

Online Appendix for “Mentors or Teachers? Microenterprise Training in Kenya”

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A Further Balance Tests and Attrition

Table 1: Wave 1 Balance Test

	Control (114)	Class (125)	Mentor (113)
<i>Firm Scale:</i>			
Profit (last month)	10252	9783	9268
Firm Age	2.4	2.6	2.4
Has Employees?	0.09	0.10	0.13
Number of Emp (if $n > 0$)	1.3	1.3	1.3
<i>Business Practices:</i>			
Offer credit	0.75	0.75	0.75
Have bank account	0.30	0.28	0.27
Taken loan	0.15	0.10	0.09
Practice accounting	0.01	0.01	0.01
Advertise	0.06	0.05	0.11
<i>Sector:</i>			
Manufacturing	0.04	0.05	0.01
Retail	0.69	0.57	0.65
Restaurant	0.14	0.19	0.12
Other services	0.16	0.23	0.24
<i>Owner Characteristics:</i>			
Age	29.3	29.8	28.9
Secondary Education	0.52	0.48	0.51

Table 2: Wave 2 Balance Test

	Control (104)	Class (113)	Mentor (101)
<i>Firm Scale:</i>			
Profit (last month)	9675	9355	9161
Firm Age	2.49	2.59	2.38
Has Employees?	0.09	0.08	0.12
Number of Emp (if $n > 0$)	1.00	1.44	1.33
<i>Business Practices:</i>			
Offer credit	0.74	0.77	0.72
Have bank account	0.32	0.27	0.28
Taken loan	0.14	0.11	0.08
Practice accounting	0.01	0.01	0.00
Advertise	0.05	0.05	0.11
<i>Sector:</i>			
Manufacturing	0.05	0.04	0.01
Retail	0.67	0.57	0.69
Restaurant	0.15	0.19	0.09
Other services	0.15	0.22	0.22
<i>Owner Characteristics:</i>			
Age	29.2	29.4	28.9
Secondary Education	0.54	0.49	0.51

Table 3: Wave 3 Balance Test

	Control (103)	Class (115)	Mentor (101)
<i>Firm Scale:</i>			
Profit (last month)	9942	9802	9547
Firm Age	2.40	2.63	2.31
Has Employees?	0.11	0.10	0.12
Number of Emp (if $n > 0$)	1.27	1.36	1.5
<i>Business Practices:</i>			
Offer credit	0.73	0.76	0.72
Have bank account	0.29	0.28	0.29
Taken loan	0.15	0.10	0.08
Practice accounting	0.01	0.01	0.01
Advertise	0.07	0.03	0.09
<i>Sector:</i>			
Manufacturing	0.05	0.05	0.01
Retail	0.70	0.57	0.66
Restaurant	0.14	0.19	0.11
Other services	0.16	0.22	0.24
<i>Owner Characteristics:</i>			
Age	29.1	29.6	28.7
Secondary Education	0.51	0.45	0.53

Table 4: Wave 4 Balance Test

	Control (107)	Class (113)	Mentor (103)
<i>Firm Scale:</i>			
Profit (last month)	10380	9452	9371
Firm Age	2.38	2.67	2.37
Has Employees?	0.09	0.10	0.15
Number of Emp (if $n > 0$)	1.30	1.36	1.40
<i>Business Practices:</i>			
Offer credit	0.75	0.75	0.69
Have bank account	0.30	0.28	0.27
Taken loan	0.15	0.11	0.09
Practice accounting	0.01	0.01	0.01
Advertise	0.07	0.05	0.09
<i>Sector:</i>			
Manufacturing	0.05	0.05	0.01
Retail	0.69	0.54	0.66
Restaurant	0.14	0.20	0.13
Other services	0.17	0.23	0.22
<i>Owner Characteristics:</i>			
Age	29.7	29.7	29.2
Secondary Education	0.53	0.49	0.50

Table 5: Wave 5 Balance Test

	Control (101)	Class (110)	Mentor (104)
<i>Firm Scale:</i>			
Profit (last month)	10198	8986	9195
Firm Age	2.45	2.60	2.26
Has Employees?	0.09	0.09	0.15
Number of Emp (if $n > 0$)	1.33	1.40	1.40
<i>Business Practices:</i>			
Offer credit	0.74	0.75	0.71
Have bank account	0.31	0.26	0.25
Taken loan	0.15	0.10	0.07
Practice accounting	0.01	0.00	0.01
Advertise	0.05	0.05	0.12
<i>Sector:</i>			
Manufacturing	0.05	0.05	0.01
Retail	0.69	0.54	0.66
Restaurant	0.14	0.20	0.13
Other services	0.17	0.23	0.22
<i>Owner Characteristics:</i>			
Age	29.6	29.6	29.4
Secondary Education	0.50	0.49	0.51

