

Supplemental Appendix

Long-term and lasting impacts of personal initiative training on entrepreneurial success

Francisco Campos, Michael Frese, Leonardo Iacovone,

Hillary C. Johnson, David McKenzie, Mona Mensmann

A. Timeline

November 2012-February 2013: Communication campaign and application window

October 2013-December 2013: Baseline survey

April 2014: Training interventions

May 2014-August 2014: Once a month mentoring sessions

Short-term follow-up survey rounds:

- September 2014: First follow-up survey (*4 months after training*)
- January-February 2015: Second follow-up survey (*9-10 months after training*)
- August-September 2015: Third follow-up survey (*16-17 months after training*)
- August-September 2016: Fourth follow-up survey (*28-29 months after training*)

Long-term follow-up survey rounds:

- March-April 2021: Phone follow-up surveys (*7 years after training*)
- September-October 2021: In-person follow-up survey (*7.5 years after training*)

B. Methods used to Reduce Attrition

Table A1 shows that attrition rates are low for a long-term follow-up. This reflects substantial fieldwork effort by the team and strategies employed to minimize survey attrition. Participants received small gifts for participation in each survey. During the first four follow-up rounds, participants received either a small gift or entry into a raffle for larger prizes. Those who participated in all four rounds were eligible for a raffle to win a motorcycle. Participants for the long-term phone survey received a small amount of phone credit (200 FCFA, or approximately US\$0.40), and those for the long-term in-person survey received a more consequential gift of phone credit worth 5,000 FCFA (approximately US\$10). Second, detailed contact information for each entrepreneur—including the physical location of both the business and the entrepreneurs' residence, multiple phone numbers for the entrepreneur, and phone numbers for two close contacts of the entrepreneur—was collected at baseline and updated at each of the first three follow-up surveys. Third, to reach entrepreneurs who could not be directly contacted, the field team reached out to the entrepreneurs' contacts, inquired among neighbors, sought assistance from associations or institutions that helped recruit entrepreneurs to the program, and worked with leaders of markets. During the long-term, in-person follow-up, additional tracking was done using social networks, online business databases, and an open house for entrepreneurs who had taken part in the study. Additionally, the field team conducted shorter telephone interviews with entrepreneurs who had moved outside of Lomé. Using the two rounds of long-term follow-up by phone and in-person increased the chances of finding the firm on at least one occasion. These detailed tracking protocols helped minimize attrition.

We see survey attrition is higher for smaller, less profitable firms, and for firms that were more likely to have closed in the short-term (Table A4). This is the case for both treatment and control, and for both men and women. This suggests another reason that our overall response rates are relatively high: our sample

consists of established firms who had been in business for some time, and where the owners were middle-aged. Such firms are less likely to close, and the owners less geographically mobile, than would be the case if we worked with new start-ups, especially enterprises just created by youth, which have high failure rates and where the owners may move frequently.

C. Data Definitions

Data and code for reproducibility are in the World Bank's Reproducible Research Repository (Campos et al, 2025).

To adjust for inflation we converted all nominal values of financial variables to real September 2021 CFA using the consumer price index published at the Institut National de la Statistique et des Etudes Economiques et Démographiques (INSEED-TOGO), a public establishment attached to the Togolese Ministry in charge of statistics. For ease of interpretation of magnitudes, we then converted these to USD at the exchange of 550.5 CFA per USD. We combined the phone and in-person surveys into a single long-term survey round, taking the in-person response where available, and the phone survey response for those who did not answer the in-person. Table A5 shows results are robust to the inclusion of survey month fixed effects.

The main outcome variables in Table 1 are defined as follows:

- Real last month profits:
 - Main business: Profits in the last full month in the main business operated by the entrepreneur. This variable was winsorized at the 99th and 1st percentiles by survey wave, and coded to 0 for individuals who are not running a business.
 - All businesses: Profits in the last full month for the main business added to those in any other businesses run by the entrepreneur. This variable was winsorized at the 99th and 1st percentiles by survey wave, and coded to 0 for individuals who are not running a business.
 - All businesses conditional on survival: Profits in all businesses as defined above, but coded as missing for those no longer running a business.
- Real last month sales:
 - Main business: Revenues in the last full month in the main business operated by the entrepreneur. This variable was winsorized at the 99th and 1st percentiles by survey wave, and coded to 0 for individuals who are not running a business.
 - All businesses: Revenues in the last full month for the main business added to those in any other businesses run by the entrepreneur. This variable was winsorized at the 99th and 1st percentiles by survey wave, and coded to 0 for individuals who are not running a business. Note revenue in other businesses was only asked in the long-term follow-up round, and not in the short-term rounds.
 - Main business conditional on survival: Revenue in the main business as defined above, but coded as missing for individuals not running a business.
- Main profits and business index: This index averages the standardized z-scores of profits and sales in the main businesses.
- Total labor income: this adds the total profits in all businesses in the last month, as defined above, to total earnings from paid work, farming, retirement and investment income (winsorized at the 99th and 1st percentiles) to get the total monetary income earned by the entrepreneur.

The mechanism outcomes in Table 2 are defined as follows using the long-term survey:

- Main firm employees: the number of employees in the main firm of the business, coded as 0 for closed firms, and winsorized at the 99th percentile. We use the 2016 number of employees as the short-run outcome to represent the size of the firm after 2 years.
- Capital stock: Total value of machinery and equipment, other work tools, vehicles, furniture, other business assets, and inventories and stocks, winsorized at the 1st and 99th percentiles. Excludes the value of land and buildings given the highly skewed distribution (only 16 percent of firms report a value) and that it can be intertwined with household assets. Asked only during the in-person survey. Coded as 0 for closed firms. We use the 2016 capital stock as the short-run outcome, to represent capital accumulated after 2 years.
- Entrepreneurial Self-Efficacy: This measures their self-confidence in their ability to carry out different business tasks, regardless of whether or not they currently operate a business. It is the mean of responses (answered on a five-point Likert scale ranging from 1 = Not at all confident to 5 = totally confident) of the following statements:
 - To start a business
 - Perceive well business opportunities
 - Ensure the marketing of the company properly
 - Correctly set the prices of products or services
 - Negotiate well with other business owners
 - Manage a team of staff well
 - Manage a business well
 - Write a good business plan
 - Find capital financing when starting a business

The internal consistency of this scale is good, with a Cronbach alpha of 0.83. These questions were only collected during the in-person long-run survey, and only during the fourth short-term follow-up in 2016.

