TEAM INCENTIVES: EVIDENCE FROM A FIRM LEVEL EXPERIMENT APPENDIX

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A Proofs and Extensions

A.1 Proofs

Proof of Result 1: We focus on equilibria in which: (i) all workers form teams, and, (ii) teams are stable in the sense that no worker is better off by leaving his team and forming a new one with whomever is willing to do so.

First we show that when friends are of the *same* ability, the only stable equilibrium is the one in which the two high ability workers form one team and the two low ability workers form the other. To do so, we show that high ability workers cannot gain by leaving their high ability friend and matching with a low ability non-friend, regardless of the strength of team incentives p. Substituting the workers' first order condition for effort into the utility function, we find his utility when matched with his high ability friend to be $\frac{3p^2(1+\pi)^2\theta_H^2}{8}+s$, and when matched with the low ability non-friend to be $\frac{p^2\theta_H^2}{8}+\frac{p^2\theta_L^2}{4}$.Given $\theta_H>\theta_L$, $\pi>1$ and $s>0$, we have $\frac{p^2\theta_H^2}{8}+\frac{p^2\theta_L^2}{4}<\frac{3p^2\theta_H^2}{8}<\frac{3p^2(1+\pi)^2\theta_H^2}{8}+s$, for any p.

Next we show that when friends are of *different* ability, they might face a trade-off between matching by ability or friendship, and when they do, the terms of the trade-off depend on the strength of team incentives p. First we show that the low ability workers face no trade-off, namely their utility is always higher when matching with their high ability friend rather than the other low ability worker. Indeed when matched with their high ability friend their utility is $\frac{(1+\pi)^2p^2\theta_L^2}{8}+\frac{(1+\pi)^2p^2\theta_H^2}{4}+s$, whereas when matched with the other low ability worker their utility is $\frac{p^2\theta_L^2}{8}+\frac{p^2\theta_L^2}{4}$. Again because $\theta_H>\theta_L$, $\pi>1$ and $s>0$, $\frac{p^2\theta_L^2}{8}+\frac{p^2\theta_L^2}{4}<\frac{(1+\pi)^2p^2\theta_L^2}{8}+\frac{(1+\pi)^2p^2\theta_H^2}{4}<\frac{(1+\pi)^2p^2\theta_L^2}{8}+\frac{(1+\pi)^2p^2\theta_H^2}{4}+s$ for any p. Second we show that the high ability workers might face a trade-off. Indeed when matched with their low ability friend utility is $\frac{(1+\pi)^2p^2\theta_H^2}{8}+\frac{(1+\pi)^2p^2\theta_L^2}{4}+s$, whereas when matched with the other high ability worker their utility is $\frac{p^2\theta_H^2}{8}+\frac{p^2\theta_H^2}{4}$. It is straightforward to show that $\frac{(1+\pi)^2p^2\theta_H^2}{8}+\frac{(1+\pi)^2p^2\theta_L^2}{4}+s<\frac{p^2\theta_H^2}{8}+\frac{p^2\theta_H^2}{4}$

if and only if $p > \hat{p} = \frac{s}{\left(\frac{3}{2}-(1+\pi)^2(R^2+1/2)\right)\theta_H^2}$, where $R = \frac{\theta_L}{\theta_H}$. We note that $\hat{p} > 0$ if $\frac{3}{2} - (1+\pi)^2\left(R^2+1/2\right) > 0$, which is the condition that guarantees that matching by ability yields higher utility than matching by friendship when $s = 0$. If not, workers always prefer to match by friendship and effectively face no trade-off. It is straightforward to show $\frac{\partial \hat{p}}{\partial \pi} > 0$, $\frac{\partial \hat{p}}{\partial s} > 0$ and $\frac{\partial \hat{p}}{\partial R} > 0$.■

Proof of Result 2: Parts (a) and (b) follow directly from the assumptions. Part (c) follows from the comparison of worker effort under the two regimes. When $p = p_0$ and teams are formed among friends, worker i's effort is $\frac{p_0(1+\pi)}{2}\theta_i$, whereas when $p = p_1$ and workers match by ability, worker i's effort is $\frac{p_1}{2}\theta_i$. Hence average productivity increases if and only if $p_1 > p_0(1+\pi)$.