Table 6: Wave 6 Balance Test

	Control (110)	Class (109)	Mentor (104)
<i>Firm Scale:</i>			
Profit (last month)	10293	8986	9167
Firm Age	2.48	2.60	2.31
Has Employees?	0.21	0.16	0.21
Number of Emp (if $n > 0$)	1.33	1.03	1.27
<i>Business Practices:</i>			
Offer credit	0.75	0.75	0.70
Have bank account	0.31	0.26	0.26
Taken loan	0.15	0.10	0.07
Practice accounting	0.01	0.00	0.01
Advertise	0.05	0.05	0.11
<i>Sector:</i>			
Manufacturing	0.04	0.05	0.01
Retail	0.70	0.54	0.66
Restaurant	0.15	0.17	0.12
Other services	0.14	0.23	0.25
<i>Owner Characteristics:</i>			
Age	29.6	29.6	29.3
Secondary Education	0.52	0.48	0.51

Table 7: Wave 7 Balance Test

	Control (101)	Class (111)	Mentor (99)
<i>Firm Scale:</i>			
Profit (last month)	9739.60	9896.85	9240.30s
Firm Age	2.44	2.71	2.42
Has Employees?	0.26	0.23	0.22
Number of Emp (if $n > 0$)	0.94	0.93	1.18
<i>Business Practices:</i>			
Offer credit	0.73	0.73	0.74
Have bank account	0.32	0.27	0.28
Taken loan	0.16	0.09	0.07
Practice accounting	0.01	0.00	0.00
Advertise	0.07	0.05	0.12
<i>Sector:</i>			
Manufacturing	0.05	0.05	0.01
Retail	0.67	0.58	0.67
Restaurant	0.14	0.16	0.09
Other services	0.19	0.25	0.26
<i>Owner Characteristics:</i>			
Age	29.0	30.0	29.0
Secondary Education	0.50	0.47	0.52

Table 8: Correlation of baseline observables with number of surveys completed

Variable	Correlation coefficient
<i>Firm Scale:</i>	
Profit (last month)	0.029
Firm Age	0.137***
Has Employees?	0.054
Number of Emp (if $n > 0$)	0.049
<i>Business Practices:</i>	
Offer credit	0.069
Have bank account	0.078
Taken loan	-0.055
Practice accounting	-0.055
Advertise	-0.032
<i>Sector:</i>	
Manufacturing	0.118**
Retail	-0.006
Restaurant	-0.129**
Other services	0.050
<i>Owner Characteristics:</i>	
Age	0.106**
Secondary Education	0.054

Statistical significance at 0.10, 0.05, and 0.01 are denoted *, **, and ***.

B Motivation: Baseline Learning Methods

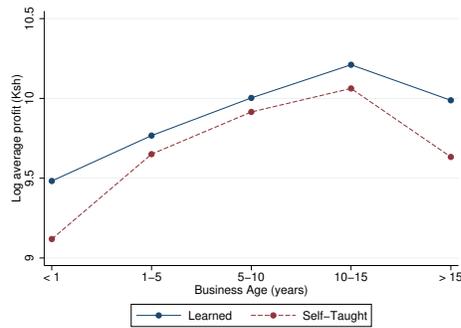
To motivate our study, we assess how profitability varies in the cross-section based on self-reported learning methods. Fifty-five percent of all firms claimed they were self-taught, while the rest claimed to learn either from another business operator, in school, or through an apprenticeship. We then consider various measures of business success across these two groups, and find that those who are self-taught make substantially less profit and operate at a smaller scale. Figure 1 plots three measures of business scale over the lifecycle.¹ First, Figure 1a shows that the self-taught earn less profit at any point over the lifecycle. The average profit of a self-taught firm is 18 percent less than firms that learn from others. Other measures show similar patterns of self-taught firms operating at a lower scale than those who learned from others. Figures 1b and 1c show that self-taught firms are less likely to have employees and pay a smaller total wage bill.

The results provide suggestive evidence that learning from others plays an important role in the profitability of business, though not all businesses have access to it. However, confounding factors (e.g. selection) limit our ability to make causal inferences about the relationship between profitability and the type or source of information. Understanding this link is the purpose of our experiment.

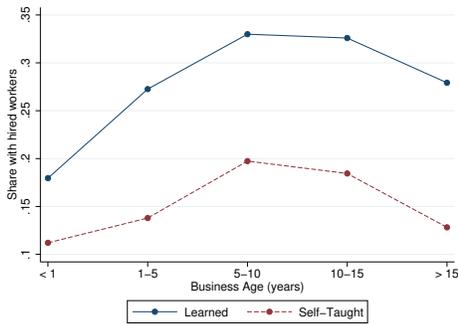
¹Total employment looks quite similar to Figure 1b given there are so few firms that have more than one worker.