- Personal initiative: This is the mean of responses (answered on a five-point Likert scale ranging from 1 = Strongly disagree to 5 = Strongly agree) of agreement with whether in the past six months the following statements apply to them:
 - I normally go beyond what is expected of me
 - I take the initiative immediately even when others do not
 - I use opportunities quickly in order to attain my goals
 - I actively tackle problems
 - I have a gift for implementing ideas

The internal consistency of this scale is good, with a Cronbach alpha of 0.77. Measured in all four rounds of the short-run follow-up surveys.

- “A” Index: The average of standardized z-scores of the personal initiative, entrepreneurial self-efficacy, and business practice (defined below) indices along with the product innovation variable (defined below). We just use the 2016 (fourth survey round) for the short-term follow-up given that self-efficacy was not collected in earlier rounds.

Additional mechanisms and outcomes in Table A8 are as follows:

- Business practices: This measure is only available for firms answering the in-person survey or that have closed down. This is the proportion of the following 9 business practices used in the firm in the last six months (coded as 0 for firms that are not operating).
 - Visited a competitor to learn their products or prices

- Asks customers whether there are products or services that they wish the firm would offer
- Offered promotions to attract customers
- Compared suppliers' prices or product quality with alternatives
- Analyzed company's performance in order to identify ways to improve
- Changed the ways products and services are presented to make them more attractive
- Consulted the internet, newspapers or books to learn about new developments in their industry
- Has a written budget
- Has set sales goals for the company

These questions were not collected in the first follow-up survey, so average over rounds 2, 3 and 4 of the short-term follow-up.

- New Product Innovation index:
 - Introduced a new product or service (binary variable)

D. How much of the return to men is coming from building up capital stock?

Personal initiative training resulted in a large accumulation of capital stock for men, and smaller accumulation for women. De Mel, McKenzie and Woodruff (2009) found very high returns to capital of 11 percent per month for men running firms with less than \$1000 capital stock when given grants of \$100 to \$200. This raises the question of whether the treatment effect on profits we see for men could be coming entirely as a return to the additional capital invested in the business. In the short-run our treatment estimates of a \$65 increase in profits and \$1298 increase in capital stock for men would imply a monthly return of 5.0% on the additional capital if no other channel was responsible for the increase in profits. In the long-run our treatment estimates of a \$148 increase in profits and \$3627 increase in capital stock would imply a monthly return of 4.1% if no other channel was responsible for the increase in profits. So while high, these returns would be less than those for men from small capital grants.

However, there are multiple reasons why it seems unlikely that the entire effect is purely a return to capital. First, while the returns to very small grants in subsistence microenterprises have been found to be high for men, there is evidence of decreasing returns with returns of around 2-3% per month for firms with more capital (McKenzie and Woodruff, 2006). Second, our intervention did not provide any capital to firms, nor any new saving technology. Capital accumulation therefore required continuing to grow profits and reinvesting these proceeds. As our theoretical model shows, we would expect there to be limits to this growth as firms approach their steady state capital stock level, unless they can increase the A term. We do find firms innovating and introducing new products, employing better business practices, and entrepreneurs adopting a more proactive entrepreneurial mindset. Assuming that the increase in profits is entirely from capital accumulation would require assuming that there is no return to better business practices, new product innovation, or to employing more personal initiative in the business. We do not have separate instruments for K and A, so cannot separate how much of the impact is due to each, but in Campos et al. (2017) we use mediation analysis to show that business practices, personal initiative, capital, and innovation jointly mediate the total effect of personal initiative training and its differential effect from traditional training over the first two years.

E. Macroeconomy and COVID-19

Our long-term follow-up takes place in 2021, when the world was still recovering from the COVID-19 pandemic. At the macroeconomic level, Togo still saw positive real GDP growth of 2.0 percent in 2020, down from an average of 4.4 percent over the 2016-2019 period, but then the economy rebounded with 6.0 percent growth in 2021 (World Bank, 2023). The government had a strong counter-cyclical fiscal policy

response, including setting up a new cash transfer system which provided vulnerable households with money that they could spend buying many of the goods sold by the types of firms in our sample. Aga and Maemir (2021) report that sub-Saharan African countries had less stringent COVID-19 responses than other regions, and using rapid response surveys taken in 2020, show that Togo had the smallest number of temporary firm closures during COVID-19 of any of the eight sub-Saharan African countries surveyed (at 28%). The most affected industry was hospitality and tourism services, which is not in our sample. Figure 1C shows that firm profits conditional on survival are of similar magnitudes in 2021 as 2016, which suggests we are not examining long-term impacts in a period of large recession.

To further examine how the specific firms in our study may have been affected by the pandemic, our in-person survey asked firms to recall the best and worst months of profits in 2019 (the year prior to the pandemic), as well as in 2021. These data are only available for 852 firms, and are summarized in Table E1 for the full sample, as well as for the control group only. We see that mean profits in the best month of the year are only slightly lower in 2021 than in 2019, and we cannot reject equality of mean best month profits across these two years. Moreover, this is true for both men and women, and we cannot reject that the change in best month profits is the same by gender. In contrast, firms do report earning significantly less in their worst month of 2021 than they recall earning in their worst month of 2019. The point estimates in the control group show a larger drop for men than for women, with this difference being statistically significant in the full sample. This suggests that the gender differences we see in long-term treatment effects are unlikely to be due to women's businesses being more adversely affected by COVID-19 than the men's businesses. The pandemic seems to be having minimal effects in a good month (or in the past month as seen in Figure 1), while effects in the worst month are, if anything, more negative for men.

