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Targeting High Ability Entrepreneurs: Replication and Heterogeneity by Gender of Hussam, Rigol and Roth (2022)

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Isabella Masetto

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Targeting High Ability Entrepreneurs: Replication and Heterogeneity by Gender of Hussam, Rigol and Roth (2022)

Isabella Masetto and Diego Ubfal*

May 31, 2023

Abstract

Hussam et al. (2022a) use a cash grant experiment in India to demonstrate that community knowledge can help target high-growth microentrepreneurs. In their preferred specification, the authors find that the average marginal return to the grant is 9.4 percent per month, while estimated returns for entrepreneurs reported by peers to be in the top third of the community are between 24 percent and 30 percent. First, we reproduce the paper's main findings and uncover one minor coding error, which affects the estimates for one of the main tables but does not change the overall conclusions of the paper. Second, we test the robustness of the results to: (1) different treatment of outliers, (2) dropping surveyor and survey month fixed effects, and (3) using quartiles instead of terciles for grouping the ranking of entrepreneurs. The paper's results are robust to these robustness checks. Finally, we test heterogeneity of results by gender, which was not reported in the original study.

*Isabella Masetto: Bocconi University, isabella.masetto@studbocconi.it; Diego Ubfal: World Bank, dubfal@worldbank.org. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank Group, its Board of Executive Directors, or the governments they represent. All errors and omissions are our own. The replication package including codes to generate the tables in this paper can be found at https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/DI7RR9

1 Introduction

Targeting business support programs to firms that derive the largest returns on them is crucial for policy effectiveness (McKenzie, 2021; Ubfal, 2023). However, selecting the entrepreneurs who can obtain the highest returns to different interventions is not a trivial task. McKenzie and Sansone (2019) show that it is difficult to obtain good predictive power to detect top performers among entrants in a business plan competition in Nigeria, even when a significant amount of baseline data are available and machine learning tools are used. Two recent papers paint a more positive picture: Bryan et al. (2022) find that using a large set of psychometric variables can significantly improve prediction for the effects of receiving larger loans in Egypt, and Ellis et al. (2022) show that data on motivations and constraints faced by entrepreneurs can improve predictions on loan growth in Tanzania, with the set of predicting variables being different for women entrepreneurs. Hussam et al. (2022a) contribute to this literature by showing that, in small communities, knowledge from peer entrepreneurs elicited in an incentivized way to avoid strategic reporting can be a source of valuable information for targeting resources to high-growth entrepreneurs. In this short paper, we replicate their main findings, conduct some robustness checks, and test heterogeneity of results by gender.

Hussam et al. (2022a) use a cash grant experiment with a sample of 1,345 microentrepreneurs in India to demonstrate that community knowledge can help target those entrepreneurs with the largest returns to the grant. In their preferred specification, the authors estimate average marginal returns to the grant of 9.4 percent per month. They then show that returns for entrepreneurs reported by peers to be in the top third of the community are significantly larger, ranging from 24 percent to 30 percent per month. This finding provides evidence that community members can identify high-return entrepreneurs. First, we reproduce the paper's main findings and uncover one minor coding error, which affects the estimates for one of the main tables but does not change the study's main results. Second, we test the robustness of the results to: (1) different treatment of outliers, (2) dropping surveyor and survey month fixed effects, and (3) using quartiles instead of terciles for grouping the rank distribution of entrepreneurs. The paper's results are robust to these robustness checks. Finally, we test heterogeneity of results by gender, which was not reported in the original study.

The paper continues as follows. Section 2 discusses the computational reproducibility of the paper and a coding error. Section 3 presents robustness replicability including three sets of robustness checks. Section 4 presents heterogeneity analysis by gender. Finally, Section 5 concludes.

2 Computational Reproducibility and Coding Error

We used the code and datasets published by the authors (Hussam et al., 2022b) to reproduce the tables in their paper. We were able to reproduce all the tables in the paper, which is not surprising given that the codes had already been checked by the American Economic Review replication team and by the team of the Institute for Replication.

However, we detected a coding error for Table 4, one of the main tables in the paper. The code in one of the do files (the file "predictvaluewithobservables.do") used to generate that table contains an error at line 109 when ordering the variables.[1] Due to this coding error, the controls used in the regressions are based on the wrong variables. For example, Column 1 in Table 4 should have been obtained by regressing trimmed income on the interaction between a dummy for grant winner ("winner") and a dummy indicating whether the respondent falls in the respective tercile of trimmed income based on the prediction from observables ("Tercile"). However, because of the coding error,"Tercile" was constructed based on a prediction for trimmed profits instead of a prediction for trimmed income, while trimmed income was still used as outcome. Similarly, Column 2 should have been obtained by regressing trimmed income on the interaction between "winner" and a prediction for the tercile of trimmed income based on observable characteristics and the community rank. In this case, because of the coding error, the tercile prediction was obtained for trimmed profits instead of trimmed income, while trimmed income was still used as outcome.

Table 1 replicates Table 4 in Hussam et al. (2022a) to facilitate the comparison with Table 2, which presents results obtained after correcting for the coding error mentioned above. Note that the bottom part of the two tables is identical since those results are obtained from a different code not affected by the coding error. However, all estimated coefficients in the upper part of the two tables differ.

The implications of this coding error are not severe. The new results do not significantly affect the author's conclusions. Nevertheless, some of the claims made in the published version of the paper should be corrected. For example, from the odd Columns of Table 1, the authors concluded that observables are useful for predicting marginal return to capital, though they warned that the coefficient on "top tercile controls" was only statistically significant for the profits outcome variable. In Table 2, we see that, after correcting for the coding error, this coefficient is also significant for the income outcome variable. Moreover, the authors claimed that comparing these estimates to those of Table 2 in their paper (which we replicate in our Table 3) suggests that observables are as informative as community rank; with community rank being a better predictor of income, and

[1]The error can be corrected by changing the order of variables in line 43 of the file "predictvaluewithobservables.do." Masetto and Ubfal (2023) provide replication codes.

observables a better predictor of profits. By comparing Table 3 with the correct Table 2, we can see that observables appear to be better predictors than community rank for both profits and income.

Even when the coefficients are different, the conclusions obtained from the odd Columns of Table 1 are still valid for Table 2. For both profits and income, the prediction based on both observables and community information is still stronger than the corresponding prediction based only on observables. This implies that community information is valuable even if the policymaker counts with a long list of observable characteristics, which is one of the main conclusions in the paper.

3 Robustness Replicability

In this section, we conduct a series of robustness tests focusing on the two main tables of Hussam et al. (2022a), which we replicate in Table 1 and Table 3. For comparability with the published version of the paper, robustness checks are performed with respect to the original code used to generate Table 1, instead of the corrected code that delivers Table 2.[2]

3.1 Different Treatment of Outliers

First, we test robustness of results to different treatment of outliers. Table 4 replicates Table 1 but replacing *trimmed* income and profits as dependent variables in Columns 1-2 and 5-6 with *winsorized* incomes and profits.[3] While the magnitude of the coefficients change, and the differences between entrepreneurs in the top and middle terciles are mitigated, all the main conclusions derived from the original table still hold. Similar conclusions can be obtained when looking at Table 5, which reproduces Table 3 and adds *winsorized* income and profits in Columns 3-4 and 9-10, respectively.