Figure 1: Business scale differences over the lifecycle

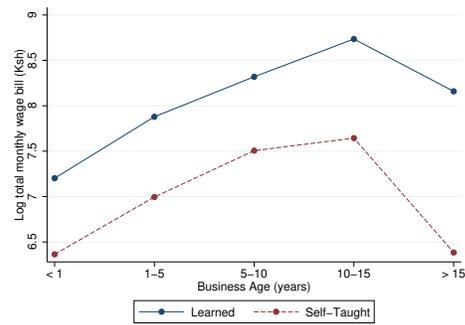
(a) Average profit



(b) Share with employees



(c) Total wage bill



C Details of Regression Discontinuity

C.1 Details of Mentor Selection and Characteristics

The pool of mentors was selected from our baseline survey. We first constrained our sample to female business owners who were over 40 years old and had been operating the same business for at least 5 years. This left 366 individuals. We then ran a simple regression to control for age and sector-specific differences:

$$\log(\pi_i) = \alpha + \delta_i + \gamma \log(\text{age}_i) + \varepsilon_i \quad (\text{C.1})$$

where π_i is baseline profit for individual i , δ_i is a sector fixed effect (manufacturing, retail, restaurant, other services) and age_i is age in years. Our mentors are chosen based on having the highest residual profit $\hat{\varepsilon}_i$. Given this, we simply sorted potential mentors by residual profit, then, starting with the most profitable, we recruited mentors until we have enough to link each mentee to a mentor that is in the same tightly defined business sector.²

Mentors were offered 1,000 shillings (9.83 U.S. dollars) to participate, which is equivalent to approximately two days of profit for the average firm in this group. We also told both mentors and mentees that meetings would take place at the mentor’s business to minimize inconvenience to the mentor and maintain some similarity with the travel requirement of the class treatment. These incentives were sufficient to generate high take up, as 95 percent accepted our invitation to take part in the program. Figure 2 plots the distribution of $\hat{\varepsilon}$ along with the cut-off.

As expected, mentors run substantially more successful businesses than those not chosen, as can be seen in Table 9. Moreover, they are nearly twice times as likely to have employees.

C.2 Robustness to Bandwidth Procedure

In this Appendix, we use the MSE-optimal bandwidth procedure in ? instead of the ? procedure used in the text. We also allow for higher-order polynomials. In no specification do we find any

²The sector-specific estimates were small and statistically insignificant, as the correlation between the natural logarithm of baseline profit and $\hat{\varepsilon}_i$ is 0.98. Using residual profit rather than raw profit did not change the set of potential mentors.

Figure 2: Distribution of $\hat{\varepsilon}$ and cut-off

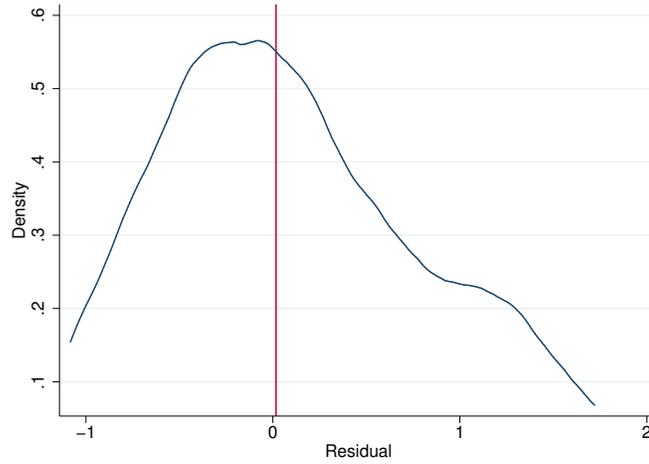


Table 9: Mentor vs. non-mentor baseline characteristics

	Mentors	Non-mentors
<i>Firm Scale:</i>		
Profit (last month)	21,430	6,883
Firm Age	13.0	13.2
Has Employees?	0.29	0.16
Number of Emp (if $n > 0$)	2.3	1.5
<i>Business Practices:</i>		
Offer credit	0.67	0.73
Have bank account	0.52	0.35
Taken loan	0.48	0.25
Practice accounting	0.11	0.08
Advertise	0.05	0.08
<i>Owner:</i>		
Age	44.3	43.8
Secondary Education	0.57	0.48

statistically significant effects.

Table 10: Regression discontinuity results using ?

Polynomial order	Scale		Practices	
	Profit	Inventory	Marketing	Record keeping
0	-265.39 (900.51)	-1739.00 (2322.60)	0.050 (0.089)	0.042 (0.175)
1	-724.40 (2277.10)	-5388.50 (3855.90)	0.086 (0.125)	0.003 (0.295)
2	-4071.80 (4232.50)	-4107.20 (5356.30)	0.232 (0.142)	0.222 (0.505)
Treatment Average	4387.34	8501.58	0.08	0.85
Control Average	1791.94	4005.06	0.13	0.63

Table notes: Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. Profit and inventory are both trimmed at 1 percent.

D Further Results on Composition, Business Scale and Skills

D.1 Baseline Business Types

In Table 11 we provide more detail on the types of businesses included in the sample of firms assigned to the three treatment groups. Overall, retailers make up nearly two thirds of the sample, and the retail sector is mostly composed of clothing and food sellers. Firms were allowed to select more than one category, so these numbers sum to 104%.