Parts (d) and (e) follow from the comparison of the productivity of each team under the two regimes. At $p = p_0$ teams are formed among friends and both teams produce $\frac{p_0(1+\pi)}{2}\theta_H^2 + \frac{p_0(1+\pi)}{2}\theta_L^2$. At $p = p_1$ workers match by ability, the most productive team produces $p_1\theta_H^2$ and the least productive team produces $p_1\theta_L^2$. Thus the productivity of the most productive team increases if only if $p_1 > p_0(1+\pi)\frac{1+R^2}{2}$. Since $\frac{1+R^2}{2} < 1$, $p_1 > p_0(1+\pi)$ implies $p_1 > p_0(1+\pi)\frac{1+R^2}{2}$. The productivity of the least productive team increases if only if $p_1 > p_0(1+\pi)\frac{1+1/R^2}{2}$. Since $\frac{1+1/R^2}{2} > 1$, when $p_0(1+\pi) < p_1 < p_0(1+\pi)\frac{1+1/R^2}{2}$, average productivity increases while the productivity of the bottom team decreases. When $p_0(1+\pi) < p_0(1+\pi)\frac{1+1/R^2}{2} < p_1$ the productivity of the bottom team increases. This proves part (d). Extending the argument to the case where $p_1 < p_0(1+\pi)$ then proves part (e).■

A.2 Extension: Transfers Between Team Members

We now extend the model to incorporate the possibility that team members can make transfers to each other. We solve for the more interesting case where friends differ in ability and show how transfers can affect the trade-off between sorting by ability or by friendship.[1] As shown in Result 1 above, low ability workers strictly prefer to match with their high ability friend, and might therefore be willing to pay them a transfer to attract them to their team. The transfer that the low ability worker can offer to their high ability friend is $t \in [\ 0; t^{\max}]$ $t^{\max} = \frac{(1+\pi)^2p^2\theta_L^2}{8} + \frac{(1+\pi)^2p^2\theta_H^2}{4} + s - \frac{3p^2\theta_L^2}{8}$, that is the difference in utility that a low ability worker would get by matching with his friend and the utility he would get by matching with the other low ability worker. The analysis in the text corresponds to the case $t = 0$, that is when transfers are not feasible. For any feasible $t > 0$, the utility of the high ability worker when matching with his low ability friend is now equal to $\frac{(1+\pi)^2p^2\theta_L^2}{8} + \frac{(1+\pi)^2p^2\theta_H^2}{4} + s + t$, following the proof of Result 1 above, this implies that the threshold $\hat{p}$ such that for $p > \hat{p}$ workers match by ability *increases* to $\frac{s+t}{\left(\frac{3}{2}-(1+\pi)^2(R^2+1/2)\right)\theta_H^2}$. Intuitively, trans-

[1] It is straightforward to show that when friends are of the same ability level, the maximum transfer that a low ability worker is willing to pay to a high ability worker is never sufficient to make them leave their friend and match with them instead.

fers make it less likely that high ability workers prefer to form a team together. If utility is perfectly transferrable, so that $t^{\max}$ is feasible workers always prefer to match by friendship, and incentive power does not affect team composition. In this case, increasing incentive power unambiguously increases individual effort and average productivity, as the transfer effectively ensures that high ability workers internalize the effect of their choice of team mates on the utility of their friends.

B The Assignment of Workers to Tasks

Table A1 presents evidence on how the general manager assigns individual workers to various tasks in the workplace. These tasks include picking fruit, weeding, planting, or to be left unemployed for the day. The null hypothesis is that the behavior of the general manager is unaffected by the provision of rank incentives or tournaments to bottom tier workers. We consider the sample of all workers that are available to pick fruit for at least two weeks before the start of the rank incentives treatment and at least two weeks after the introduction of tournaments. This represents the pool of workers over which the general manager makes his selection decision. There are 243 workers and 110 days in this sample. To shed light on the determinants of worker assignment to tasks we condition on farm level variables that affect the probability of being assigned to tasks independently of the team incentive scheme in place. We then estimate a linear probability model of the form,