Table 6 replicates Table 1 but using the inverse hyperbolic sine (IHS) transformation instead of a logarithmic transformation for dependent variables in Columns 3-4 and 7-8.[4] Results are overall similar to those in the original table. Table 7 reproduces Table 3 and adds the IHS transformation for income and profits in Columns 5-6 and 11-12, respectively. Again, we do not see significant changes in the estimates.

[2]We also conducted all robustness checks using the corrected code and conclusions are broadly similar. Results are presented in Appendix B.

[3]This means that instead of dropping observations above the 99.5th percentile of the outcome, we replace them by the value of the outcome at the 99.5th percentile.

[4]This means that instead of using $log(Y+1)$ to transform outcome Y, we use $ln(Y+(Y^2+1)^{1/2})$.

3.2 Results without surveyor and survey month fixed effects

Surveyor and survey month were not randomly allocated across participants in the study, and they might be correlated with the effect of the grants. We test robustness of results to excluding surveyor and survey month fixed effects from the regressions.

Tables 8 and 9 show that results are robust to dropping surveyor and survey month fixed effects. Only marginal differences are observed with respect to tables 1 and 3, respectively.

3.3 Grouping predictions in quartiles instead of terciles

We test the robustness of results to dividing the average rank distribution of entrepreneurs into quartiles instead of terciles. Tables 10 and 11 confirm the predictive power of community information in this case.

In general, we see significant differences between the top quartile and the second quartile; which confirm the authors' conclusions from comparing the top tercile and the second tercile. Moreover, in some instances we observe significant differences between the top quartile and the third quartile (particularly in Table 11). This provides additional evidence of the value of community information in selecting high-growth entrepreneurs.

4 Additional Results: Heterogeneity by Gender

In this Section, we explore whether community information is better at predicting returns to the grant for male than for female entrepreneurs. To do this, we add to the specifications used to obtain Tables 1 and 3 interactions for the gender of the entrepreneur ranked.

Tables 12 and 13 include interactions with a dummy that takes the value of 1 if the entrepreneur ranked is a man and 0 if a woman. The estimates suggest that the differences between the top tercile and the middle tercile are larger for male than for female entrepreneurs. These differences are statistically significant for male entrepreneurs in 7 out of 8 Columns in Table 13 and in the even Columns of Table 12, when predictions are based on both observables and the community ranking. Whereas differences between the top tercile and the middle tercile are not statistically significant when female entrepreneurs are ranked. These findings can be related to those in Hussam et al. (2022a) indicating that women may have an advantage in ranking women, and that only 40% of ranked entrepreneurs in the sample are women.

To complement these findings, we re-estimate Table A17 in Hussam et al. (2022a) by splitting the

sample by gender. In that table, baseline characteristics of households and entrepreneurs are compared across all three terciles of the marginal returns ranks distribution. Hussam et al. (2022a) conclude that when compared to bottom-ranked entrepreneurs, top-ranked entrepreneurs are more likely to be male, more educated and younger. They also have higher scores in digit span memory tests and would require higher monthly wages to leave their businesses. Their households have significantly more assets, their businesses earn much higher profits, and they earn higher monthly income. However, there are not significant differences in demographic characteristics. All these conclusions hold for the sample of male entrepreneurs as shown in Table A1. Most of these conclusions also hold for the sample of female entrepreneurs as shown in Table A2. However, there are some interesting differences: women entrepreneurs in the top tercile are not less likely to be in agriculture, they are more likely to be married, and their level of profits and income are higher but not statistically different from those in the bottom tercile. Another interesting pattern is that women in the top tercile are much less likely to have children below the age of 5 than women in the bottom tercile (while men in the top tercile are more likely to have children in this age range than men in the bottom tercile); which could be in line with findings on the baby profit gap and the lack of childcare documented in the literature (Delecourt and Fitzpatrick, 2021).

Finally, we study whether the distortion of reports documented by Hussam et al. (2022a) differs by gender of the person who provides the ranking. Table A21 in Hussam et al. (2022a) provides evidence that respondents give higher ranks to family members and close peers relative to other peers in the group in the absence of incentives and public disclosure. Both monetary incentives and publicity reduce the average rank assigned to either of these groups. We split the sample by gender and replicate their Table A21. In Table A3, we see that the patterns reported above are if anything stronger in the sample of men rankers than for the average participant. In Table A4, we observe that the evidence that women up-rank family members is weaker and not statistically significant; but there is still evidence that women entrepreneurs up-rank close peers.

5 Conclusion

Overall, we conclude that our replication of the results in Hussam et al. (2022a) is successful. Results are computationally reproducible and robust to different treatment of outliers, to excluding surveyor and survey month fixed effects and to different splits of the average rank distribution of entrepreneurs.

We do find, however, a minor coding error that affects one of the main tables in the paper. While this error does not impact the conclusions of the paper; it points to the importance of carefully

reviewing the programming codes used to generate results in academic papers even when they have been published in a top academic journal and their replication package has been verified. Clearly, checking for computational reproducibility is not enough to guarantee the internal validity of the findings.

Finally, we go beyond the replication of the paper and study heterogeneity of results by gender of the entrepreneurs ranked as well as by gender of the entrepreneur providing the ranking. We find that community information seems to do a slightly better job at predicting high-growth entrepreneurs among men than among women. We find that women entrepreneurs, but not men entrepreneurs, in the top tercile of the ranking are less likely to have younger children than women entrepreneurs at the bottom tercile of the ranking. We also observe that women are less-likely to up-rank their family members than men, but not less likely to up-rank close peers. These findings indicate that incorporating gender considerations when using community information to select high-growth entrepreneurs can be a promising area of research.

References

Bryan, G., D. Karlan, and A. Osman (2022): "Big Loans to Small Businesses: Predicting Winners and Losers in an Entrepreneurial Lending Experiment," NBER Working Paper 29311.

Delecourt, S. and A. Fitzpatrick (2021): "Childcare Matters: Female Business Owners and the Baby-Profit Gap," *Management Science*, 67, 4455:4474.

Ellis, M., C. Kinnan, M. McMillan, and S. Shaukat (2022): "What Predicts the Growth of Small Firms? Evidence from Tanzanian Commercial Loan Data," Working Paper.

Hussam, R., N. Rigol, and B. Roth (2022a): "Targeting High Ability Entrepreneurs Using Community Information: Mechanism Design in the Field," *American Economic Review*, 112.

Hussam, R., N. Rigol, and B. Roth (2022b): "Data and Code for: Targeting High Ability Entrepreneurs Using Community Information: Mechanism Design In The Field," American Economic Association [publisher]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor] https://doi.org/10.3886/E151841V1.

Masetto, I. and D. Ubfal (2023): "Replication Package for: Targeting High Ability Entrepreneurs: Replication and Heterogeneity by Gender of Hussam, Rigol and Roth (2022)," Harvard Dataverse. https://doi.org/10.7910/DVN/DI7RR9.