Table E1: Were firms doing worse off in 2021 than they were pre-Covid and gender differences?

	Full Sample			Control Group only		
	All	Men	Women	All	Men	Women
Best month						
Recall of 2019 best month profits (mean)	477	617	319	341	465	224
2021 best month profits (mean)	454	576	316	301	398	208
Percent difference (2021-2019)	-4.9	-6.6	-1.1	-11.9	-14.3	-7.2
Sample size	852	451	401	262	128	134
p-value: 2019 = 2021	0.394	0.357	0.909	0.219	0.306	0.403
p-value: difference the same by gender	0.493			0.448		
Worst month						
Recall of 2019 worst month profits (mean)	132	151	111	106	123	91
2021 worst month profits (mean)	72	70	75	55	55	55
Percent difference (2021-2019)	-45.2	-53.7	-32.7	-48.3	-55.0	-40.0
Sample size	818	427	391	247	119	128
p-value: 2019=2021	0.000	0.000	0.000	0.000	0.002	0.012
p-value: difference the same by gender	0.004			0.228		

Notes:

Sample is restricted to balanced panel of firms that answered the in-person long-term follow-up survey and that were able to provide recall of 2019 best and worst month profits.

Appendix References

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McKenzie, David and Christopher Woodruff (2006) “Do Entry Costs Provide an Empirical Basis for Poverty Traps? Evidence from Mexican Microenterprises”, *Economic Development and Cultural Change* 55(1): 3-42.

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F. Appendix Tables and Figures

Tables A1-A5 provide more detail on response rates, and robustness to attrition

Table A6 shows robustness of impacts on profits and sales to other measures

Table A7 provides the traditional training impacts by gender.

Tables A8-A11 and Figure A1 examine gender differences in more detail.

Table A1: Survey Response rates by Round and Survey Type

	Short-Run Survey Rounds				Long-run Survey Round			
	Round 1	Round 2	Round 3	Round 4	In-person survey	Phone survey	Either	Know status
Panel A: Pooled Sample								
Personal initiative training group response rate	0.962	0.928	0.938	0.910	0.792	0.746	0.870	0.926
Traditional business training group response rate	0.956	0.940	0.938	0.890	0.770	0.678	0.844	0.900
Control group response rate	0.940	0.898	0.906	0.882	0.700	0.646	0.786	0.856
Total number of observations	1429	1383	1391	1341	1131	1035	1250	1341
Overall response response (all groups)	0.953	0.922	0.927	0.894	0.754	0.690	0.833	0.894
p-value: PI=control	0.099	0.071	0.059	0.143	0.001	0.001	0.000	0.000
p-value: Trad=control	0.238	0.013	0.059	0.676	0.012	0.282	0.015	0.027
p-value: PI=Trad	0.642	0.462	1.000	0.290	0.412	0.021	0.254	0.166
Panel B: Men								
Personal initiative training group response rate	0.971	0.929	0.954	0.924	0.828	0.782	0.887	0.945
Traditional business training group response rate	0.962	0.932	0.945	0.907	0.789	0.730	0.869	0.916
Control group response rate	0.941	0.915	0.928	0.898	0.703	0.644	0.758	0.831
Total number of observations	681	658	670	647	550	511	596	638
Overall response response (all groups)	0.958	0.925	0.942	0.910	0.774	0.719	0.838	0.897
p-value: PI=control	0.123	0.568	0.241	0.330	0.001	0.001	0.000	0.000
p-value: Trad=control	0.282	0.481	0.451	0.746	0.034	0.038	0.001	0.003
p-value: PI=Trad	0.641	0.856	0.686	0.511	0.274	0.177	0.510	0.253
Panel C: Women								
PI response rate	0.954	0.927	0.924	0.897	0.760	0.714	0.855	0.908
Traditional response rate	0.951	0.947	0.932	0.875	0.753	0.631	0.821	0.886
Control response rate	0.939	0.883	0.886	0.867	0.697	0.648	0.811	0.879
Total observations	748	725	721	694	581	524	654	703
Overall response rate	0.948	0.919	0.914	0.880	0.736	0.664	0.829	0.891
p-value:PI=0	0.416	0.063	0.140	0.276	0.094	0.114	0.162	0.264
p-value:Trad=0	0.547	0.007	0.070	0.787	0.147	0.716	0.736	0.788
p-value:PI=Trad	0.837	0.406	0.754	0.410	0.839	0.059	0.293	0.402

Notes:

Round 1-Round 4 denote previous survey rounds collected between September 2014 and September 2016, covering a period up to 2.5 years post-training.

In-person survey is 7 year in-person follow-up survey collected between September and November 2021.

Phone survey is 7-year follow-up survey collected via phone between March and April 2021.

Either denotes firm was surveyed in at least one of in-person and phone long-term follow-up surveys.

Know status denotes firm was surveyed in either long-term round, or owner is dead, or business operating status still known, or migrated abroad.

Table A2a: Baseline balance for those responding to at least one 7-year follow-up survey

	Overall Mean	Overall S.D.	Control Mean	PI Mean	Traditional Mean	p-value equality
<i>Baseline strata variables</i>						
Monthly profits	185	340	191	176	188	0.140
Commerce sector	0.47	0.50	0.47	0.46	0.47	0.167
Production sector	0.28	0.45	0.29	0.28	0.27	0.126
Female	0.52	0.50	0.54	0.51	0.51	0.720
<i>Other baseline variables</i>						
Age of Owner	40.8	10.8	41.3	40.1	40.9	0.448
Years schooling	8.5	4.4	8.6	8.7	8.3	0.153
Firm age	12.2	9.2	12.7	11.6	12.4	0.346
Monthly sales	1336	2603	1364	1320	1328	0.900
Weekly sales	409	829	408	425	394	0.587
Weekly profits	66	122	67	62	68	0.531
Capital stock	1569	4297	1673	1493	1549	0.834
Number of employees	2.9	4.1	2.9	2.9	2.9	0.744
Personal initiative index	4.23	0.47	4.24	4.23	4.21	0.718
Business practices	0.58	0.14	0.58	0.59	0.58	0.365
Sample Size	1250		393	435	422	

Notes: Baseline (2013) characteristics for entrepreneurs interviewed at least once in 2021. Monetary values are expressed in terms of September 2021 USD. **Control**, **PI**, and **Traditional** denote firms randomly assigned to the control group, personal initiative training group, and traditional business training groups respectively. P-value of equality tests for equality of means across the three groups.