Table 11: Detailed Composition of Businesses

Business Type	Fraction of Businesses (Entire Baseline Sample)		Fraction Female (Entire Baseline Sample)	Fraction of Businesses (Study Sample)	
Retail	0.59		0.70	0.64	
Clothes		0.22	0.74		0.32
Electronics		0.02	0.27		0.00
Fruits and vegetables		0.30	0.84		0.28
Non-perishable food		0.19	0.65		0.17
Perishable food		0.19	0.62		0.14
Medicine		0.02	0.64		0.04
Cell phones, mobile		0.00	1.00		0.00
Books, stationary		0.01	0.60		0.02
Bicycle or moto		0.00	0.50		0.00
Materials (wood, glass)		0.04	0.56		0.03
Other retail		0.12	0.57		0.08
Production	0.06		0.48	0.03	
Furniture		0.21	0.05		0.00
Cooking pots		0.01	0.00		0.00
Animals		0.03	0.60		0.09
Metal work		0.10	0.29		0.00
Tailor, seamstress		0.41	0.75		0.55
Other		0.24	0.49		0.36
Services	0.25		0.56	0.21	
Clothes repair		0.21	0.76		0.32
Carpenter		0.03	0.00		0.00
Hair stylist		0.42	0.73		0.52
Bicycle repair		0.01	0.14		0.00
Auto, moto repair		0.01	0.00		0.00
Moneylender		0.03	0.55		0.02
Clothes washer		0.04	0.23		0.02
Other		0.25	0.25		0.12
Food Prep	0.14		0.73	0.16	
Roadside food prep		0.33	0.77		0.41
Small meals, breakfast and lunch		0.40	0.69		0.36
Coffee shop		0.13	0.58		0.11
Larger meals (lunch, dinner)		0.15	0.79		0.13
Larger meals with interior seating		0.05	0.57		0.00
Bar with exterior seating		0.01	0.50		0.00
Bar with interior seating		0.03	0.62		0.02
Other		0.01	0.60		0.00

Table notes: Fractions of individual sectors are written as share of total. For example, *Furniture production* is 21 percent of total *Production* businesses. *Fraction Female* is the fraction of businesses in each sector operated by a woman.

D.2 Alternative Regression Specifications

In our main specification we included baseline values of control variables. Here we provide two alternative specifications. First, we consider the case where instead of baseline controls we include individual fixed effects. Second, we estimate treatment effects with neither baseline controls nor individual fixed effects. However, each specification does include time fixed effects. Given that our sample is balanced at baseline, it is unsurprising that we find similar results in all three specifications.

Table 12: OLS Estimates on Profit at Different Time Periods

Panel A: Fixed Effects	Months since treatment							
	Pooled	(1)	(2)	(3)	(4)	(7)	(12)	(17)
Mentee	474.39 (206.65)**	313.17 (200.26)	50.22 (208.94)	321.06 (272.72)	994.68 (279.15)***	915.59 (336.22)***	20.81 (210.16)	35.86 (289.39)
Class	229.76 (212.31)	255.82 (196.04)	17.05 (203.32)	34.84 (264.57)	312.58 (275.37)	141.01 (330.48)	-150.85 (210.19)	284.21 (282.78)
Control mean	1803.60	1733.11	1412.43	1903.30	1620.28	2437.84	1764.84	1973.37
p-value, $H_0 : M = C$	0.236	0.719	0.872	0.285	0.014	0.018	0.418	0.383
Obs.	2608	345	311	312	316	302	318	307
R ²	0.345	0.056	0.028	0.057	0.081	0.076	0.102	0.053
Panel B: No Controls	Months since treatment							
	Pooled	(1)	(2)	(3)	(4)	(7)	(12)	(17)
Mentee	302.71 (94.96)***	247.02 (203.92)	39.02 (203.71)	196.90 (273.78)	891.09 (277.69)***	811.96 (331.86)**	-85.95 (216.26)	38.45 (286.07)
Class	26.50 (92.69)	206.93 (199.71)	-64.30 (198.09)	-153.74 (263.89)	203.73 (271.29)	63.91 (325.75)	-313.75 (213.24)	236.68 (278.16)
Control mean	1803.60	1733.11	1412.43	1903.30	1620.28	2437.84	1764.84	1973.37
p-value, $H_0 : M = C$	0.003	0.841	0.605	0.189	0.013	0.021	0.291	0.479
Obs.	2608	345	311	312	316	302	318	307
R ²	0.042	0.005	0.001	0.006	0.034	0.024	0.007	0.003

Table notes: Standard errors are in parentheses. Standard errors for pooled regressions are clustered at individual level and include wave fixed effects. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees. The top and bottom one percent of dependent variables are trimmed. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. The p-value provided is the p-value for testing equality of treatment effects across the two treatment arms.

D.3 Other Dimensions of Mentor Heterogeneity

We now include two other potential measures: business age and an indicator for whether the mentor was a high school graduate. Neither provides the same results. Interestingly, they are also both only somewhat correlated with mentor profitability.