McKenzie, D. (2021): "Small business training to improve management practices in developing countries: re-assessing the evidence for 'training doesn't work'," *Oxford Review of Economic Policy*, 37, 276–301.

McKenzie, D. and D. Sansone (2019): "Predicting entrepreneurial success is hard: Evidence from a business plan competition in Nigeria," *Journal of Development Economics*, 141, 102369.

Ubfal, D. (2023): "What Works in Supporting Women-led Businesses?" World Bank, Washington, DC. http://hdl.handle.net/10986/38564.

Tables

Table 1: Replication of Table 4 in Hussam et al. (2022a)

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	1157.509		0.115		2377.487		0.093	
	(752.152)		(0.202)		(608.675)		(0.311)	
Winner*Top Middle Controls	1576.349		0.206		1599.643		-0.081	
	(868.320)		(0.200)		(498.874)		(0.276)	
Winner*Top Tercile Controls+Rank		3559.464		0.632		2752.701		0.798
		(725.716)		(0.180)		(569.789)		(0.302)
Winner*Top Middle Controls+Rank		1867.939		0.326		1288.719		0.247
		(792.343)		(0.164)		(423.688)		(0.246)
Winner	-342.438	-1265.233	0.031	-0.180	-652.922	-656.104	0.309	-0.031
	(538.084)	(575.034)	(0.173)	(0.088)	(437.700)	(412.129)	(0.234)	(0.210)
P-value from F-Test								
Winner*Top Tercile = Winner*Middle Tercile	0.625	0.038	0.571	0.156	0.209	0.007	0.524	0.045
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table reproduces Table 4 in Hussam et al. (2022a) and was obtained from their replication package. It estimates Specification 8 in the paper. Top (Middle) Tercile Controls is a dummy for whether the entrepreneur is in the top (middle) tercile of predicted marginal return to capital based on observables. Top (Middle) Tercile Controls+Rank is a dummy for whether the entrepreneur is in the top (middle) tercile of predicted marginal return to capital based on observables plus the average community ranking (excluding the entrepreneur's ranking of herself). Winner indicates that the household is a grant recipient. The unit of observation is the household. Robust standard errors clustered at the group level in parentheses. All regressions include household, survey month, survey round, and surveyor fixed effects. The even columns also include baseline controls interacted with Winner. All regressions are weighed by the inverse propensity score.
Outcome variables: Columns (1)-(2) and (5)-(6) include *trimmed* distributions of income and profits, respectively. Columns (3)-(4) and (7)-(8) include the natural log of the (outcome+1) of the *untrimmed* distribution.

Table 2: Replicating Table 1 after Correcting for Coding Error

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	4426.341		0.050		2247.798		0.087	
	(887.822)		(0.208)		(487.448)		(0.302)	
Winner*Top Middle Controls	3234.703		0.161		1911.549		0.042	
	(755.940)		(0.196)		(670.607)		(0.282)	
Winner*Top Tercile Controls+Rank		4921.151		0.773		3291.618		0.903
		(841.090)		(0.213)		(554.442)		(0.283)
Winner*Top Middle Controls+Rank		3255.179		0.291		1775.345		0.155
		(719.769)		(0.107)		(415.552)		(0.251)
Winner	-2005.837	-2117.368	0.066	-0.210	-699.191	-1024.363	0.267	-0.053
	(713.216)	(686.665)	(0.173)	(0.090)	(497.904)	(401.116)	(0.233)	(0.195)
P-value from F-Test								
Winner*Top Tercile = Winner*Middle Tercile	0.096	0.007	0.491	0.024	0.521	0.005	0.868	0.009
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 1 after correcting the coding error detected in the do files of Hussam et al. (2022b).

Table 3: Replication of Table 2 in Hussam et al. (2022a)

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Panel A: Average MR Rank Value								
Winner*Rank	1275.64	1127.80	0.22	0.17	606.86	590.95	0.40	0.37
	(459.30)	(340.58)	(0.09)	(0.09)	(290.24)	(235.00)	(0.16)	(0.17)
Winner	-3709.32		-0.62		-1350.02		-1.04	
	(1609.98)		(0.31)		(909.10)		(0.56)	
Panel B: Average MR Rank Tercile								
Winner*Top Tercile Rank	2261.13	2167.94	0.34	0.19	1301.83	1107.33	0.67	0.48
	(802.98)	(627.62)	(0.21)	(0.19)	(557.19)	(404.91)	(0.31)	(0.31)
Winner*Middle Tercile Rank	453.22	820.95	0.02	-0.00	118.19	139.78	0.07	-0.07
	(785.55)	(582.59)	(0.18)	(0.18)	(388.99)	(347.92)	(0.29)	(0.30)
Winner	-448.84		0.00		151.96		0.03	
	(622.35)		(0.16)		(374.89)		(0.25)	
P-value from F-Test								
Winner*Top Tercile Rank= Winner*Middle Tercile Rank	0.026	0.034	0.062	0.245	0.027	0.029	0.023	0.039
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Controls		X		X		X		X
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table reproduces Table 2 in Hussam et al. (2022a) and was obtained from their replication package. It estimates Specification 4 in their paper. Rank indicates the average ranking the entrepreneur was given by her peers for the marginal returns to grant quintile ranking question. It excludes the self rank before producing the average ranking. Top (Middle) Tercile Rank is a dummy for whether the entrepreneur is in the top (middle) tercile of the average marginal return rank distribution. Winner indicates that the household is a grant recipient. The unit of observation is the household. Robust standard errors clustered at the group level in parentheses. All regressions include household, survey month, survey round, and surveyor fixed effects. The even columns also include baseline controls interacted with Winner. All regressions are weighed by the inverse propensity score.
Outcome variables: Columns (1)-(2) and (5)-(6) show the trimmed distributions of income and profits, respectively. Columns (3)-(4) and (7)-(8) show the natural log of the (outcome+1) of the untrimmed distribution.

Table 4: Replicating Table 1: Winsorizing instead of Trimming Outcomes

	(1) Winsorized income	(2) Winsorized income	(3) Log Income	(4) Log Income	(5) Winsorized profits	(6) Winsorized profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	1518.524		0.115		2291.347		0.093	
	(643.134)		(0.202)		(526.771)		(0.311)	
Winner*Top Middle Controls	1642.676		0.206		1773.061		-0.081	
	(725.010)		(0.200)		(471.174)		(0.276)	
Winner*Top Tercile Controls+Rank		3270.920		0.632		2582.721		0.798
		(598.612)		(0.180)		(467.757)		(0.302)
Winner*Top Middle Controls+Rank		2199.316		0.326		1437.350		0.247
		(661.465)		(0.164)		(428.323)		(0.246)
Winner	-593.579	-1397.289	0.031	-0.180	-923.985	-900.268	0.309	-0.031
	(537.709)	(503.929)	(0.173)	(0.088)	(427.300)	(348.410)	(0.234)	(0.210)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.843	0.090	0.571	0.156	0.236	0.013	0.524	0.045
Mean of Outcome for Grant Losers	8159.64	8159.64	8.62	8.62	4527.73	4527.73	7.33	7.33
	[6101.35]	[6101.35]	[1.35]	[1.35]	[4703.07]	[4703.07]	[2.55]	[2.55]
Observations	5342	5342	5342	5342	5338	5338	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 1 but replacing *trimmed* income and profits in Columns 1-2 and 5-6 with *winsorized* incomes and profits. Winsorized outcomes are obtained by replacing observations above the 99.5th percentile by the value of outcome at the 99.5th percentile.