Table A2b: Baseline balance by gender for those responding to at least one 7-year follow-up

	Overall Mean	Overall S.D.	Control Mean	PI Mean	Traditional Mean	p-value equality
Panel A: Males						
Monthly profits	224	347	222	221	230	0.301
Commerce sector	0.22	0.41	0.20	0.23	0.22	n.a.
Production sector	0.39	0.49	0.42	0.38	0.38	0.302
Age of Owner	39.2	10.6	40.3	38.1	39.2	0.273
Years schooling	10.04	3.90	9.94	10.13	10.04	0.853
Firm age	10.93	8.47	11.60	9.97	11.33	0.148
Monthly sales	1456	2831	1460	1488	1421	0.698
Weekly sales	438	904	390	484	432	0.499
Weekly profits	76	127	74	75	78	0.820
Capital stock	2520	5342	2821	2239	2546	0.574
Number of Workers	3.84	4.87	4.18	3.52	3.86	0.754
Personal initiative index	4.27	0.49	4.27	4.29	4.24	0.772
Business practices	0.61	0.14	0.61	0.62	0.61	0.695
Sample Size	596		179	211	206	
Panel B: Females						
Monthly profits	149	329	165	134	148	0.339
Commerce sector	0.70	0.46	0.70	0.68	0.71	0.301
Production sector	0.18	0.38	0.18	0.18	0.17	0.301
Age of Owner	42.3	10.7	42.2	42.1	42.5	0.897
Years schooling	7.11	4.33	7.45	7.27	6.62	0.122
Firm age	13.43	9.67	13.65	13.20	13.46	0.926
Monthly sales	1227	2374	1284	1161	1240	0.980
Weekly sales	383	755	424	370	358	0.720
Weekly profits	56	117	61	49	59	0.588
Capital stock	702	2781	713	791	599	0.752
Number of Workers	2.07	3.03	1.86	2.34	2.00	0.058
Personal initiative index	4.19	0.45	4.22	4.18	4.18	0.695
Business practices	0.56	0.14	0.56	0.56	0.55	0.430
Sample Size	654		214	224	216	

Notes: Baseline (2013) characteristics for entrepreneurs interviewed at least once in 2021.

Monetary values are expressed in terms of September 2021 USD. **Control**, **PI**, and **Traditional** denote firms randomly assigned to the control group, personal initiative training group, and traditional business training groups respectively. P-value of equality tests for equality of means across the three groups.

Table A3: Baseline balance for those not responding to any 7-year follow-up survey

	Overall Mean	Overall S.D.	Control Mean	PI Mean	Traditional Mean	p-value equality
<i>Baseline strata variables</i>						
Monthly profits	190	299	153	212	223	0.775
Commerce sector	0.52	0.50	0.52	0.57	0.49	
Production sector	0.25	0.43	0.21	0.26	0.28	
Female	0.54	0.50	0.47	0.58	0.60	
<i>Other baseline variables</i>						
Age of Owner	39.2	11.6	38.1	39.4	40.7	0.995
Years schooling	7.7	5.5	8.4	7.2	7.2	0.663
Firm age	10.8	8.7	11.0	11.5	9.9	0.750
Monthly sales	1193	2060	1161	1439	1033	0.969
Weekly sales	375	618	373	441	324	0.737
Weekly profits	63	102	56	63	74	0.848
Capital stock	1356	4150	1455	1388	1193	0.853
Number of employees	2.3	3.7	2.3	2.2	2.5	0.896
Personal initiative index	4.23	0.55	4.29	4.16	4.20	0.590
Business practices	0.58	0.15	0.59	0.59	0.56	0.767
Sample Size	250		107	65	78	

Notes: Baseline (2013) characteristics for entrepreneurs interviewed at least once in 2021.

Monetary values are expressed in terms of September 2021 USD. **Control**, **PI**, and **Traditional** denote firms randomly assigned to the control group, personal initiative training group, and traditional business training groups respectively. P-value of equality tests for equality of means across the three groups.

Table A4a: Dynamics Selection into who responds to the long-run surveys

	Full sample				Control group				Personal initiative training group			
	Both surveys	Only one survey	Neither survey	p-value	Both surveys	Only one survey	Neither survey	p-value	Both surveys	Only one survey	Neither survey	p-value
<i>Round 4 survey variables</i>												
Answered Round 4	0.97	0.88	0.63	0.000	0.97	0.85	0.67	0.000	0.97	0.90	0.63	0.000
Open in Round 4	0.93	0.89	0.80	0.000	0.94	0.90	0.83	0.027	0.91	0.88	0.83	0.208
Above Median profits round 4	0.57	0.50	0.39	0.000	0.55	0.49	0.37	0.013	0.60	0.54	0.46	0.134
Profit growth baseline to R4>0	0.53	0.47	0.36	0.000	0.51	0.42	0.40	0.100	0.57	0.51	0.35	0.009
Personal initiative in round 4	4.52	4.52	4.49	0.828	4.49	4.45	4.43	0.503	4.57	4.60	4.58	0.721
Business practices in round 4	0.63	0.59	0.46	0.000	0.59	0.56	0.48	0.002	0.65	0.59	0.50	0.001
<i>Known operating status in long-run</i>												
Self-employed after 7 years	0.97	0.92	0.06	0.000	0.96	0.92	0.09	0.000	0.97	0.95	0.04	0.000
Monthly Profits after 7 years	248	167			204	145			289	213		
Sample size	915	336	249		279	115	106		334	101	65	

Notes:

Both surveys denotes firms that replied to both in-person and phone 7-year survey. Only one survey denotes firm replied to only one of the two survey types, and neither denotes firm did not respond to either survey type.

