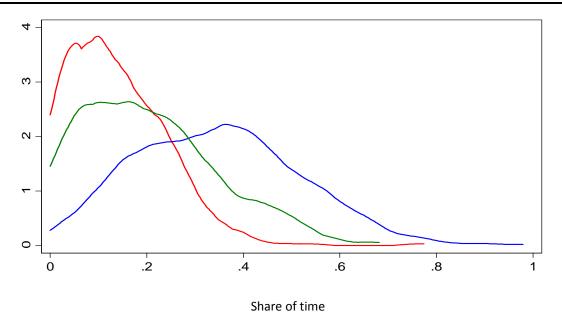


Table 5: Activity characteristics

A. MEANS							
			One	Many	One	Many	
	Planned	Unplanned	Participant	Participants	Function	Functions	Duration
Average hours	26.4	12.6	15.8	12.8	19.0	9.9	1.26
	(9.9)	(7.5)	(7.1)	(8.1)	(7.5)	(7.4)	(.35)
B. CORRELATIONS							
			One	Many	One	Many	
	Planned	Unplanned	Participant	Participants	Function	Functions	Duration
Planned	1.0						
Unplanned	45*	1.0					
One Participant	.23*	.04	1.0				
Many Participants	.50*	.03	40*	1.0			
One Function	.33*	.02	.60*	.04	1.0		
Many Functions	.44*	.04	11*	.67*	37*	1.0	
Duration	.23*	04	17*	.41*	01	.29*	1.0

Figure 5: Share of time devoted to planned activities

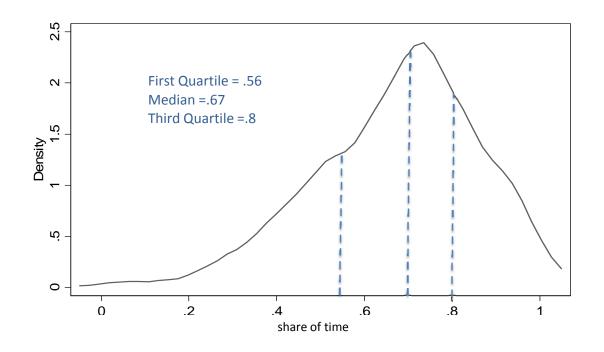


Table 6: CEO time use and total hours worked

PANEL A: Participant origin

	log(hours with insiders)	log(hours with both insiders and outsiders)	log(hours with outsiders)	log(hours alone)
log(hours worked)	0.932***	1.318***	0.504***	0.423**
	(0.114)	(0.217)	(0.182)	(0.179)
R-squared	0.160	0.174	0.086	0.293
N	354	354	354	354

Panel B: Participant functional area

	log(hours spent with production)	log(hours spent with sales)	log (hours spent with finance)	log(hours spent with management)	log(hours spent with labor)	log(hours spent with legal)	log(hours spent with government)
log(hours worked)	0.810***	0.517***	0.639***	0.594***	0.761***	0.312***	0.424**
	(0.142)	(0.181)	(0.177)	(0.190)	(0.154)	(0.117)	(0.164)
R-squared	0.155	0.068	0.065	0.064	0.097	0.024	0.019
N	354	354	354	354	354	354	354

PANEL C: Planning and other activity characteristics

					log(hours with	log (hours with	
	log(hours planned)	log(hours unplanned)	log(hours with one participant)	log (hours with many participants)	representatives of one function)	representatives of many functions)	log (average duration)
log(hours worked)	0.993***	0.941***	0.646***	1.529***	0.692***	1.443***	0.240***
	(0.088)	(0.148)	(0.122)	(0.159)	(0.095)	(0.185)	(0.061)
R-squared	0.431	0.309	0.162	0.354	0.220	0.259	0.220
N	354	354	354	354	354	354	354

Table 7: CEOs time use in the production function

Panel A: log(sales) on planned/un	planned log h	nours by parti	cipant origin		Panel B: log(sales) on planned/unpla functional area	anned log ho	urs by
number of employees	(1) 1.055***	(2) 1.070***	(3) 1.038***	(4) 1.025***	number of employees	(5) 1.031***	(6) 1.071***
log log hours worked	(0.090) 1.085**	(0.089)	(0.091)	(0.090)	log hours spent with production	(0.094) 0.243	(0.094)
log hours planned	(0.512)	0.649**			log hours spent with sales	(0.202) 0.007	
log hours unplanned		(0.297) 0.082			log hours spent with finance	(0.162) 0.330**	
log hours with insiders		(0.198)	0.605**		log hours spent with management	(0.158) 0.075	
log hours with both insiders and outsiders			(0.254) 0.209		log hours spent with labor	(0.157) 0.445**	
log hours with outsiders			(0.128) -0.023 (0.169)		log hours spent with legal matters	(0.184) -0.120 (0.248)	
log hours working alone			-0.110		log hours spent with government matters	-0.086	
			(0.159)		matters	(0.180)	
log hours with insiders-planned				0.470***	log hours spent with production- planned		0.218
				(0.177)	piamea		(0.184)
log hours with insiders- unplanned				0.108	log hours spent with sales-planned		-0.015
				(0.167)			(0.154)
log hours with both insiders and outsiders-planned				0.243*	log hours spent with finance- planned		0.378**
				(0.125)	•		(0.159)
log hours with both insiders and outsiders- unplanned				-0.053	log hours spent with management- planned		-0.029
				(0.206)	planica		(0.179)
log hours with outsiders- planned				-0.002	log hours spent with labor-planned		0.207
•				(0.143)			(0.213)
log hours with outsiders- unplanned				-0.234	log hours spent with legal matters- planned		-0.454
amplanica				(0.179)	planica		(0.280)
log hours alone- planned				-0.234	log hours spent with government matters-planned		-0.230
				(0.152)	matters-planned		(0.206)
log hours alone- unplanned				0.149	log hours spent with production- unplanned		-0.307*
				(0.162)	unplanneu		(0.185)
					log hours spent with sales- unplanned		-0.100
					unpianneu		(0.219)
					log hours spent with finance-		-0.161
					unplanned		(0.230)
					log hours spent with management-		0.277
					unplanned		(0.260)
					log hours spent with labor-		0.673**
					unplanned		(0.328)
					log hours spent with legal matters-		0.884
					unplanned		(0.618)
					log hours spent with government		0.041
					matters-unplanned		(0.320)
R-squared	0.303	0.302	0.308	0.318		0.308	0.322
N	351	351	351	351		351	351