Table 5: Replicating Table 3: Adding Winsorized Outcomes

	(1) Trimmed Income	(2) Trimmed Income	(3) Winsorized Income	(4) Winsorized Income	(5) Log Income	(6) Log Income	(7) Trimmed Profits	(8) Trimmed Profits	(9) Winsorized Profits	(10) Winsorized Profits	(11) Log Profits	(12) Log Profits
Panel A: Average MR Rank Value												
Winner*Rank	1275.64	1127.80	986.90	860.49	0.22	0.17	606.86	590.95	520.64	544.38	0.40	0.37
	(459.30)	(340.58)	(372.50)	(312.06)	(0.09)	(0.09)	(290.24)	(235.00)	(261.65)	(227.28)	(0.16)	(0.17)
Winner	-3709.32		-2850.82		-0.62		-1350.02		-1319.53		-1.04	
	(1609.98)		(1276.86)		(0.31)		(909.10)		(830.68)		(0.56)	
Panel B: Average MR Rank Tercile												
Winner*Top Tercile Rank	2261.13	2167.94	1851.29	1668.61	0.34	0.19	1301.83	1107.33	1126.82	1005.60	0.67	0.48
	(802.98)	(627.62)	(682.52)	(580.76)	(0.21)	(0.19)	(557.19)	(404.91)	(488.90)	(388.87)	(0.31)	(0.31)
Winner*Middle Tercile Rank	453.22	820.95	498.75	669.23	0.02	-0.00	118.19	139.78	142.62	184.35	0.07	-0.07
	(785.55)	(582.59)	(632.04)	(528.15)	(0.18)	(0.18)	(388.99)	(347.92)	(386.31)	(337.92)	(0.29)	(0.30)
Winner	-448.84		-420.64		0.00		151.96		-49.67		0.03	
	(622.35)		(515.77)		(0.16)		(374.89)		(329.39)		(0.25)	
P-value from F-Test												
Winner*Top Tercile Rank= Winner*Middle Tercile Rank	0.026	0.034	0.043	0.084	0.062	0.245	0.027	0.029	0.032	0.045	0.023	0.039
Mean of Outcome for Grant Losers	8197.37	8197.37	8159.64	8159.64	8.62	8.62	4551.38	4551.38	4527.73	4527.73	7.33	7.33
	[6412.25]	[6412.25]	[6101.35]	[6101.35]	[1.35]	[1.35]	[5159.23]	[5159.23]	[4703.07]	[4703.07]	[2.55]	[2.55]
Controls		X		X		X		X		X		X
Observations	5324	5324	5342	5342	5342	5342	5320	5320	5338	5338	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 3 but adding *winsorized* income and profits in Columns 3-4 and 9-10, respectively. Winsorized outcomes are obtained by replacing observations above the 99.5th percentile by the value of outcome at the 99.5th percentile.

Table 6: Replicating Table 1: Using IHS transformation instead of log transformation of outcomes

	(1) Income	(2) Income	(3) IHS Income	(4) IHS Income	(5) Profits	(6) Profits	(7) IHS Profits	(8) IHS Profits
Winner*Top Tercile Controls	1157.509		-0.087		2377.487		0.085	
	(752.152)		(0.225)		(608.675)		(0.335)	
Winner*Top Middle Controls	1576.349		-0.016		1599.643		-0.110	
	(868.320)		(0.177)		(498.874)		(0.297)	
Winner*Top Tercile Controls+Rank		3559.464		0.658		2752.701		0.841
		(725.716)		(0.192)		(569.789)		(0.325)
Winner*Top Middle Controls+Rank		1867.939		0.332		1288.719		0.252
		(792.343)		(0.175)		(423.688)		(0.264)
Winner	-342.438	-1265.233	0.181	-0.182	-652.922	-656.104	0.342	-0.024
	(538.084)	(575.034)	(0.154)	(0.092)	(437.700)	(412.129)	(0.251)	(0.224)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.625	0.038	0.734	0.158	0.209	0.007	0.508	0.048
Mean of Outcome for Grant Losers	8197.37	8197.37	9.30	9.30	4551.38	4551.38	7.95	7.95
	[6412.25]	[6412.25]	[1.42]	[1.42]	[5159.23]	[5159.23]	[2.74]	[2.74]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 1 but using the inverse hyperbolic sine (IHS) transformation instead of a logarithmic transformation for dependent variables in Columns 3-4 and 7-8.

Table 7: Replicating Table 3: Adding IHS Transformation of Outcomes

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) IHS Income	(6) IHS Income	(7) Profits	(8) Profits	(9) Log Profits	(10) Log Profits	(11) IHS Profits	(12) IHS Profits
Panel A: Average MR Rank Value												
Winner*Rank	1275.64	1127.80	0.22	0.17	0.24	0.18	606.86	590.95	0.40	0.37	0.43	0.40
	(459.30)	(340.58)	(0.09)	(0.09)	(0.10)	(0.09)	(290.24)	(235.00)	(0.16)	(0.17)	(0.17)	(0.18)
Winner	-3709.32		-0.62		-0.65		-1350.02		-1.04		-1.12	
	(1609.98)		(0.31)		(0.33)		(909.10)		(0.56)		(0.60)	
Panel B: Average MR Rank Tercile												
Winner*Top Tercile Rank	2261.13	2167.94	0.34	0.19	0.36	0.19	1301.83	1107.33	0.67	0.48	0.72	0.51
	(802.98)	(627.62)	(0.21)	(0.19)	(0.22)	(0.20)	(557.19)	(404.91)	(0.31)	(0.31)	(0.34)	(0.34)
Winner*Middle Tercile Rank	453.22	820.95	0.02	-0.00	0.02	-0.01	118.19	139.78	0.07	-0.07	0.08	-0.07
	(785.55)	(582.59)	(0.18)	(0.18)	(0.20)	(0.19)	(388.99)	(347.92)	(0.29)	(0.30)	(0.31)	(0.33)
Winner	-448.84		0.00		0.01		151.96		0.03		0.04	
	(622.35)		(0.16)		(0.17)		(374.89)		(0.25)		(0.27)	
P-value from F-Test												
Winner*Top Tercile Rank= Winner*Middle Tercile Rank	0.026	0.034	0.062	0.245	0.065	0.256	0.027	0.029	0.023	0.039	0.024	0.041
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	9.30	9.30	4551.38	4551.38	7.33	7.33	7.95	7.95
	[6412.25]	[6412.25]	[1.35]	[1.35]	[1.42]	[1.42]	[5159.23]	[5159.23]	[2.55]	[2.55]	[2.74]	[2.74]
Controls		X		X		X		X		X		X
Observations	5324	5324	5342	5342	5342	5342	5320	5320	5338	5338	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 3 but adding the IHS transformation for income and profits in Columns 5-6 and 11-12, respectively.

