



Online-Appendix

„The Effect of Micro-Entrepreneurship on
Migration Plans of Young Adults in Rural Sub-
Saharan Africa and the Mediating Role of
Subjective and Economic Well-Being“

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Annex

A Methodology

A.1 Description of the Explanatory and Control Variables

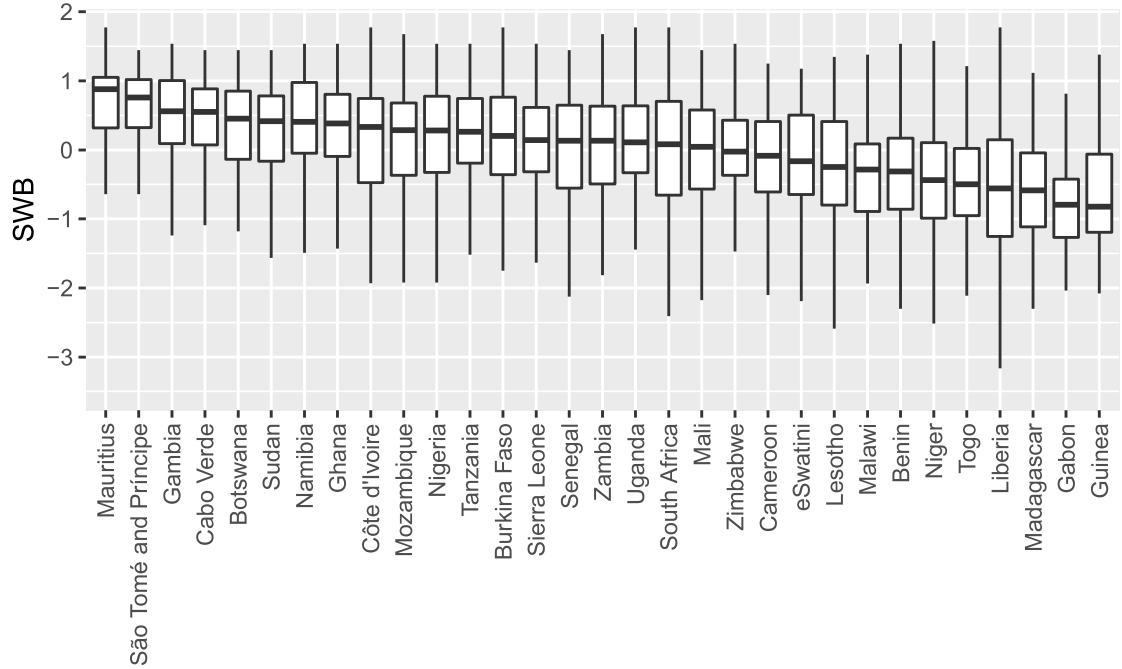
Table 12: Variable Description for Rural Micro-Entrepreneur and Control Variables

Variable Name	Afrobarometer Description
Rural Micro-Entrepreneur	
Urbrurcond	Urban or rural primary sampling unit
Employer	"Do you work for yourself, for someone else in the private sector or the non-governmental sector, or for government?"
Employment Status	"Do you have a job that pays a cash income? [If yes, ask:] Is it full-time or part-time? [If no, ask:] Are you presently looking for a job?"
Control Variables	
Age	"How old are you?"
Gender	Respondent's Gender
Education Level	"What is your highest level of education?"
Head of Household	"Who is the head of this household, that is, the person who has primary responsibility for making decisions on behalf of the household?"
Household Size	Number of adults in household
Remittances Dependency	"Considering ALL the activities you engage in to secure a livelihood, how much, if at all, do you depend on receiving remittances from relatives or friends living in other countries?"
Migration Experience	"During the past three years, have you or anyone in your household gone to live in another country outside [Country] for more than three months? Where did you or they go?"
Perceived Personal Safety	"Please tell me if the following things are worse or better now than they were a few years ago, or are they about the same? - Your personal safety from crime and violence"
Country Income Group	Low-income vs. Middle/High-income Countries according to GNI per capita in USD 2016-2018

Note: All variables except *Country Income Group* stem from the Afrobarometer survey round 7 (2016-2018).