Table 13: Heterogeneous Mentor Effects from OLS Profit Regression

	Business age	High School graduate
Mentee: mentor in (0, 25) pctlile	507.06 (192.85)***	489.10 (184.00)***
Mentee: mentor in (25, 75) pctlile	418.77 (173.63)**	n.a.
Mentee: mentor in (75, 100) pctlile	329.62 (241.34)	374.40 (158.89)**
Class	95.70 (144.64)	97.03 (144.46)
Control mean	1803.48	1803.48
p-value, $H_0 : M_H = M_L$	0.532	0.5818
p-value, $H_0 : M_L = C$	0.053	0.0472
Obs.	2271	2271
R ²	0.121	0.120
Controls	Y	Y
Corr. with mentor profit	0.059	0.122

Table notes: Robust standard errors are in parentheses. Standard errors for pooled regressions are clustered at individual level and include wave fixed effects. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees. The top and bottom one percent of dependent variables are trimmed, except for indicators. For the “high school graduate” indicator, the first row denotes non-high school graduates, while the third row denotes a high school graduate mentor. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, *** for both p-values and correlation. The first p-value is for test of equality of “high” (percentile 75-100) mentor and “low” (percentile 0-25) mentor effects, while the second is the p-value for equality of means of “low” mentor and class.

D.4 Details on Supplier Switching

Table 14: OLS Treatment Effects on Supplier Switching

	Switch Suppliers	Switch Suppliers
Mentee	0.203*** (0.063)	0.187*** (0.065)
Class	0.001 (0.069)	-0.002 (0.069)
log(age)		-0.192 (0.160)
Retailer		0.095 (0.143)
Manufacturer		0.001 (0.188)
Services		0.179 (0.142)
Food Preparation		0.046 (0.155)
Control mean	0.617	0.617
p-value, $H_0 : M = C$	0.001	0.002
Obs.	304	304
R ²	0.042	0.070
Controls	N	Y
Time F.E.	Y	Y

Table notes: Robust standard errors are in parentheses. Results are for switches between $t = 0$ and $t = 7$. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees at baseline. The first regression reports the results from the main text for comparison. We report the coefficient on sectoral controls and age in the second regression. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***.

D.5 Business Exit

In the final survey wave ($t = 17$) we ask respondents if they are still operating the business from baseline. We find no evidence that members of either the classroom or mentorship treatment exit at a greater rate than the control group as summarized in Table 15.

Table 15: OLS Treatment Effects on Exit

	Exit by $t = 17$	Exit by $t = 17$
Mentee	-0.029 (0.028)	-0.024 (0.028)
Class	-0.023 (0.028)	-0.023 (0.029)
Control mean	0.059	0.059
p-value, $H_0 : M = C$	0.836	0.972
Obs.	311	311
R ²	0.003	0.026
Controls	N	Y
Time F.E.	Y	Y

Table notes: Robust standard errors are in parentheses. Results are presented for pooled regressions from $t = 1$ to $t = 12$. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees at baseline. The top and bottom one percent of dependent variables are trimmed for all dependent variables except the 0-1 indicator. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***.

D.6 Product Switching

Table 16: OLS Treatment Effects on Product Mix

	New Product?	New Product?
Mentee	-0.009 (0.023)	-0.010 (0.023)
Class	-0.007 (0.025)	-0.007 (0.025)
Control mean	0.198	0.198
p-value, $H_0 : M = C$	0.915	0.908
Obs.	1921	1917
R ²	0.041	0.043
Controls	N	Y
Time F.E.	Y	Y

Table notes: Standard errors clustered at individual level are in parentheses. Results are presented for pooled regressions from $t = 1$ to $t = 12$. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees at baseline. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and ***.

D.7 Measures of Business Scale

At $t = 7$ and $t = 12$, we included more detailed measures of business scale, including inventory stock, employment, and hours of business operation. In each wave, we asked about any big investments made in the business. We test whether these margins change in response to either of the treatments. We find that they do not, again highlighting the importance of the supplier and cost channels emphasized in the main text. To test them, we run a variation of the pooled regression in the main text with the caveat that the variables are only available for two periods. The results are in Table 17.

Table 17: OLS Treatment Effects on Business Scale Measures

Panel A:	Stock of	Any	Number of	Total wage	Hours open	Any
No Controls	inventory (Ksh)	employees?	employees	bill (Ksh)	(last week)	investment?
	(1)	(2)	(3)	(4)	(5)	(6)
Mentee	851.04 (2275.16)	-0.038 (0.025)	-0.006 (0.038)	224.43 (231.73)	0.82 (2.24)	0.005 (0.006)
Class	-1166.94 (1907.59)	-0.032 (0.026)	-0.034 (0.034)	117.44 (183.64)	1.51 (2.10)	0.002 (0.006)
Control mean	11030.83	0.092	0.099	360.00	49.42	0.011
p-value, $H_0 : M = C$	0.290	0.792	0.405	0.678	0.760	0.671
Obs.	629	633	628	630	629	1911
R ²	0.002	0.07	0.002	0.005	0.005	0.012
Controls	N	N	N	N	N	N
Panel B:	Stock of	Any	Number of	Total wage	Hours open	Any
With Controls	inventory (Ksh)	employees?	employees	bill (Ksh)	(last week)	investment?
	(1)	(2)	(3)	(4)	(5)	(6)
Mentee	1304.43 (2104.53)	-0.032 (0.022)	0.001 (0.034)	244.98 (212.08)	0.42 (2.29)	0.005 (0.006)
Class	-398.74 (1881.65)	-0.027 (0.022)	-0.029 (0.034)	112.56 (165.48)	2.21 (2.08)	0.002 (0.006)
Control mean	11030.83	0.092	0.099	360.00	49.42	0.011
p-value, $H_0 : M = C$	0.364	0.806	0.334	0.579	0.423	0.578
Obs.	629	633	628	630	629	1911
R ²	0.067	0.240	0.206	0.162	0.048	0.018
Controls	Y	Y	Y	Y	Y	Y