$$p_{it} = F(R_t, T_t, X_t^D, X_t^S, X_{it}), \tag{1}$$

where p_{it} equals one if worker i is selected by the general manager to pick on day t, and is zero otherwise, and R_t and T_t are dummy variables for the rank and tournament incentive schemes. X_t^D and X_t^S proxy the demand and supply of labor on day t. We measure the demand for labor by controlling for the number of fields and sites that are operated on day t for each variety of fruit. We measure the supply of labor as the number of workers on the farm that are available to pick fruit on day t. In addition we control for a cubic time trend. X_{it} is the cumulative number of days worker i has been present on the farm for. We estimate (1) using GLS where we estimate panel corrected standard errors allowing for first order autocorrelation within each worker to capture persistent shocks to the worker, such as her health status, that affect the likelihood of her being assigned to any given task. The error terms are worker specific heteroscedastic and contemporaneously correlated across workers to capture common shocks to worker assignments to tasks.

Column 1 of Table A1 shows that others things equal, the likelihood of being selected to pick fruit does not significantly differ between the control period, and neither the rank incentives nor tournament treatment. Hence the timing of the treatments does not appear to coincide with aggregate changes in the demand for workers to engage in picking tasks. Column 2 shows that conditional on

being selected to conduct a task – be it picking or non-picking – the probability of being assigned specifically to picking tasks does not vary over the regimes.

Column 3 defines the dependent variable p_{it} to be equal to one if worker i only engages in picking tasks on day t, and is zero otherwise. This allows us to focus in on whether the general manager changes the selection of workers that are exclusively picking in response to the incentive schemes. The result shows this not to be the case.

While the specifications so far focus on whether there is a change in assignment probabilities for the average worker, the next two columns address whether the marginal worker assigned to specialize in picking tasks varies with the change in worker incentives. To do so we exploit the worker survey and explore whether there are heterogeneous effects of the treatments on assignment along two dimensions: (i) whether the worker reports their primary reason for coming to work was money, or not; (ii) the preferred pay scheme of the worker, be it a fixed hourly wage, an individual piece rate, or a team based piece rate.

On the first heterogeneous effect, Column 4 shows that workers who report coming for money – who may be better motivated – are not differentially likely to be assigned by the general manager to engage exclusively in picking under either incentive scheme. If anything, the pattern of coefficients suggests that those not motivated by money are more likely to be assigned to picking under the tournament regime, when team productivity has been shown to rise significantly relative to the rank incentives regime. On the second heterogeneous effect, Column 5 shows that workers who prefer piece individual or team piece rates, relative to those that prefer hourly wages, are no more likely to only pick under either treatment. Again, if anything the result hints at workers that prefer fixed hourly wages – and so are presumably less motivated or of lower ability – are marginally more likely to pick when the monetary prize tournament is introduced, although this effect is not significant at conventional levels.

Overall these findings provide little to suggest the average or marginal worker selected by the general manager to pick varies with the team incentive schemes in place, or that changes in how the general manager assigns workers over time leads to overestimating the rank incentives and tournament effects. In turn, this implies the documented baseline effects of rank incentives and tournaments represent changes in behavior of the bottom tier of workers – whose incentives have explicitly been experimentally varied – and do not capture any additional effects caused by changes in behavior of the general manager.

C Selection into the Worker Survey

The worker survey is administered on two different dates over the peak picking season – once during the control regime and once during the tournament regime, when rank incentives is always provided. It is administered in the evening after workers have returned from the fields. We aimed to interview all workers present on the survey date, and obtained a 95% response rate. Of the 265 individuals whose primary task is to pick fruit, 11 were not surveyed as they were not

present on the farm on either survey date, namely they arrived after the first and left before the second. We surveyed 177 workers and the remaining 77 were not present on the campsite at the time of the survey, most likely because they were engaged in other non-work related activities away from the farm site at the time of the survey. Table A2 presents descriptive evidence on the characteristics of workers who were interviewed and those who were on the farm's payroll but were not present on survey day. Information available on both sets of workers mostly relates to that contained in personnel records.