Table 8: Replicating Table 1: Without Surveyor and Survey Month Fixed effects

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	1189.603		0.093		2252.246		0.155	
	(742.287)		(0.206)		(577.400)		(0.317)	
Winner*Top Middle Controls	1532.685		0.166		1522.693		-0.032	
	(834.552)		(0.205)		(494.181)		(0.273)	
Winner*Top Tercile Controls+Rank		3603.443		0.557		2538.042		0.719
		(735.586)		(0.209)		(584.533)		(0.305)
Winner*Top Middle Controls+Rank		1922.594		0.074		1180.184		0.374
		(819.866)		(0.149)		(434.177)		(0.256)
Winner	-384.791	-1360.693	0.034	-0.095	-597.315	-571.747	0.258	-0.066
	(538.010)	(565.533)	(0.178)	(0.133)	(436.198)	(417.091)	(0.235)	(0.225)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.691	0.045	0.636	0.011	0.183	0.013	0.489	0.184
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 1 but dropping surveyor and survey month fixed effects.

Table 9: Replicating Table 3: Without Surveyor and Survey Month Fixed Effects

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Panel A: Average MR Rank Value								
Winner*Rank	1236.26	1070.17	0.22	0.16	590.74	579.08	0.40	0.37
	(464.14)	(339.59)	(0.09)	(0.09)	(302.34)	(236.99)	(0.16)	(0.17)
Winner	-3623.41		-0.62		-1310.91		-1.03	
	(1607.51)		(0.31)		(933.92)		(0.56)	
Panel B: Average MR Rank Tercile								
Winner*Top Tercile Rank	2214.20	2069.95	0.33	0.17	1293.32	1105.67	0.66	0.47
	(821.35)	(633.86)	(0.22)	(0.19)	(581.33)	(415.98)	(0.32)	(0.31)
Winner*Middle Tercile Rank	457.61	672.30	0.02	-0.01	125.51	94.35	0.10	-0.04
	(782.79)	(570.54)	(0.18)	(0.18)	(392.52)	(348.29)	(0.30)	(0.31)
Winner	-479.19		-0.01		137.44		0.02	
	(618.28)		(0.16)		(368.76)		(0.25)	
P-value from F-Test								
Winner*Top Tercile Rank= Winner*Middle Tercile Rank	0.028	0.026	0.075	0.270	0.034	0.026	0.034	0.052
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Controls		X		X		X		X
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 3 but dropping surveyor and survey month fixed effects.

Table 10: Replicating Table 1: Grouping Predictions in Quartiles instead of Terciles

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top quartile Controls	1899.419		0.084		3051.811		0.081	
	(883.522)		(0.237)		(699.690)		(0.363)	
Winner*Third quartile Controls	2660.370		-0.030		1958.916		-0.107	
	(991.237)		(0.221)		(485.080)		(0.319)	
Winner*Second quartile Controls	1914.042		0.293		2291.336		-0.013	
	(846.212)		(0.276)		(618.001)		(0.340)	
Winner*Top quartile Controls+Rank		4519.662		0.709		3056.459		0.868
		(913.451)		(0.214)		(689.662)		(0.342)
Winner*Third quartile Controls+Rank		3388.309		0.357		1878.591		0.560
		(936.143)		(0.168)		(504.820)		(0.304)
Winner*Second quartile Controls+Rank		2554.493		0.224		934.323		0.228
		(847.075)		(0.178)		(553.698)		(0.286)
Winner	-1051.630	-2092.752	0.061	-0.190	-1108.910	-791.506	0.323	-0.095
	(595.919)	(686.401)	(0.214)	(0.108)	(445.604)	(443.028)	(0.265)	(0.232)
P-value from F-Test								
Winner*Top quartile= Winner*Second quartile	0.987	0.027	0.321	0.045	0.324	0.003	0.790	0.042
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 1 but dividing the average rank distribution of entrepreneurs into quartiles instead of terciles.

Table 11: Replicating Table 3: Grouping Predictions in Quartiles instead of Terciles

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Panel A: Average MR Rank Value								
Winner*Rank	1275.64	1127.80	0.22	0.17	606.86	590.95	0.40	0.37
	(459.30)	(340.58)	(0.09)	(0.09)	(290.24)	(235.00)	(0.16)	(0.17)
Winner	-3709.32		-0.62		-1350.02		-1.04	
	(1609.98)		(0.31)		(909.10)		(0.56)	
Panel B: Average MR Rank Quartile								
Winner*Top quartile Rank	2272.50	1939.40	0.29	0.13	1255.23	1002.46	0.65	0.50
	(903.32)	(700.96)	(0.23)	(0.22)	(591.77)	(427.90)	(0.35)	(0.36)
Winner*Third quartile Rank	1056.93	1300.56	0.24	0.28	435.79	807.61	0.62	0.67
	(968.00)	(799.18)	(0.28)	(0.31)	(595.28)	(527.41)	(0.37)	(0.39)
Winner*Second quartile Rank	161.90	30.52	-0.17	-0.24	-119.36	-361.69	-0.19	-0.30
	(938.57)	(698.99)	(0.21)	(0.20)	(440.04)	(396.87)	(0.35)	(0.36)
Winner	-461.12		0.05		198.21		0.05	
	(737.20)		(0.19)		(422.51)		(0.30)	
P-value from F-Test								
Winner*Top quartile Rank= Winner*Second quartile Rank	0.015	0.004	0.008	0.028	0.011	0.003	0.002	0.003
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Controls		X		X		X		X
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 3 but dividing the average rank distribution of entrepreneurs into quartiles instead of terciles.

Table 12: Heterogeneity by Gender (based on Table 1)

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	784.152		0.066		1587.063		0.379	
	(1243.139)		(0.177)		(414.256)		(0.364)	
Winner*Top Middle Controls	1691.745		0.264		1287.957		-0.049	
	(1186.687)		(0.183)		(396.747)		(0.348)	
Male Winner*Top Tercile Controls	1798.556		0.148		1224.681		-0.375	
	(1434.191)		(0.344)		(1023.324)		(0.583)	
Male Winner*Top Middle Controls	-45.064		-0.074		488.014		0.021	
	(1752.607)		(0.324)		(865.157)		(0.460)	
Winner*Top Tercile Controls+Rank		2648.693		0.157		1411.387		0.464
		(964.818)		(0.164)		(427.954)		(0.457)
Winner*Top Middle Controls+Rank		1263.513		0.221		1085.906		0.611
		(1468.096)		(0.145)		(383.578)		(0.328)
Male Winner*Top Tercile Controls+Rank		1774.619		0.700		2073.354		0.430
		(1551.889)		(0.292)		(1039.305)		(0.631)
Male Winner*Top Middle Controls+Rank		1016.534		0.184		351.250		-0.599
		(1714.367)		(0.291)		(744.479)		(0.493)
Winner	-908.752	-1538.826	-0.090	-0.093	-566.912	-432.822	-0.017	-0.198
	(989.067)	(879.629)	(0.150)	(0.111)	(392.285)	(384.284)	(0.219)	(0.289)
Male Winner	687.455	375.436	0.170	-0.153	-155.146	-387.348	0.447	0.294
	(1143.641)	(1104.579)	(0.270)	(0.152)	(698.864)	(645.864)	(0.347)	(0.412)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.348	0.280	0.138	0.693	0.377	0.362	0.300	0.711
P-value from F-Test								
Male Winner*Top Tercile + Winner*Top Tercile= Male Winner*Middle Tercile + Winner*Middle Tercile	0.349	0.052	0.928	0.149	0.246	0.010	0.934	0.015
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Mean of Outcome for Male Grant Losers	8041.11	8041.11	8.59	8.59	5693.71	5693.71	7.76	7.76
	[6411.43]	[6411.43]	[1.42]	[1.42]	[5576.06]	[5576.06]	[2.43]	[2.43]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table is based on Table 1 and introduces interactions with a dummy variable taking the value of 1 when it is male entrepreneurs instead of female entrepreneurs who are ranked.