Table notes: Standard errors are in parentheses. Results for regressions 1–6 are available for $t = 7$ and $t = 12$, while regression 6 is available for $t = 1$ to $t = 12$. Controls include a time fixed effect, secondary education, age of owner, sector fixed effects, and an indicator for any employees at baseline. The top and bottom one percent of dependent variables are trimmed for all dependent variables except for 0-1 indicators. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***.

D.8 Formal and Informal Borrowing

One possibility is that mentors provide informal financing for mentees. At $t = 7$ and $t = 12$ we asked mentees if their mentor had ever given them an informal loan. At $t = 7$, no one answers yes and at $t = 12$, only 2 percent of mentees affirm financial help from their mentor. A second possibility is that mentors advise mentees to access the formal financial market. Regression 1 and 2 are an indicator equal to one if a business had taken a loan at any point in the previous year, asked at $t = 12$. We find no significant effect on formal borrowing.

Table 18: OLS Treatment Effects on Borrowing

	Loan in last year ($t = 12$) (1)	Loan in last year ($t = 12$) (2)
Mentee	0.011 (0.023)	0.015 (0.024)
Class	0.009 (0.023)	0.015 (0.023)
Control mean	0.020	0.020
p-value, $H_0 : M = C$	0.937	0.995
Obs.	298	298
R ²	0.001	0.015
Controls	N	Y

Table notes: Standard errors are in parentheses. Results are presented for pooled regressions from $t = 1$ to $t = 12$ with standard errors clustered at the individual level. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees at baseline. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and ***.

D.9 Decomposition of Business Scores

Table 19: Marketing Practices Decomposed

Panel A: $t = 7$	Marketing Score Components					
	Marketing Score	Check competitor price	Check competitor products	Have sales	Upsell	Advertise
Mentee	0.185 (0.195)	0.036 (0.061)	0.096 (0.060)	0.064 (0.067)	0.072 (0.073)	-0.083 (0.061)
Class	-0.263 (0.161)	-0.058 (0.054)	-0.031 (0.053)	-0.017 (0.061)	-0.064 (0.071)	-0.092 (0.058)
Control mean	1.505	0.206	0.186	0.289	0.536	0.289
p-value, $H_0 : M = C$	0.015	0.082	0.020	0.200	0.048	0.867
Obs.	308	308	308	308	308	308
R ²	0.104	0.036	0.060	0.072	0.048	0.094
Controls	Y	Y	Y	Y	Y	Y

Panel B: $t = 12$	Marketing Score Components					
	Marketing Score	Check competitor price	Check competitor products	Have sales	Upsell	Advertise
Mentee	-0.203 (0.185)	-0.111 (0.063)*	-0.072 (0.065)	-0.038 (0.056)	0.041 (0.053)	-0.023 (0.055)
Class	0.248 (0.202)	0.106 (0.067)	0.108 (0.068)	0.020 (0.058)	0.132 (0.058)**	-0.117 (0.050)**
Control mean	1.400	0.373	0.391	0.227	0.191	0.218
p-value, $H_0 : M = C$	0.022	0.001	0.008	0.292	0.127	0.061
Obs.	325	325	325	325	325	325
R ²	0.081	0.064	0.047	0.046	0.090	0.037
Controls	Y	Y	Y	Y	Y	Y

Table notes: Robust standard errors are in parentheses. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. Marketing score is computed by summing all its components.

Table 20: Stock Practices Decomposed

Panel A: $t = 7$	Stock Score Components			
	Stock Score	Haggle with suppliers	Compare suppliers	Run out of stock
Mentee	0.521 (0.118)***	0.141 (0.061)**	0.158 (0.067)**	-0.221 (0.052)***
Class	0.445 (0.116)***	0.107 (0.061)*	0.119 (0.066)*	-0.220 (0.048)***
Control mean	1.021	0.691	0.598	0.268
p-value, $H_0 : M = C$	0.482	0.517	0.534	0.952
Obs.	308	308	308	308
R ²	0.099	0.041	0.048	0.125
Controls	Y	Y	Y	Y
Panel B: $t = 12$	Stock Score Components			
	Stock Score	Haggle with suppliers	Compare suppliers	Run out of stock
Mentee	-0.12 (0.13)	-0.03 (0.07)	-0.05 (0.07)	0.02 (0.06)
Class	-0.05 (0.13)	-0.04 (0.07)	0.02 (0.07)	0.01 (0.06)
Control mean	1.51	0.21	0.19	0.29
p-value, $H_0 : M = C$	0.004	0.042	0.021	0.067
Obs.	306	306	306	306
R ²	0.025	0.010	0.015	0.008
Controls	Y	Y	Y	Y

Table notes: Robust standard errors are in parentheses. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. Aggregate stock score is computed as *Haggle + Compare - Run out of stock*.