Three points are of note. First, those surveyed have similar productivity – averaged across all the teams they are part of – to those not surveyed. This is true both for productivity on average, and also the entire distribution of productivity as shown in the last column by the p-value on the equality of distributions from a Mann-Whitney test. Similarly, the picking experience does not differ across surveyed and non-surveyed workers. Hence it is not the case that the most productive workers are too busy or too tired to be interviewed. Second, the gender and nationality composition of the two groups is quite similar, suggesting they do not differ in the potential social networks they could form in the workplace. Third, surveyed workers are more than twice as likely to name another surveyed worker as their friend, as they are to name an individual who was not surveyed. This is consistent with non-surveyed workers not being present at the time of the survey due to social engagements away from the workplace, and indicates that the social networks of non-surveyed workers do not overlap with those of surveyed workers.

D Robustness Checks on the Team Productivity Estimates

D.1 Time Effects

Column 1 of Table A3 estimates the productivity regressions restricting the control regime to the four weeks immediately preceding the rank incentives treatment, rather than exploiting the full span of data. This allows us to check whether the estimated effects of each treatment are sensitive to time trends during the control regime. Compared to the baseline estimate in Column 1 of Table 3, the rank incentives effect is larger in absolute magnitude and more precisely estimated, and the prize effect is slightly smaller but still precisely estimated.

Column 2 checks for whether the rank incentives and prize effects themselves vary over time. To do this we split each of the treatment regimes into two week periods and so estimate whether the effects vary between the first and second fortnight. The results shows that the rank incentives effect becomes more pronounced the longer the provision of rank incentives has been in place for. In contrast, the point estimates on the tournament dummy suggests the effect of the monetary prize becomes slightly stronger the longer such prizes have been offered for. Reassuringly, the estimated effects of rank incentives or prizes therefore

appear to be neither short run changes based on hot decision making, nor mere responses to changing work conditions *per se* as in a Hawthorne effect. Rather, as workers have more team exchanges in which to respond to the treatments, the effects of each appear to become stronger. The pattern of coefficients found also helps rule out the baseline estimates are merely picking up any underlying aggregate time trend.

Finally, Column 3 addresses the concern that workers are more likely to be close to their date of departure from the farm the longer the tournament has been in place for. If, for example, workers have income targets over the season, then any shortfall in the income earned and that they expected to earn at the start of the season, can only be made up by working harder late in the season. This would lead to a spuriously positive effect of tournaments. To check for this we additionally control for the average number of days until departure for members of team i on field f and day t. The results shows the estimate of the rank incentives becomes less precisely estimated and not significantly different from zero, although the tournament effect is largely unchanged. We find no evidence that team productivity systematically varies with how close members of the team are to leaving the farm.[2]

D.2 Management Practices

The remaining Columns of Table A3 check whether the main effects documented in Table 3 reflect changing patterns of behavior among workers – who are exposed to experimental changes in their work environment – rather than management, whose compensation schemes are left unchanged. There are two separate causes of concern. First, the behavior of managers may naturally change over time and it is these changes that are spuriously attributed to the estimated treatment effects. Second, with the change in team incentives that workers are subject to, workers may engage in influence activities or other inefficient behaviors in order to change the behavior of their managers. In this case the baseline results capture the total effect of each treatment rather than the pure effect caused only by changes in worker behavior, all else equal.

The first dimension of management behavior we explore relates to the composition of workers in teams observed picking. More formally, Column 4 restricts the sample to teams made of workers who pick for at least one week in each of the three regimes. This allows us to focus directly on those individuals that are picking throughout the peak picking season and so minimizes any potential contamination of the results caused by changes in the composition of pickers, which might be driven by changes in the behavior of management rather than workers across regimes. The result shows that, although the estimates are slightly less precise in this smaller sample relative to the baseline sample as expected, it

[2] This result also suggests that any ratchet effects caused by the way in which the piece rate is set are not first order. If such concerns were present, we would expect, contrary to the result in Column 3, team productivity to increase as workers' dates of departure approached because the ratchet effect typically gets weaker as the time horizon of the worker becomes shorter.

remains the case that rank incentives significantly reduced team productivity and tournaments significantly increase team productivity.