Table 13: Heterogeneity by Gender (based on Table 3)

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Panel A: Average MR Rank Value								
Male Winner*Rank	761.49	526.39	0.14	0.21	1144.11	1181.07	0.00	0.01
	(797.34)	(631.08)	(0.17)	(0.16)	(496.75)	(419.73)	(0.33)	(0.32)
Winner*Rank	685.98	757.78	0.11	0.02	-236.47	-239.25	0.38	0.36
	(539.61)	(472.61)	(0.12)	(0.14)	(309.16)	(266.78)	(0.25)	(0.24)
Winner	-2226.73		-0.34		1083.39		-1.12	
	(1964.22)		(0.42)		(983.51)		(0.81)	
Male Winner	-1827.71		-0.33		-3295.70		0.22	
	(2837.75)		(0.58)		(1553.52)		(1.12)	
Panel B: Average MR Rank Tercile								
Male Winner*Top Tercile Rank	1894.48	2190.84	0.29	0.52	1730.29	2296.84	-0.10	0.02
	(1423.91)	(1184.30)	(0.36)	(0.33)	(965.59)	(821.04)	(0.63)	(0.62)
Male Winner*Middle Tercile Rank	1431.91	1257.86	-0.01	0.12	-927.70	-254.62	-0.80	-0.79
	(1567.01)	(1079.56)	(0.33)	(0.33)	(720.82)	(701.25)	(0.56)	(0.58)
Winner*Top Tercile Rank	959.45	750.82	0.13	-0.15	30.42	-447.92	0.68	0.43
	(877.07)	(785.79)	(0.18)	(0.22)	(523.27)	(462.49)	(0.46)	(0.46)
Winner*Middle Tercile Rank	-372.51	79.01	0.03	-0.07	650.14	280.34	0.55	0.39
	(1220.25)	(802.67)	(0.15)	(0.19)	(389.86)	(458.85)	(0.38)	(0.42)
Winner	-121.47		-0.03		27.44		-0.32	
	(706.15)		(0.13)		(378.19)		(0.31)	
Male Winner	-539.78		0.05		206.15		0.58	
	(1096.63)		(0.28)		(583.00)		(0.47)	
P-value from F-Test								
Winner*Top Tercile Rank= Winner*Middle Tercile Rank	0.269	0.461	0.535	0.664	0.179	0.092	0.748	0.918
P-value from F-Test								
Male Winner*Top Tercile Rank + Winner*Top Tercile Rank= Male Winner*Middle Tercile Rank + Winner*Middle Tercile Rank	0.044	0.042	0.100	0.170	0.006	0.003	0.013	0.011
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Mean of Outcome for Male Grant Losers	8041.11	8041.11	8.59	8.59	5693.71	5693.71	7.76	7.76
	[6411.43]	[6411.43]	[1.42]	[1.42]	[5576.06]	[5576.06]	[2.43]	[2.43]
Controls		X		X		X		X
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table is based on Table 3 and introduces interactions with a dummy variable taking the value of 1 when it is male entrepreneurs instead of female entrepreneurs who are ranked.

Appendix A: Additional Tables

Table A1: Replicates Table A17 in Hussam et al. (2022a): Sample Restricted to Male Entrepreneurs

	(1) Bottom Tercile Rank Mean	(2) Middle Tercile Rank Difference	(3) Top Tercile Rank Difference
Panel A: Individual Characteristics of Ranked Entrepreneur			
Education	5.779	0.804	2.131
		(0.332)	(0.333)
Married	0.882	-0.010	0.023
		(0.030)	(0.029)
Age	44.480	-1.995	-2.374
		(1.157)	(1.173)
Digitspan	5.099	0.061	0.555
		(0.159)	(0.155)
Monthly Sales Change 2014	532.673	17.408	83.641
		(217.282)	(204.576)
Business Employed in 5 Yrs	0.819	0.003	0.043
		(0.036)	(0.033)
Wage Exit Self-Employment	12199.005	783.573	2070.719
		(662.269)	(674.078)
Panel B: Sector of Ranked Entrepreneur			
Manufacturing	0.103	-0.011	0.060
		(0.026)	(0.034)
Retail	0.417	0.017	-0.006
		(0.042)	(0.043)
Service	0.412	0.016	-0.009
		(0.047)	(0.045)
Agriculture	0.074	-0.026	-0.051
		(0.020)	(0.019)
Panel C: Household Characteristics			
Household Size	3.652	0.315	0.281
		(0.120)	(0.130)
No. Children 0-5	0.358	0.202	0.099
		(0.071)	(0.070)
No. Children 6-12	0.525	-0.052	-0.017
		(0.082)	(0.081)
No. Salaried HH Members	0.353	-0.056	-0.056
		(0.054)	(0.052)
No. Daily Wage HH Members	0.245	-0.000	-0.149
		(0.053)	(0.047)
Total No. HH Businesses	1.123	0.007	-0.007
		(0.031)	(0.031)
Baseline Avg Monthly Income in Past Year	7812.255	999.735	1291.855
		(626.242)	(595.547)
Value HH Assets	366129.363	97007.331	150943.881
		(65569.508)	(52639.685)
Panel D: Characteristics of Household Businesses			
Baseline Total Non-HH Labor	0.270	0.034	0.249
		(0.111)	(0.165)
Baseline Total HH Labor	0.284	-0.003	0.048
		(0.060)	(0.074)
Baseline Total Hours Worked Past Week	48.191	4.793	7.589
		(2.754)	(2.682)
Baseline Total Days Worked Past Month	24.980	1.138	1.458
		(0.992)	(1.030)
Avg. Monthly Profits	4917.900	991.260	2395.157
		(408.078)	(738.798)
Baseline Total Capital	42333.907	82425.606	444650.232
		(82720.152)	(396493.726)

Table A2: Replicates Table A17 in Hussam et al. (2022a): Sample Restricted to Female Entrepreneurs