Table 21: Record Keeping Practices Decomposed

Panel A: $t = 7$	Record Keeping Score Components			
	Record Keeping Score	Record every sale	Consult records	Budget costs
Mentee	0.239 (0.187)	0.053 (0.069)	0.033 (0.070)	0.153 (0.068)**
Class	0.070 (0.179)	-0.026 (0.066)	0.042 (0.068)	0.054 (0.069)
Control mean	1.711	0.598	0.557	0.557
p-value, $H_0 : M = C$	0.346	0.243	0.901	0.131
Obs.	308	308	308	308
R ²	0.088	0.091	0.070	0.073
Controls	Y	Y	Y	Y

Panel B: $t = 12$	Record Keeping Score Components			
	Record Keeping Score	Record every sale	Consult records	Budget costs
Mentee	-0.001 (0.140)	0.090 (0.060)	0.033 (0.065)	-0.125 (0.060)**
Class	0.094 (0.151)	0.021 (0.062)	0.032 (0.066)	0.401 (0.066)
Control mean	1.391	0.700	0.345	0.345
p-value, $H_0 : M = C$	0.509	0.254	0.983	0.007
Obs.	325	325	325	325
R ²	0.071	0.052	0.054	0.065
Controls	Y	Y	Y	Y

Table notes: Standard errors are in parentheses. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. Record keeping score is computed by summing all its components.

D.10 Mentor-Mentee Match Continuation

We run an additional test not subject to the biases that potentially entered into mentee answers (though we were careful to explain that the program had ended, and any answer would have no positive or negative effects on anything in the future). The idea of this test is that the mentee cannot perfectly predict whether an additional meeting with the mentor is worth the cost, since the value of the meeting is determined by information that she does not yet possess. But if the mentee decides to end the relationship because the mentor is providing increasingly less valuable advice, this should translate into increasingly smaller improvements in her business, which is observable in the data. Similarly, if the mentor's participation is driven by the satisfaction of seeing improvements in the mentee's firm over time or since baseline, lack of firm growth or performance should predict exit by the mentor. In either case, if a mentee has high profit at t_1 and low profit at t_2 , then the selection explanation implies the match should end. Therefore, the likelihood of meeting with her mentor at t_3 should be positively related to the change in profits $\pi_{t_2} - \pi_{t_1}$: those who continue to generate profit growth through meetings continue to meet, while those who do not are less likely to meet. Alternatively, if matches end for reasons unrelated to mentee profitability (i.e. the mentor tires of time away from her own business, mentor moves to different city, etc.) then there should be no relationship between meeting and profit changes. We therefore ask whether changes in profitability affect the likelihood of meeting with a mentor in the future with the regressions

$$\Delta Meet_{it} = \alpha + \beta \Delta \pi_{i,t-1} + \varepsilon$$

run on just the mentees, with standard errors clustered at the individual level. The variable $Meet_t = 1$ if the mentee is still meeting with her mentor and $\Delta Meet_t = Meet_t - Meet_{t-1}$. We define $\Delta \pi_{i,t-1}$ in three different ways, to allow mentees to potentially react to different profit fluctuations. The first is $\Delta \pi_{i,t-1} := \log(\pi_{i,t-1}) - \log(\pi_{i,t-2})$, so that we test whether lagged profit changes impact meeting likelihood. The second is $\Delta \pi_{i,t-1} := \log(\pi_{i,t-1}) - \log(\pi_{i,0})$ which test whether changes from baseline profit predict meetings. Lastly, $\Delta \pi_{i,t-1} := \log(\pi_{i,t-1}) - \log(\bar{\pi}_{i,t-1}^{control})$. This regression considers that mentees may react to how well they are doing relative to the control group. If mentees are responding to changes in profit as is required for the selection explanation, we would expect to see $\hat{\beta} > 0$ for

Table 22: Relationship between Meeting with Mentor and Previous Profit Realizations

	$\Delta Meet_t$					
$\log \pi_{t-1} - \log \pi_{t-2}$	-0.017 (0.026)	-0.014 (0.028)	-	-	-	-
$\log \pi_{t-1} - \log \pi_0$	-	-	-0.002 (0.019)	0.000 (0.019)	-	-
$\log \pi_{t-1} - \log \bar{\pi}_{t-1}^{control}$	-	-	-	-	-0.004 (0.025)	0.005 (0.026)
Constant	-0.188 (0.317)	-0.383 (0.326)	-0.291 (0.336)	-0.508 (0.353)	-0.300 (0.340)	-0.504 (0.351)
Obs.	414	414	423	423	423	423
R ²	0.012	0.027	0.009	0.024	0.000	0.024
Wave F.E.	N	Y	N	Y	N	Y
Controls	Y	Y	Y	Y	Y	Y

Table notes: Robust standard errors are in parentheses, and are clustered at individual level. Controls include secondary education, age of owner, sector fixed effects, and an indicator for any employees. Statistical significance at 0.10, 0.05, and 0.01 is denoted by *, **, and, ***. The variable $Meet_t = 1$ if an individual has met with their mentor in period t .

at least one of these regressions. The results are presented in Table 22, and we find no evidence that meeting likelihood is responding to mentee profit realizations. In all specifications, we have no statistically significant effects. Moreover, the point estimates are small. Combined with the previous evidence, this suggests that the cause of the decline in average effect is driven by the dissolution of matches by mentors, not necessarily by a decrease in the impact of continued mentorship. These results suggest the differences found in the main text are not simply a result of selection, but that the *flow* of information is critical to continued success of the mentee.