Columns 5 to 8 check whether changes in managerial behavior might be driving the findings by exploring outcomes at the field-day level. Column 5 estimates whether the number of teams on the field is significantly changed by the regime, conditional on the average picking experience of teams present, the field life cycle, a linear time trend, and field fixed effects. Standard errors are clustered by field to allow for general forms of serial correlation in shocks to the demand for teams within a field over time. Reassuringly the result shows there is no significant change in the number of teams on the field over regimes. This is bolstered by the result in Column 7 that shows there is no significant change in the number of teams per field manager across the incentive schemes. Hence it is not the case that the documented productivity changes at the team level are driven by changes in the span of control of field managers for example.

Along similar lines, Column 8 checks whether the days between when the same field is operated change significantly with the treatments. If for example teams are able to successfully lobby to pick on fields that have been left unpicked for longer – and so where productivity is expected to be higher – and they do this when rank incentives or tournaments are provided, our previous results would capture the total effect of the change in incentives, including workers lobbying managers, rather than a pure incentive effect. Reassuringly the result does not support this claim.

Finally, a team can be temporarily reduced from size five to four either because a worker is sick, or is assigned to some other task that needs completing urgently. If teams are able to lobby managers to remove certain workers from their team, or the conduct of the team exchange becomes less lax over time so that teams are more likely to only comprise four workers, then some of the estimated effects of the treatments might actually be attributable to other such factors. To check for this in Column 8 we define the dependent variable to be the share of teams on the field-day that are temporarily reduced to less than five members. We find no systematic change in this share with the provision of rank incentives or tournament incentives.

Table A1: The Assignment of Workers to Tasks and Teams

GLS panel corrected standard errors allowing for first order autocorrelation within worker

Dependent Variable:	(1) Picking	(2) Picking Conditional on Employed	(3) Only Picking	(4) Only Picking	(5) Only Picking
Rank Incentives	-.019	-.006	.002	.004	.029
	(.020)	(.015)	(.023)	(.025)	(.032)
Tournament	-.018	-.006	.028	.041*	.054*
	(.020)	(.015)	(.022)	(.025)	(.032)
Rank Incentives x Came for money [Yes=1]				-.005	
				(.030)	
Tournament x Came for money [Yes=1]				-.037	
				(.033)	
Rank Incentives x Prefer individual piece rate					-.052
					(.042)
Rank Incentives x Prefer team piece rate					-.050
					(.077)
Tournament x Prefer individual piece rate					-.052
					(.046)
Tournament x Prefer team piece rate					-.087
					(.086)
Mean of dependent variable in control period	.509	.666	.450	.450	.534
Fixed effects	Worker, Date	Worker, Date	Worker, Date	Worker, Date	Worker, Date
Number of observations (worker-day level)	25538	20128	25538	25538	15168

Notes: *** denotes significance at 1%, ** at 5%, and * at 10%. The unit of observation is the worker-day. Panel corrected standard errors allowing for first order autocorrelation within each worker are in parentheses. The error terms are also allowed to be worker specific heteroscedastic and contemporaneously correlated across workers. The sample is based on workers that are present for at least two weeks before the start of the rank incentive regime and two weeks after the introduction of the tournament regime. There are 243 workers and 110 days in the sample. The dependent variable in Columns 1 and 2 is equal to one if the worker is assigned to any picking tasks on the day, and is zero otherwise. In Column 3 the sample is restricted to those days where the worker is assigned to some task. The dependent variable in Columns 3 to 5 is equal to one if the worker is assigned to only picking tasks on the day, and is zero otherwise. Throughout we control for the number of fields and sites that are operated on day t for each variety of fruit, the number of workers on the farm that are available to pick fruit on day t, a cubic time trend, and the cumulative number of days worker i has been present on the farm for. The "came for money" and "preferred pay scheme" questions are from the worker survey. The omitted category for he preferred pay scheme question is a fixed hourly wage.