Round 4 survey was last short-run survey conducted, at 2.5 years post-training. Self-employed after 7 years is based on those who responded to long-run survey, or who had operating status reported by proxy report, were dead or internationally migrated, but is only available for 36% of those responding to neither survey.

Monthly profits after 7 years not available for those not answering any surveys.

p-value is for test of equality of means across the three groups (both, only one, neither).

Table A4b: Dynamics of Selection into responding to long-run surveys by gender

	Full sample				Control group				Personal initiative training group			
	Both surveys	Only one survey	Neither survey	p-value	Both surveys	Only one survey	Neither survey	p-value	Both surveys	Only one survey	Neither survey	p-value
Panel A: Men												
Answered Round 4	0.98	0.89	0.63	0.000	0.99	0.90	0.68	0.000	0.98	0.90	0.59	0.000
Open in Round 4	0.94	0.89	0.82	0.006	0.93	0.90	0.86	0.371	0.95	0.84	0.88	0.128
Above Median profits round 4	0.63	0.56	0.45	0.004	0.57	0.60	0.46	0.396	0.68	0.58	0.52	0.254
Profit growth baseline to R4>0	0.54	0.49	0.39	0.024	0.51	0.47	0.42	0.520	0.58	0.47	0.43	0.245
Personal initiative in round 4	4.53	4.53	4.43	0.254	4.56	4.47	4.42	0.164	4.52	4.59	4.54	0.584
Business practices in round 4	0.66	0.61	0.49	0.000	0.60	0.57	0.56	0.506	0.69	0.62	0.51	0.018
Self-employed after 7 years	0.97	0.92	0.02	0.000	0.96	0.98	0.06	0.000	0.98	0.95	0	0.000
Monthly Profits after 7 years	292	251			201	232			364	337		
Sample Size	464	133	114		138	42	56		172	39	27	
Panel B: Women												
Answered Round 4	0.96	0.86	0.63	0.000	0.96	0.82	0.66	0.000	0.95	0.90	0.66	0.001
Open in Round 4	0.92	0.89	0.78	0.004	0.94	0.90	0.80	0.063	0.87	0.90	0.79	0.373
Above Median profits round 4	0.51	0.46	0.35	0.005	0.52	0.42	0.27	0.008	0.51	0.52	0.42	0.628
Profit growth baseline to R4>0	0.52	0.46	0.34	0.001	0.51	0.39	0.39	0.160	0.55	0.534	0.303	0.021
Personal initiative in round 4	4.51	4.51	4.55	0.754	4.43	4.43	4.45	0.984	4.62	4.61	4.61	0.977
Business practices in round 4	0.6	0.57	0.43	0.000	0.58	0.54	0.40	0.001	0.60	0.58	0.48	0.092
Self-employed after 7 years	0.97	0.92	0.08	0.000	0.96	0.89	0.11	0.000	0.96	0.95	0.07	0.000
Monthly Profits after 7 years	203	111			207	94			209	135		
Sample Size	451	203	135		141	73	50		162	62	38	

Table A5a: Robustness of Long-term impact on being self-employed

	Self-employed after 7 years	Robustness to assumptions about attritors			
		All s/e	92% s/e	50% s/e	0% s/e
Assigned to personal initiative	0.030 (0.022)	0.018 (0.019)	0.024 (0.019)	0.054 (0.023)	0.088 (0.025)
Assigned to Traditional Training	0.010 (0.022)	-0.000 (0.019)	0.004 (0.020)	0.022 (0.023)	0.044 (0.026)
Sample Size	1341	1500	1500	1500	1500
Control Mean	0.883	0.900	0.888	0.828	0.756
p-value: PI=Trad	0.354	0.333	0.303	0.144	0.075

Notes:

Column 1 shows treatment impacts on whether the respondent is still self-employed in Togo 7 years after training. Columns 2 to 5 examine robustness to different assumptions about the percentage of attritors that are still self-employed. Firm owners who were harder to reach were more likely to have closed their firms in earlier rounds than those who were interviewed more easily, suggesting fraction of attritors self-employed is 92% or lower. s/e denotes self-employed. Robust standard errors in parentheses.

Table A5b: Robustness of Profits Impact to Attrition Assumptions

	Base Specification (1)	PDS Lasso (2)	Month Fixed Effects (3)	Lee lower bound (4)	Lee upper bound (5)	Assuming attritors earn:		
						personal max (6)	average of one-time only (7)	no profits (are closed) (8)
Assigned to personal initiative	90.6 (32.2)	96.0 (24.5)	91.6 (35.2)	-41.5 (19.1)	124.2 (34.0)	91.3 (31.9)	75.8 (27.4)	87.8 (27.6)
Assigned to traditional training	27.6 (30.4)	33.2 (24.8)	18.8 (34.3)	-49.2 (18.7)	43.2 (31.6)	23.9 (29.0)	19.4 (25.6)	26.8 (25.9)
Sample Size	1337	1337	1250	1278	1278	1500	1500	1500
Assumed Control Mean	173	173	187	173	173	204	172	147

Notes:

All regressions include randomization strata fixed effects and lagged baseline total profits. Dependent variable is total profits in all businesses. Robust standard errors in parentheses.

Column 1 shows base specification. Column 2 uses PDS Lasso to select additional controls. This selects no controls for either treatment but selects baseline monthly sales, weekly profits, and capital stock as additional controls that predict the outcome.

Column 3 introduces fixed effects for the month of interview. Columns 4 and 5 provide Lee bounds by dropping the top (column 4) or bottom (column 5) 36 firms from PI training and 23 firms from traditional training in terms of profits.

Columns 6, 7 and 8 instead fill in missing profits under different assumptions of what attritors could be earning. Column 6 assumes they would earn the maximum profits they have ever earned over the baseline and four short-term follow-up rounds; Column 7 assumes they earn 167 USD, the average for those answering the long-term follow-up only once; Column 8 assumes that all attritors are closed and hence earn zero profits.