	(1) Bottom Tercile Rank Mean	(2) Middle Tercile Rank Difference	(3) Top Tercile Rank Difference
Panel A: Individual Characteristics of Ranked Entrepreneur			
Education	6.842	1.113	1.848
		(0.472)	(0.441)
Married	0.726	0.043	0.093
		(0.049)	(0.051)
Age	38.938	-0.149	-2.260
		(1.327)	(1.263)
Digitspan	4.862	0.245	0.618
		(0.200)	(0.190)
Monthly Sales Change 2014	370.172	215.717	234.898
		(163.006)	(169.661)
Business Employed in 5 Yrs	0.842	-0.030	-0.061
		(0.039)	(0.048)
Wage Exit Self-Employment	8472.222	513.080	1605.405
		(653.237)	(855.478)
Panel B: Sector of Ranked Entrepreneur			
Manufacturing	0.610	0.024	0.042
		(0.055)	(0.061)
Retail	0.212	-0.036	-0.011
		(0.044)	(0.049)
Service	0.158	0.003	-0.015
		(0.040)	(0.040)
Agriculture	0.021	0.008	-0.015
		(0.015)	(0.019)
Panel C: Household Characteristics			
Household Size	3.562	0.261	0.012
		(0.167)	(0.195)
No. Children 0-5	0.438	-0.121	-0.193
		(0.077)	(0.076)
No. Children 6-12	0.507	0.006	0.149
		(0.101)	(0.114)
No. Salaried HH Members	0.685	0.004	0.023
		(0.081)	(0.086)
No. Daily Wage HH Members	0.521	-0.128	-0.229
		(0.085)	(0.094)
Total No. HH Businesses	1.103	0.088	0.071
		(0.042)	(0.047)
Baseline Avg Monthly Income in Past Year	8484.247	1122.084	1330.838
		(785.592)	(853.891)
Value HH Assets	321917.911	179901.933	100997.861
		(61397.103)	(57136.067)
Panel D: Characteristics of Household Businesses			
Baseline Total Non-HH Labor	0.027	0.275	0.063
		(0.206)	(0.053)
Baseline Total HH Labor	0.356	-0.063	-0.034
		(0.073)	(0.081)
Baseline Total Hours Worked Past Week	32.664	6.056	2.339
		(3.611)	(3.578)
Baseline Total Days Worked Past Month	23.048	3.315	0.795
		(1.468)	(1.586)
Avg. Monthly Profits	2800.970	710.444	774.908
		(473.596)	(544.413)
Baseline Total Capital	22868.527	23082.725	12738.758
		(10247.818)	(10079.186)

Table A3: Replicates Table A21 in Hussam et al. (2022a): Restrict Sample to Male Rankers

	(1) Rank	(2) Rank	(3) Rank	(4) Rank	(5) Rank	(6) Rank
Characteristic	0.471	0.432	0.550	0.182	0.075	0.301
	(0.147)	(0.208)	(0.227)	(0.064)	(0.099)	(0.085)
Characteristic*Public	-0.371	-0.165	-0.501	0.026	0.062	-0.000
	(0.183)	(0.281)	(0.268)	(0.105)	(0.149)	(0.151)
Characteristic*Incentives	-0.233	-0.224	-0.141	-0.034	0.028	-0.102
	(0.203)	(0.272)	(0.334)	(0.103)	(0.128)	(0.174)
Characteristic*Public*Incentives	0.326	0.072	0.493	0.117	0.017	0.200
	(0.261)	(0.374)	(0.390)	(0.158)	(0.223)	(0.240)
Mean of Outcome	3.12 [1.37]	3.12 [1.37]	3.12 [1.37]	3.12 [1.37]	3.12 [1.37]	3.12 [1.37]
Characteristic	Family	Family	Family	CR Peer	CR Peer	CR Peer
Treatment	Pooled	Stakes	No Stakes	Pooled	Stakes	No Stakes
Observations	13950	7325	6625	17511	9192	8319
Number of Households	1306	1306	1306	1306	1306	1306

Table A4: Replicates Table A21 in Hussam et al. (2022a): Restrict Sample to Female Rankers

	(1) Rank	(2) Rank	(3) Rank	(4) Rank	(5) Rank	(6) Rank
Characteristic	0.274	0.199	0.343	0.243	0.028	0.395
	(0.161)	(0.191)	(0.258)	(0.098)	(0.127)	(0.125)
Characteristic*Public	-0.286	-0.127	-0.440	-0.147	-0.054	-0.230
	(0.230)	(0.363)	(0.330)	(0.140)	(0.201)	(0.179)
Characteristic*Incentives	-0.020	0.054	-0.138	-0.331	-0.154	-0.451
	(0.226)	(0.370)	(0.312)	(0.141)	(0.223)	(0.170)
Characteristic*Public*Incentives	0.173	0.100	0.274	0.391	0.362	0.412
	(0.300)	(0.484)	(0.445)	(0.198)	(0.292)	(0.264)
Mean of Outcome	3.20 [1.37]	3.20 [1.37]	3.20 [1.37]	3.20 [1.37]	3.20 [1.37]	3.20 [1.37]
Characteristic	Family	Family	Family	CR Peer	CR Peer	CR Peer
Treatment	Pooled	Stakes	No Stakes	Pooled	Stakes	No Stakes
Observations	8535	4067	4468	10701	5093	5608
Number of Households	1132	1132	1132	1132	1132	1132

Appendix B: Tables After Correcting Coding Error

Table B1: Heterogeneity by Gender. Replicates Table 12, after Correcting for Coding Error

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	4548.258		0.023		2746.083		0.288	
	(1114.819)		(0.177)		(688.050)		(0.353)	
Winner*Top Middle Controls	3701.649		0.280		1958.699		0.021	
	(1164.619)		(0.181)		(704.130)		(0.369)	
Male Winner*Top Tercile Controls	-312.203		0.117		203.813		-0.240	
	(1646.986)		(0.352)		(916.980)		(0.562)	
Male Winner*Top Middle Controls	-841.936		-0.158		142.267		0.075	
	(1575.459)		(0.316)		(1169.160)		(0.486)	
Winner*Top Tercile Controls+Rank		4289.922		0.160		2163.498		0.420
		(1109.033)		(0.167)		(503.305)		(0.448)
Winner*Top Middle Controls+Rank		4398.629		0.343		1526.839		0.412
		(1113.967)		(0.138)		(515.369)		(0.351)
Male Winner*Top Tercile Controls+Rank		846.352		0.916		2081.249		0.658
		(1617.634)		(0.337)		(1126.749)		(0.585)
Male Winner*Top Middle Controls+Rank		-1833.201		-0.058		414.301		-0.425
		(1449.529)		(0.215)		(785.754)		(0.522)
Winner	-2541.318	-2590.922	-0.088	-0.129	-1769.063	-1093.906	-0.017	-0.127
	(1065.962)	(1023.076)	(0.150)	(0.109)	(686.475)	(491.534)	(0.219)	(0.286)
Male Winner	939.179	817.316	0.214	-0.147	1305.980	93.424	0.393	0.127
	(1418.568)	(1326.050)	(0.271)	(0.158)	(818.653)	(632.057)	(0.348)	(0.388)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.218	0.876	0.050	0.270	0.012	0.046	0.530	0.984
P-value from F-Test								
Male Winner*Top Tercile + Winner*Top Tercile= Male Winner*Middle Tercile + Winner*Middle Tercile	0.168	0.004	0.944	0.007	0.247	0.013	0.901	0.003
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Mean of Outcome for Male Grant Losers	8041.11	8041.11	8.59	8.59	5693.71	5693.71	7.76	7.76
	[6411.43]	[6411.43]	[1.42]	[1.42]	[5576.06]	[5576.06]	[2.43]	[2.43]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Specification: This table replicates Table 12 after correcting the coding error detected in the do files of Hussam et al. (2022b).