Table A2: Characteristics of Surveyed and Non-Surveyed Workers

Means, standard errors in parentheses, p-value on Mann Whitney Test in brackets

		Surveyed	Not Surveyed	Difference (standard error)	Mann-Whitney Test of Equality of Distributions
A. Number (%) of Workers		177 (70.0)	77 (30.3)		
B. Productivity, Work Experience, and Ability	**Productivity [kg/hr]**	8.12	7.96	.159	[.608]
		(.212)	(.326)	(.389)	
	Total picking experience [field-days]	70.6	72.7	-2.14	[.365]
		(4.46)	(9.07)	(10.1)	
C. Friendship Networks	**Number of times mentioned as a friend by a surveyed worker**	2.72	1.30	1.42***	[.000]
		(.158)	(.171)	(.232)	
D. Worker Characteristics	**Gender [female=1]**	.362	.377	-.015	-
		(.036)	(.056)	(.066)	
	Live on main farm site [yes=1]	.678	.753	-.075	
		(.035)	(.049)	(.061)	
	Main nationality	Ukrainian (36.7%)	Ukrainian (35.1%)	-	

Notes: *** denotes significance at 1%, ** at 5%, and * at 10%. This data is obtained from the firm's personnel records and the survey we administered to workers. Total picking experience is the number of field-days the worker picks on over the entire season. There are eight nationalities represented among the workers. The standard errors on the differences are estimated from running the corresponding least squares regression allowing for robust standard errors.

Table A3: Robustness Checks on The Effect on Rank Incentives and Monetary Prizes on Team Productivity

Dependent Variable (Columns 1 to 4) = Log of team's productivity on the field-day (kilograms/hour)

Dependent Variable (Columns 5 to 8): see Notes below

Standard errors in parentheses, clustered by week (Columns 1-4), and by field (Columns 5-8)

	Time Concerns				Management Practices			
	(1) Shorter Control Regime	(2) Quarters	(3) Days to Go	(4) Same Workers	(5) Number of Teams on Field	(6) Number of Teams per Field Manager	(7) Days Since Field Was Last Picked	(8) Share of Teams With Less Than Five Members
Rank Incentives Regime	-.204**		-.142	-.210*	-.221	-.012	1.69	1.69
	(.096)		(.102)	(.115)	(.592)	(.147)	(1.34)	(1.34)
Tournament Regime	.165***		.246***	.141**	-.890	.179	1.46	1.46
	(.048)		(.070)	(.062)	(.843)	(.161)	(.914)	(.914)
Rank Incentives weeks 1 and 2		-.093						
		(.103)						
Rank Incentives weeks 3 and 4		-.221*						
		(.123)						
Tournament weeks 1 and 2		.271***						
		(.052)						
Tournament weeks 3 and 4		.332***						
		(.088)						
Days to go			.006					
			(.022)					
Field fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.338	.312	.310	.303	.503	.463	.077	.077
Number of team-field-day observations	2533	2914	2870	1493				
Number of field-day observations					466	466	459	459

Notes: *** denotes significance at 1%, ** at 5%, and * at 10%. The unit of observation is the team-field-day in Columns 1 to 4, and the field-day in Columns 5 to 8. All continuous variables are in logarithms in Columns 1 to 4. Standard errors are clustered by week in Columns 1 to 4, and are clustered by field in Column 5 to 8. In Columns 1 to 4 the additional controls are the log of average team picking experience, the log of the field life cycle plus one, a linear time trend, and field fixed effects. The field life cycle is defined as the nth day the field is picked divided by the total number of days the field is picked over the season. In the field-day level specifications, an analogous set of controls - where picker experience is averaged within the field-day - are included in levels. In Column 1, we restrict the control regime to the four weeks preceding the rank incentive experiment. In Column 2 we split the rank incentive and tournament regimes in two periods of two weeks each. In Column 3 we control for the average number of days left before the team members departure. In Column 4 we restrict the sample to teams made of workers who pick for at least one week in each of the three regimes. The dependent variable in Column 5 is the number of teams that are picking on the field-day. The dependent variable in Column 6 is the number of teams per field manager. The dependent variable in Column 7 is the number of days since the field was last picked. The number of observations drops in Column 7 because we drop the first day a field was picked. The dependent variable in Column 8 is the share of teams that are temporarily reduced to less than five members.