Table A6: Impact on Other Measures of Profits and Sales

	Log Total	Best Month	Worst Month	Recall of best 2019	Recall of worst 2019	Alternate Index
Panel A: Profits						
Assigned to Personal Initiative	0.36 (0.13)	190.7 (61.3)	13.9 (10.5)	157.3 (127.0)	-2.87 (36.2)	0.13 (0.070)
Assigned to Traditional training	0.13 (0.13)	38.6 (55.9)	6.78 (9.86)	2.74 (136.4)	-6.21 (35.9)	0.029 (0.066)
Sample Size	976	1337	1337	852	818	1337
Control Mean	4.5	299.0	52.0	338.7	100.5	-0.0
Control SD	1.4	665.9	133.4	996.4	241.6	0.9
p-value: PI = Trad	0.057	0.010	0.478	0.247	0.923	0.143
Panel B: Sales						
Assigned to Personal Initiative	0.40 (0.12)	627.9 (352.1)	134.3 (100.6)	1757.0 (1020.1)	619.0 (542.7)	0.20 (0.11)
Assigned to Traditional training	0.16 (0.13)	31.3 (333.2)	104.5 (96.1)	-896.9 (841.4)	-308.8 (470.1)	0.041 (0.089)
Sample Size	1043	1337	1337	852	842	1337
Control Mean	6.1	1956.9	505.7	1993.2	724.4	-0.0
Control SD	1.6	4805.3	1313.6	4797.1	1854.5	0.9
p-value: PI = Trad	0.035	0.083	0.765	0.056	0.320	0.160

Notes:

Regressions include randomization strata fixed effects and baseline of outcome. Robust standard errors in parentheses. *, **, *** denote significance at the 10, 5, and 1 percent levels respectively.

Log denotes log of total profits or sales in all businesses in the past month, conditional on operating.

Best Month and **Worst Month** are for profits or sales in the best and worst months of 2021.

Recall of best 2019 and **Recall of worst 2019** are the recall in 2021 of their profits and sales in the best and worst months of 2019.

Alternate index is an index of standardized z-scores of the best and worst months in both 2021 and 2019.

Table A7: Gender Heterogeneity in Traditional Training Impacts and Mechanisms

	Uncond. Profits (1)	Profit & Sales index (2)	Total Labor Income (3)	Employees (4)	Capital Stock (5)	Self- Efficacy (6)	Personal Initiative (7)	"A" Index (8)
<i>Assigned to Traditional Training</i>								
*Male * 2-Years	45.6 (27.8)	0.076 (0.057)	55.8 (31.3)	0.23 (0.33)	365.6 (856.0)	0.00064 (0.045)	0.054 (0.023)	0.019 (0.066)
*Female*2-Years	4.77 (19.0)	-0.00024 (0.045)	4.13 (20.0)	-0.31 (0.21)	5.35 (488.2)	0.0015 (0.049)	0.068 (0.024)	0.15 (0.068)
*Male*7-Years	52.4 (43.1)	0.080 (0.11)	27.1 (51.7)	0.30 (0.45)	1946.6 (1249.8)	0.100 (0.063)	-0.00031 (0.053)	0.17 (0.072)
*Female*7-Years	7.26 (30.7)	0.024 (0.069)	3.07 (35.7)	-0.23 (0.31)	-307.5 (780.2)	-0.038 (0.068)	-0.022 (0.061)	0.082 (0.082)
Sample Size	6980	6979	6786	2605	2566	2445	6789	2742
Control Mean Men SR	262	0.06	306	3.83	4798	4.61	4.38	0.05
Control Mean Women SR	177	-0.05	198	2.02	2401	4.58	4.27	-0.11
Control Mean Men LR	191	0.08	275	3.30	4461	4.37	4.31	-0.09
Control Mean Women LR	157	-0.07	203	2.18	2590	4.44	4.29	-0.08
p-value: Men=Women SR	0.226	0.299	0.165	0.169	0.715	0.990	0.676	0.165
p-value: Men=Women LR	0.394	0.663	0.703	0.337	0.126	0.137	0.792	0.404

Notes:

Regressions include randomization strata and baseline value of the outcome interacted with short-run and long-run dummies, as well as survey wave fixed effects. Coefficients on Personal Initiative Treatment shown in Table 2. Robust standard errors in parentheses, clustered at the firm level. P-values test that the 2-year short-run (SR) or 7-year long-run (LR) effects are equal for men and women. Profits, Labor Income, and Capital Stock are in real 2021 USD and are all winsorized at the 99th percentile. **Uncond. Profit** is monthly profit in all businesses, coded as 0 for those without businesses; **Profit and sales index** is the average of standardized z-scores of the main profits and main sales variables; Total labor income is real monthly profit in all businesses added to real income from wages and other work in the last month; **Main Employees** is number of employees in the main business, winsorized at the 99th percentile; **Capital Stock** is total capital stock including inventories and excluding land and buildings; **Entrepreneurial self-efficacy** is the average of 9 questions on confidence in own ability to perform different business tasks; **Personal initiative** is an index of 5 questions that measure taking initiative and actively tackling problems; **"A" Index** is the average of standardized z-scores of self-efficacy, personal initiative, business practices, and product innovation.