D.11 Self-Reported Usefulness

Within the set of mentees, we asked them to report what they felt was the greatest benefit they derived from having a mentor. Their answers are tabulated below:

Table 23: Self-Reported Benefits from Mentorship

Benefit	Proportion
Motivation to work harder	22%
Greater confidence in decision-making	17%
Specific business skills	17%
Introduced to new suppliers	13%
Introduced to new customers	12%
Change hours of operation	7%
Gave financial help (loans or cash)	6%
Other	6%

E Cost Effectiveness

We find that the average treatment effects pooled over survey waves are 371.83 Ksh for mentees and 124.51 Ksh for the class. However, this is potentially too generous a treatment effect to use when calculating cost effectiveness here. Because the effect is zero by month 12, we instead use the average effect over just the first year of the program. We re-run the same profit regression and find treatment effects of 422.57 Ksh and 96.47 Ksh for mentees and class, respectively. In Table 24 we translate this into USD and provide the 95 percent confidence interval using an exchange rate of 101.5 Ksh = 1 USD. The total effect takes this average effect and multiplies by 48 (4 weeks for 12 months).

Table 24: Treatment Effect on Weekly Profit for First Year

	Pooled treatment effect (USD)	Total Effect (USD)
Mentee	4.16 (2.26, 6.06)	199.84 (108.68, 291.00)
Class	0.95 (-0.92, 2.82)	45.62 (-44.00, 135.24)
Control Mean	18.11	1231.77

Since mentorship provides a relatively large change in profit, we next turn to the cost of the program. Total program costs – net of the direct costs of the follow-up surveys – are provided in Table 25. Even though mentorship provides substantially larger benefits than training, the last two lines of Table 25 show that it was also substantially cheaper to implement. On a per-person basis, classroom training was over four times as expensive: 41.10 USD per student compared to only 9.85 USD per mentee.

However, to compute impact per dollar spent we require a measure of total cost per person, which is not as immediately obvious as computing the direct cost of the class or mentor. In particular, it depends on how we share the cost of the baseline survey across treatment arms. We include three cost sharing assumptions in Table 26. The first does not include the baseline cost. This assumes that we could identify mentors without the baseline survey, and therefore provides an upper bound on cost effectiveness. The second cost sharing assumption is our baseline. It splits the cost of the

Table 25: Total Program Costs

Cost	USD
Baseline Survey	22,216
Orientation	1,480
Participation incentives	18,295
Class operation	5,302
Mentor incentives	1,222

baseline survey across all three arms. This measure is preferred for two reasons. First, the survey is used to define the treatment groups as well as mentors. Therefore, it is reasonable to split it across all three groups. Second, the number of mentor-mentee pairs was constrained by the need for class and control groups. Put differently, had we only been interested in the mentorship program, we could have had three times as many mentee-mentor pairs with no additional cost. Thus, the mentorship group we select should only bare one-third of the cost. However, for the sake of completeness, we also include an extreme cost-sharing scenario in column three that assigns the entire 22,216 USD baseline survey cost to the mentorship program. This assumption is much too extreme. It assumes we could costlessly target and recruit young female-operated businesses without the baseline survey and that we required a 3,290 firm survey to recruit 124 mentors, which we view as unreasonable. We include it here as an absolute lower bound on the cost effectiveness of the program.

First, note that implementing the mentorship program costs only slightly more than implementing the control group, as both groups receive cash participation incentives. In cost scenario one, the average mentorship cost is only 19 percent higher than the control, compared to 77 percent higher for the class. That number drops to 9 percent under scenario two for mentees, and 36 percent for the class. Thus, the net cost of mentorship is quite small relative to control. When combined with the annualized benefit, our baseline results (cost scenario 2) show that the mentorship program returns 1.63 USD for every dollar spent on the program, compared to 0.30 USD for training. Even when we attribute the entire baseline survey cost to mentees, the program still returns 0.83 USD per dollar spent, higher than the point estimate for both our class treatment and the estimates in many other training studies summarized in ?.

Table 26: Cost-Benefit Calculation Under Different Cost Assumptions

	(1)	(2)	(3)
	No baseline cost	Baseline cost divided evenly	Baseline cost only to mentees
Per-Person Cost			
Control	53.16	112.89	53.16
Class	94.26	153.98	94.26
Mentee	63.01	122.73	242.17
Δ Profit per Dollar Spent			
Class	0.48 (-0.47, 1.43)	0.30 (-0.29, 0.89)	0.48 (-0.47, 1.43)
Mentee	3.17 (0.89, 4.62)	1.63 (0.89, 2.37)	0.83 (0.045, 1.20)