Table B2: Replicating Table 4 : Winsorizing instead of Trimming Outcomes, after Correcting for Coding Error

	(1) Winsorized Income	(2) Winsorized Income	(3) Log Income	(4) Log Income	(5) Winsorized Profits	(6) Winsorized Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	4214.645		0.050		2288.480		0.087	
	(703.631)		(0.208)		(471.459)		(0.302)	
Winner*Top Middle Controls	3648.684		0.161		1847.858		0.042	
	(624.390)		(0.196)		(561.585)		(0.282)	
Winner*Top Tercile Controls+Rank		4626.474		0.773		3136.585		0.903
		(645.222)		(0.213)		(460.986)		(0.283)
Winner*Top Middle Controls+Rank		3468.911		0.291		1951.556		0.155
		(608.341)		(0.107)		(417.554)		(0.251)
Winner	-2157.242	-2195.209	0.066	-0.210	-949.716	-1299.728	0.267	-0.053
	(584.909)	(520.076)	(0.173)	(0.090)	(456.277)	(361.703)	(0.233)	(0.195)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.290	0.038	0.491	0.024	0.277	0.006	0.868	0.009
Mean of Outcome for Grant Losers	8159.64	8159.64	8.62	8.62	4527.73	4527.73	7.33	7.33
	[6101.35]	[6101.35]	[1.35]	[1.35]	[4703.07]	[4703.07]	[2.55]	[2.55]
Observations	5342	5342	5342	5342	5338	5338	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Specification: This table replicates Table 4 after correcting the coding error detected in the do files of Hussam et al. (2022b).

Table B3: Replicating Table 6 : IHS transformation, after Correcting for Coding Error

	(1) Income	(2) Income	(3) IHS Income	(4) IHS Income	(5) Profits	(6) Profits	(7) IHS Profits	(8) IHS Profits
Winner*Top Tercile Controls	4426.341		0.047		2247.798		-0.070	
	(887.822)		(0.222)		(487.448)		(0.339)	
Winner*Top Middle Controls	3234.703		0.155		1911.549		-0.159	
	(755.940)		(0.209)		(670.607)		(0.306)	
Winner*Top Tercile Controls+Rank		4921.151		0.819		3291.618		0.960
		(841.090)		(0.228)		(554.442)		(0.305)
Winner*Top Middle Controls+Rank		3255.179		0.311		1775.345		0.149
		(719.769)		(0.112)		(415.552)		(0.270)
Winner	-2005.837	-2117.368	0.077	-0.222	-699.191	-1024.363	0.416	-0.050
	(713.216)	(686.665)	(0.185)	(0.094)	(497.904)	(401.116)	(0.256)	(0.210)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.096	0.007	0.528	0.027	0.521	0.005	0.767	0.008
Mean of Outcome for Grant Losers	8197.37	8197.37	9.30	9.30	4551.38	4551.38	7.95	7.95
	[6412.25]	[6412.25]	[1.42]	[1.42]	[5159.23]	[5159.23]	[2.74]	[2.74]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Specification: This table replicates Table 6 after correcting the coding error detected in the do files of Hussam et al. (2022b).

Table B4: Replicating Table 8: Without Surveyor and Survey Month Fixed effects, after Correcting for Coding Error

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top Tercile Controls	4332.680		0.076		2271.142		0.093	
	(876.602)		(0.214)		(476.957)		(0.302)	
Winner*Top Middle Controls	3264.571		0.173		1852.955		0.017	
	(788.940)		(0.198)		(641.031)		(0.283)	
Winner*Top Tercile Controls+Rank		4888.174		0.750		3213.188		0.708
		(864.022)		(0.209)		(556.825)		(0.285)
Winner*Top Middle Controls+Rank		3733.988		0.192		1795.760		0.260
		(734.418)		(0.109)		(423.682)		(0.266)
Winner	-2023.947	-2319.550	0.034	-0.196	-697.985	-1032.418	0.258	-0.026
	(725.053)	(690.390)	(0.178)	(0.087)	(499.986)	(392.562)	(0.235)	(0.209)
P-value from F-Test								
Winner*Top Tercile= Winner*Middle Tercile	0.093	0.069	0.541	0.010	0.399	0.009	0.773	0.089
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Notes: This table replicates Table 8 after correcting the coding error detected in the do files of Hussam et al. (2022b).

Table B5: Replicating Table 10: Grouping Predictions in Quartiles instead of Terciles, after Correcting for Coding Error

	(1) Income	(2) Income	(3) Log Income	(4) Log Income	(5) Profits	(6) Profits	(7) Log Profits	(8) Log Profits
Winner*Top quartile Controls	5737.594		0.101		3142.438		0.031	
	(992.856)		(0.257)		(526.839)		(0.327)	
Winner*Third quartile Controls	4689.562		0.020		3239.873		-0.042	
	(809.697)		(0.222)		(819.993)		(0.316)	
Winner*Second quartile Controls	4411.634		0.205		2618.528		-0.073	
	(922.032)		(0.256)		(629.898)		(0.369)	
Winner*Top quartile Controls+Rank		6135.998		0.826		3973.294		0.998
		(1022.757)		(0.246)		(686.970)		(0.357)
Winner*Third quartile Controls+Rank		4442.788		0.392		2751.107		0.732
		(804.467)		(0.134)		(491.020)		(0.306)
Winner*Second quartile Controls+Rank		3926.077		0.188		1802.054		0.258
		(941.650)		(0.128)		(517.694)		(0.306)
Winner	-3075.844	-3001.281	0.061	-0.214	-1576.401	-1486.334	0.322	-0.187
	(763.023)	(772.458)	(0.214)	(0.093)	(531.765)	(465.193)	(0.265)	(0.250)
P-value from F-Test								
Winner*Top quartile= Winner*Second quartile	0.146	0.014	0.628	0.012	0.262	0.001	0.762	0.020
Mean of Outcome for Grant Losers	8197.37	8197.37	8.62	8.62	4551.38	4551.38	7.33	7.33
	[6412.25]	[6412.25]	[1.35]	[1.35]	[5159.23]	[5159.23]	[2.55]	[2.55]
Observations	5324	5324	5342	5342	5320	5320	5338	5338
Number of Households	1336	1336	1336	1336	1336	1336	1336	1336

Specification: This table replicates Table 10 after correcting the coding error detected in the do files of Hussam et al. (2022b).