Table A8: Gender Heterogeneity in Impact on Conditional Profits, Business Practices, and Innovation

	Conditional Profits (1)	Business Practices (2)	New Product Innovation (3)
Assigned to Personal Initiative*Male*2-Year	69.1 (29.3)	0.038 (0.014)	0.18 (0.025)
Assigned to Personal Initiative*Female*2-Year	63.0 (21.2)	0.032 (0.013)	0.15 (0.023)
Assigned to Personal Initiative*Male*7-Year	165.8 (49.0)	0.064 (0.027)	0.089 (0.039)
Assigned to Personal Initiative*Female*7-Year	28.3 (38.2)	0.094 (0.028)	0.032 (0.039)
Assigned to Traditional Training*Male*2-Year	54.8 (29.9)	0.019 (0.015)	0.095 (0.024)
Assigned to Traditional Training*Female*2-Year	5.19 (18.4)	0.045 (0.013)	0.072 (0.023)
Assigned to Traditional Training*Male*7-Year	52.6 (50.0)	0.067 (0.028)	0.072 (0.041)
Assigned to Traditional Training*Female*7-Year	-4.59 (36.4)	0.066 (0.028)	0.057 (0.038)
Sample Size	6594	5402	6827
Control Mean Men: 2-Year	273.83	0.72	0.26
Control Mean Women: 2-Year	184.23	0.65	0.33
Control Mean Men: 7-Year	214.33	0.61	0.19
Control Mean Women: 7-Year	179.46	0.54	0.24
p-value: PI Men=Women at 2-Years	0.864	0.736	0.437
p-value: PI Men=Women at 7-Years	0.027	0.440	0.298
p-value: PI 2-Year=7-Year for Men	0.058	0.342	0.040
p-value: PI 2-Year=7-Year for Women	0.350	0.019	0.006

Regressions include randomization strata and baseline value of the outcome interacted with short-run and long-run dummies, as well as survey wave fixed effects. Robust standard errors in parentheses, clustered at the firm level. P-values test that the 2-year short-run (SR) or 7-year long-run (LR) effects are equal for men and women, or equal over time. Profits are in real 2021 USD and are all winsorized at the 99th percentile. **Uncond. Profit** is monthly profit in all businesses, coded as 0 for those without businesses; **Business Practices** is an index of 9 business practices; **New Product Innovation** is a dummy variable for having introduced a new product.

Table A9: Impacts on Different Components of Capital Stock

	Machinery & Equipment	Other Tools	Vehicles	Furniture	Other assets	Stock	Land & Buildings
Panel A: Pooled Sample							
Assigned to Personal Initiative	901 (228)	148 (51)	435 (169)	100 (36)	1 (13)	331 (396)	831 (428)
Assigned to Traditional Training	495 (212)	3 (45)	237 (176)	89 (35)	2 (13)	196 (403)	818 (483)
Sample Size	1184	1184	1188	1188	1188	1188	1188
Control Mean	688	157	380	152	30	1668	885
P-value: PI = Trad	0.047	0.004	0.278	0.742	0.937	0.722	0.976
Panel B: Impacts by Gender							
Assigned to Personal Initiative * Male	1343 (423)	177 (91)	670 (302)	94 (57)	-5 (23)	656 (607)	757 (713)
Assigned to Personal Initiative * Female	462 (168)	118 (49)	206 (158)	115 (44)	7 (13)	62 (514)	923 (497)
Assigned to Traditional Training * Male	760 (390)	18 (86)	361 (303)	156 (58)	9 (24)	849 (659)	941 (790)
Assigned to Traditional Training * Female	222 (173)	-13 (36)	129 (192)	28 (38)	-7 (11)	-386 (478)	711 (584)
Sample Size	1184	1184	1188	1188	1188	1188	1188
Control Mean Men	1223	272	588	201	48	1526	1357
Control Mean Women	223	56	198	110	14	1793	471
p-value: PI Men=Women	0.054	0.573	0.173	0.767	0.648	0.456	0.848
p-value: Traditional Men=Women	0.208	0.741	0.518	0.067	0.557	0.129	0.815

Notes:

Regressions include randomization strata and baseline capital stock. Panel B also includes a control for female, and an interaction between female and baseline capital stock. Robust standard errors in parentheses. Capital stock expressed in real September 2021 USD, winsorized at the 1st and 99th percentiles, and coded as 0 for firms that are closed. The first six columns show different components of the overall capital stock aggregate used in Table 2. The last column of land and buildings is excluded from the overall capital measure given its highly skewed distribution and possible intertwining with household assets.

Table A10a: Gender Heterogeneity on Capital Stock in Subsamples in Long-Run Impacts

	Capital Stock					
	Base Profits <\$100 (1)	Base Profits >=\$100 (2)	Base Sector is Commerce (3)	Base Sector not Commerce (4)	No other Household Business (5)	Other Household Business (6)
Assigned to Personal Initiative * Male	2096 (1591)	3862 (1641)	2435 (3314)	3169 (1119)	3358 (1650)	2651 (1747)
Assigned to Personal Initiative * Female	862 (469)	1291 (1856)	1465 (1144)	-97 (777)	1822 (1062)	-957 (1426)
Assigned to Traditional Training * Male	-406 (912)	3297 (1888)	29 (3242)	1732 (1102)	2437 (1842)	1027 (1665)
Assigned to Traditional Training * Female	176 (293)	-730 (1408)	77 (820)	-675 (743)	942 (858)	-2542 (1225)
Sample Size	615	568	550	633	586	500
Control Mean Men	2683	5993	7568	3656	4511	5213
Control Mean Women	1230	4571	2820	2081	2393	4047
p-value: PI Men=Women	0.457	0.300	0.782	0.017	0.434	0.110
p-value: Traditional Men=Women	0.543	0.088	0.988	0.071	0.462	0.085

Note: robust standard errors in parentheses.

Table A10b: Gender Heterogeneity on A Index in Subsamples in Long-Run Impacts

	A Index					
	Base Profits <\$100 (1)	Base Profits >=\$100 (2)	Base Sector is Commerce (3)	Base Sector not Commerce (4)	No other Household Business (5)	Other Household Business (6)
Assigned to Personal Initiative * Male	0.18 (0.11)	0.33 (0.09)	0.19 (0.15)	0.29 (0.08)	0.26 (0.09)	0.21 (0.09)
Assigned to Personal Initiative * Female	0.12 (0.09)	0.08 (0.12)	0.06 (0.08)	0.20 (0.13)	0.10 (0.08)	0.01 (0.12)
Assigned to Traditional Training * Male	0.07 (0.11)	0.27 (0.09)	-0.02 (0.15)	0.24 (0.08)	0.09 (0.10)	0.21 (0.09)
Assigned to Traditional Training * Female	-0.10 (0.10)	0.27 (0.11)	0.01 (0.09)	0.20 (0.13)	0.07 (0.09)	-0.05 (0.11)
Sample Size	690	646	624	712	608	507
Control Mean Men	-0.12	-0.06	0.10	-0.13	0.14	0.03
Control Mean Women	-0.08	-0.07	-0.04	-0.17	0.06	0.14
p-value: PI Men=Women	0.647	0.100	0.435	0.586	0.175	0.193
p-value: Traditional Men=Women	0.281	0.985	0.866	0.802	0.888	0.066

Note: robust standard errors in parentheses.