Table A4: Worker Characteristics by Survey Date

Means and standard deviations in parentheses

	Surveyed in Control Period	Surveyed in Tournament Period	Difference [p-value]
Individual Characteristics			
Gender [female = 1]	.361	.338	[.739]
	(.483)	(.476)	
Nationality: Ukrainian	.411	.202	[.000]
	(.494)	(.404)	
Nationality: Polish	.137	.483	[.000]
	(.345)	(.503)	
Lives on main site [yes = 1]	.645	.614	[.655]
	(.480)	(.490)	
Social Network Characteristics			
Number of friends	4.40	3.21	[.001]
	(2.32)	(2.35)	
Number of times named as a friend	3.19	2.21	[.001]
	(2.17)	(1.83)	
Number of friends/number of times named as a friend	1.73	1.89	[.526]
	(1.49)	(1.85)	
Attitudes			
Main reason for coming: pay	.556	.500	[.453]
	(.499)	(.056)	
Main reason for coming: university work experience	.111	.200	[.429]
	(.660)	(.877)	
Would prefer an individual piece rate	.250	.213	[.551]
	(.435)	(.417)	
Would prefer a fixed wage	.704	.738	[.613]
	(.459)	(.443)	

Notes: The first survey was conducted on 20th July during the control regime. The second survey wave took place on the 7th of September during the tournament regime. P-values are reported for the null hypothesis of the variable being equal across the survey waves, against a two sided alternative. There are four sites on the farm – the main site is defined to be the site on which the majority of workers reside. The “number of times named as a friend” is the number of times the worker is named as a friend of all other workers that were surveyed in both waves. In the question on “main reason for coming”, workers could respond with one of the following answers – “pay”, “it is a work experience for my university degree course”, “to learn English”, or “to make friends”. In the question on pay preference workers were asked “how would you like to be paid?” There were three possible responses - a fixed wage, individual piece rate, or team piece rate.