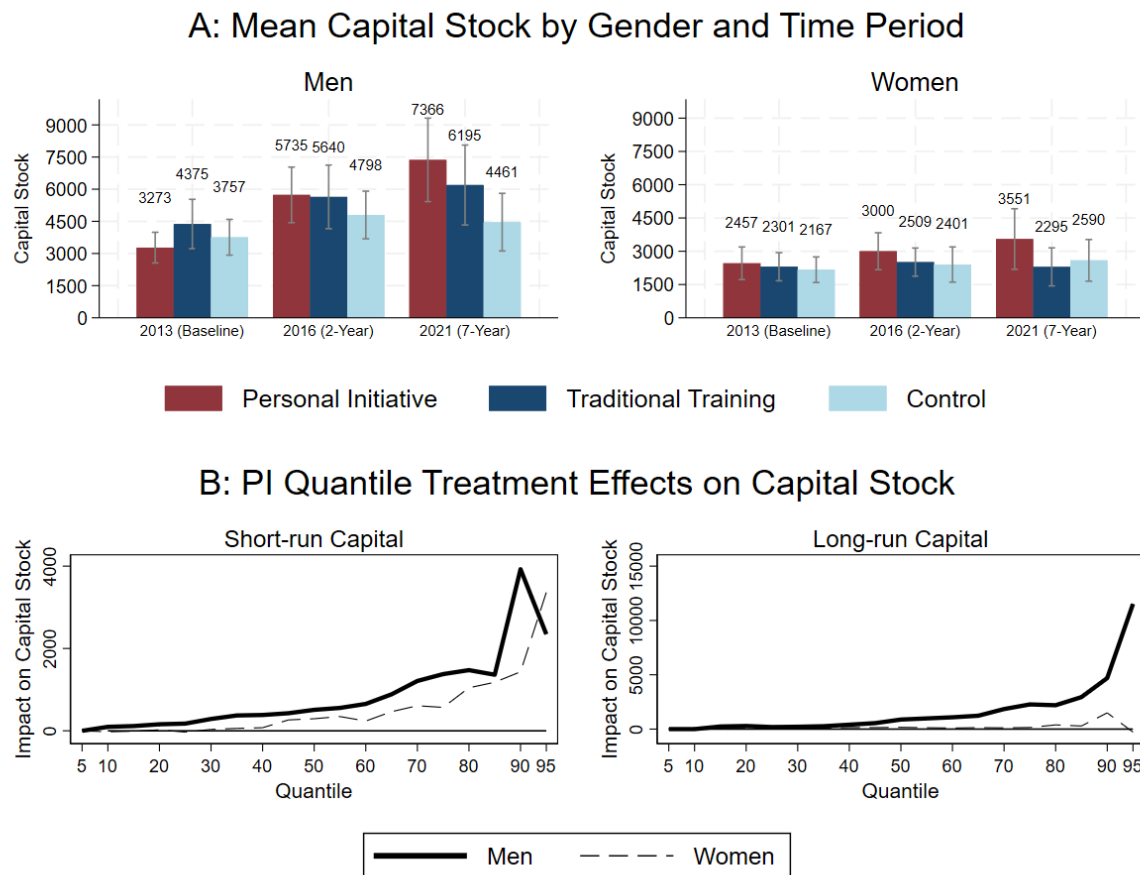
Table A11: Heterogeneity in Impacts for Women

	(1)	(2)	(3)	(4)	(5)
Assigned to Personal Initiative Training	25.2 (45.8)	38.4 (53.4)	29.3 (51.0)	50.1 (62.8)	2.22 (46.0)
Assigned to Traditional Training	-17.5 (46.7)	-4.58 (54.4)	2.62 (45.2)	-8.80 (48.3)	-15.8 (44.6)
Assigned to PI* Not Sole Decision Maker on HH Expenses	-0.58 (75.5)				
Assigned to Trad * Not Sole Decision Maker on HH Expenses	25.2 (67.6)				
Assigned to PI*Looks after Kids or Elderly		-19.4 (74.6)			
Assigned to Trad*Looks After Kids or Elderly		6.45 (70.8)			
Assigned to PI*Above Median Age of 42 at Baseline			0.11 (75.1)		
Assigned to Trad*Above Median Age of 42 at Baseline			-6.67 (69.2)		
Assigned to PI*Below 9 Years Education				-42.8 (76.2)	
Assigned to Trad*Below 9 Years Education				15.4 (67.2)	
Assigned to PI*Not Married					105.5 (72.0)
Assigned to Trad*Not Married					45.6 (49.7)
Sample Size	699	699	699	699	699
Proportion with Interaction=1	0.49	0.55	0.49	0.57	0.24
Control Mean for Interaction=1	164	155	143	158	70
Control Mean for Interaction=0	151	159	170	156	187

Notes:

Sample restricted to female entrepreneurs. All regressions include controls for baseline profits, the interacting variable, and the interacting variable interacted with baseline profit. Interacting variable varies across columns as indicated. Robust standard errors in parentheses.

Figure A1: Trajectory of Capital Stock and Capital Stock Quantile Treatment Effects



Notes: Capital stock is in real September 2021 USD, and is winsorized at the 99th percentile. Entrepreneurs with no business are coded as having zero capital. Panel A shows sample means with 95 percent confidence intervals. Panel B shows quantile treatment effects of personal initiative (PI) training estimated from a quantile regression of 2016 capital stock on treatment and baseline capital for the short-run, and separately for the long-run (seven-year) follow-up measure of capital for the long-run effects.