Figure A1a: Worker First Day in Payroll Data

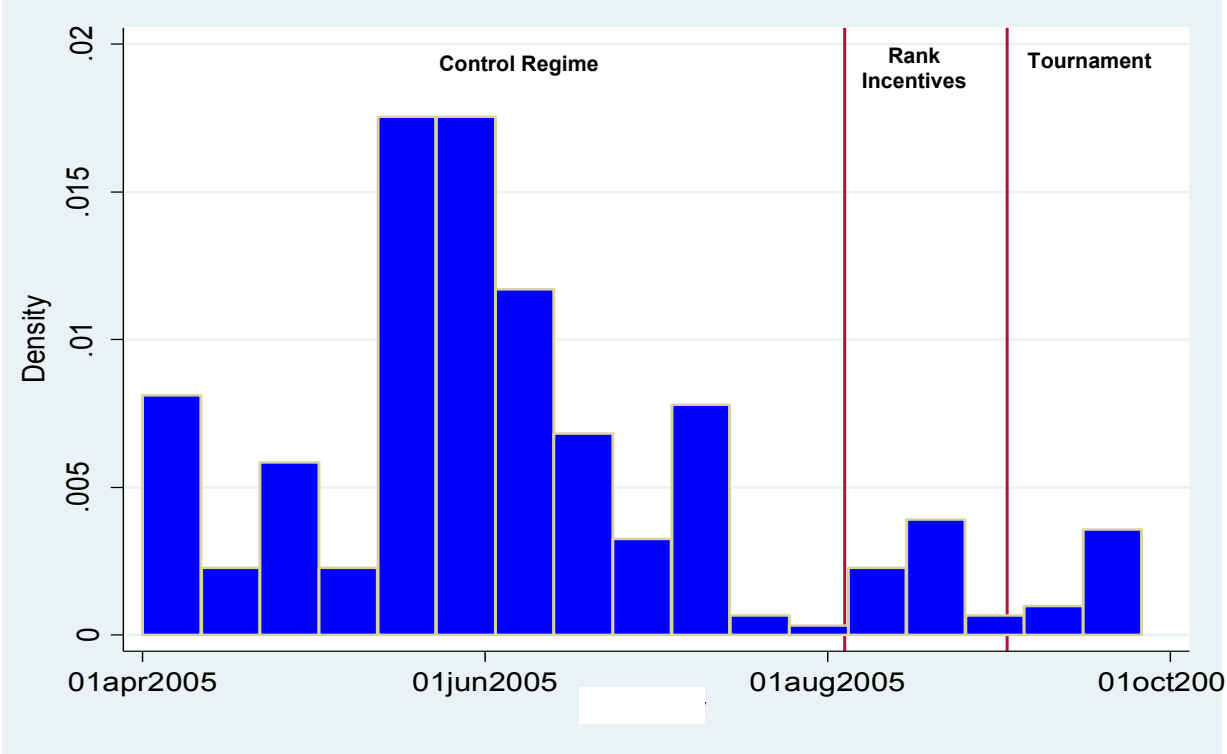
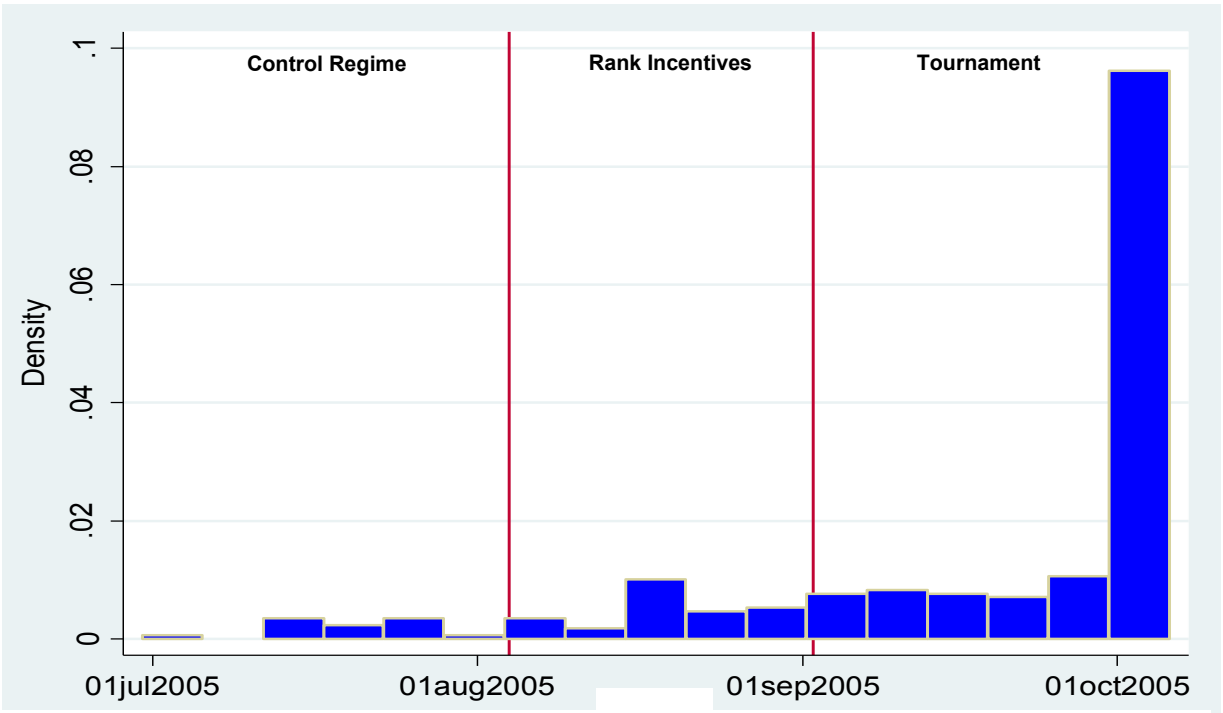


Figure A1b: Worker Last Day in Payroll Data



Note: The figures show the histogram of the first and last day each worker is recorded in the payroll data, for workers that are present on the farm for at least one week.