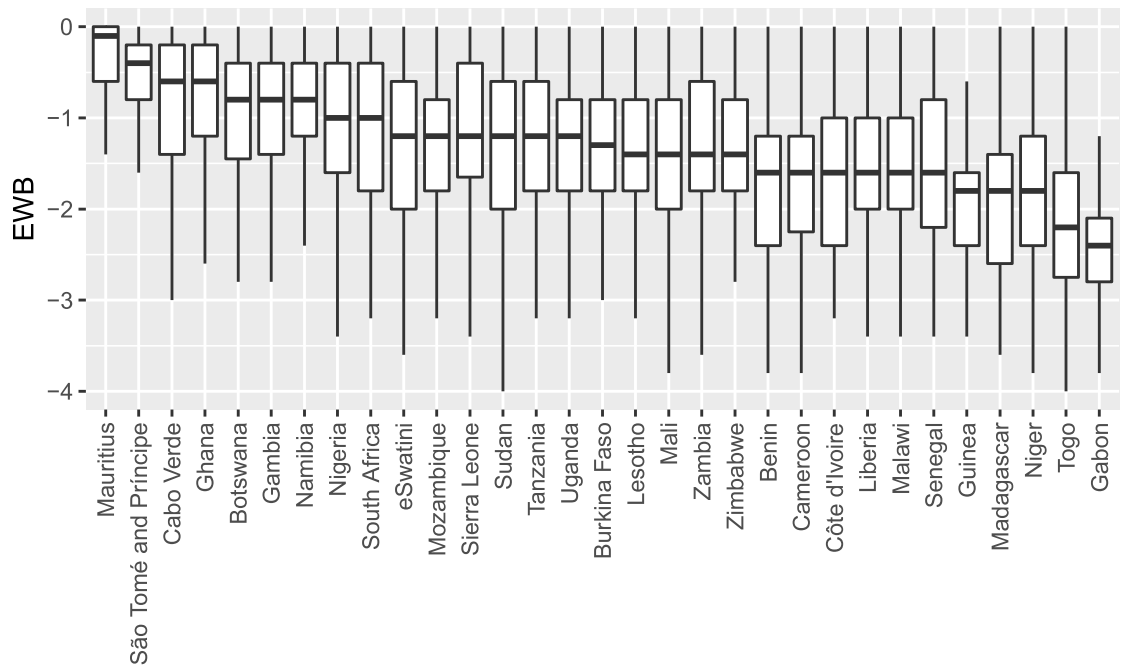
A.2 SWB Index for SSA Countries

Figure 5: Boxplot for Country-specific SWB



A.3 EWB Index for SSA Countries

Figure 6: Boxplot for Country-specific EWB



B Empirical Evidence

B.1 Propensity Score Matching

Figure 7: Back-to-Back Histograms before (left) and after Matching (right)

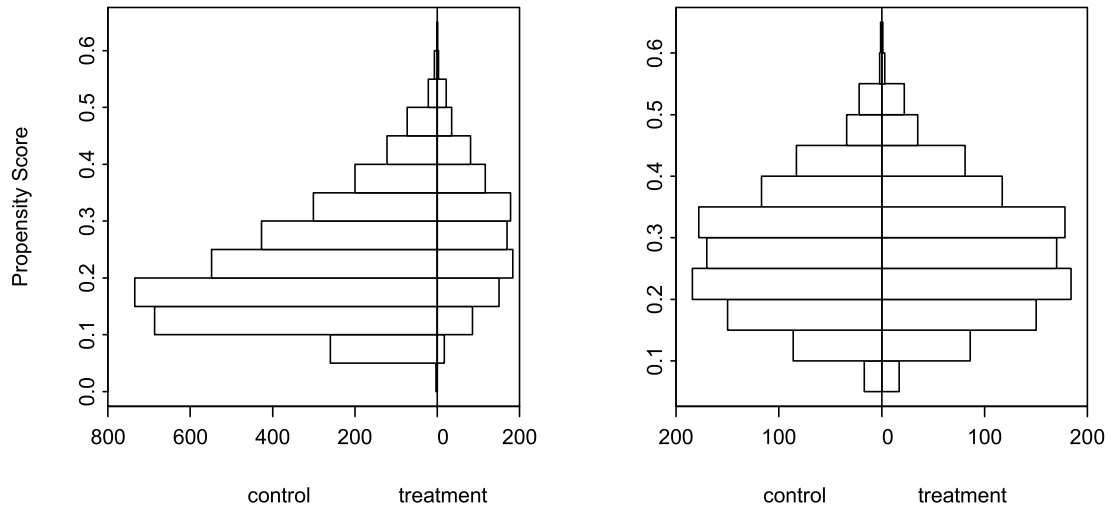
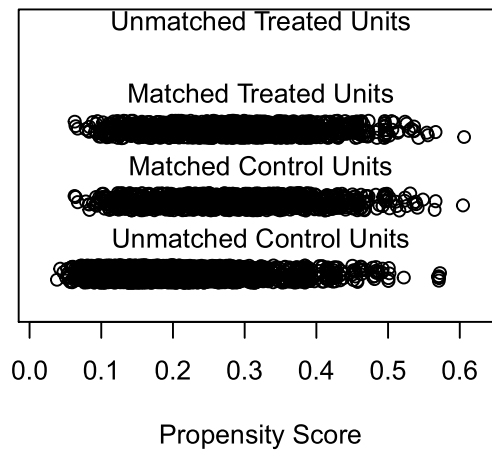


Figure 8: Distribution of Propensity Scores before and after Matching



B.2 Robustness Checks for SEM

*B.2.1 Replication with Bootstrap Standard Errors

Table 13: Effects after Bootstrapping

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.282***	-0.119	0.044	-6.387	.000	-0.370	-0.196
ME → SWB	0.110***	0.056	0.023	4.893	.000	0.066	0.155
ME → EWB	0.352***	0.169	0.028	12.349	.000	0.296	0.408
SWB → MP	-0.124***	-0.103	0.026	-4.747	.000	-0.176	-0.073
EWB → MP	0.028	0.025	0.025	1.113	.266	-0.023	0.077
EWB → SWB	0.566***	0.601	0.011	51.292	.000	0.545	0.588
Indirect effects							
ME → SWB → MP	-0.014***	-0.006	0.004	-3.381	.001	-0.022	-0.007
ME → EWB → MP	0.010	0.004	0.009	1.103	.270	-0.008	0.028
ME → EWB → SWB → MP	-0.025***	-0.010	0.006	-4.432	.000	-0.036	-0.014
Total indirect effect							
ME → MP	-0.029***	-0.012	0.008	-3.510	.000	-0.045	-0.013
Total effect (dir.+indir.)							
ME → MP	-0.310***	-0.131	0.044	-7.119	.000	-0.399	-0.228

Note: Results are based on SEM model from Figure 3. 5,000 Bootstrap samples are estimated.

***p < 0.01, **p < 0.05, *p < 0.1.

*B.2.2 Including Control Variables

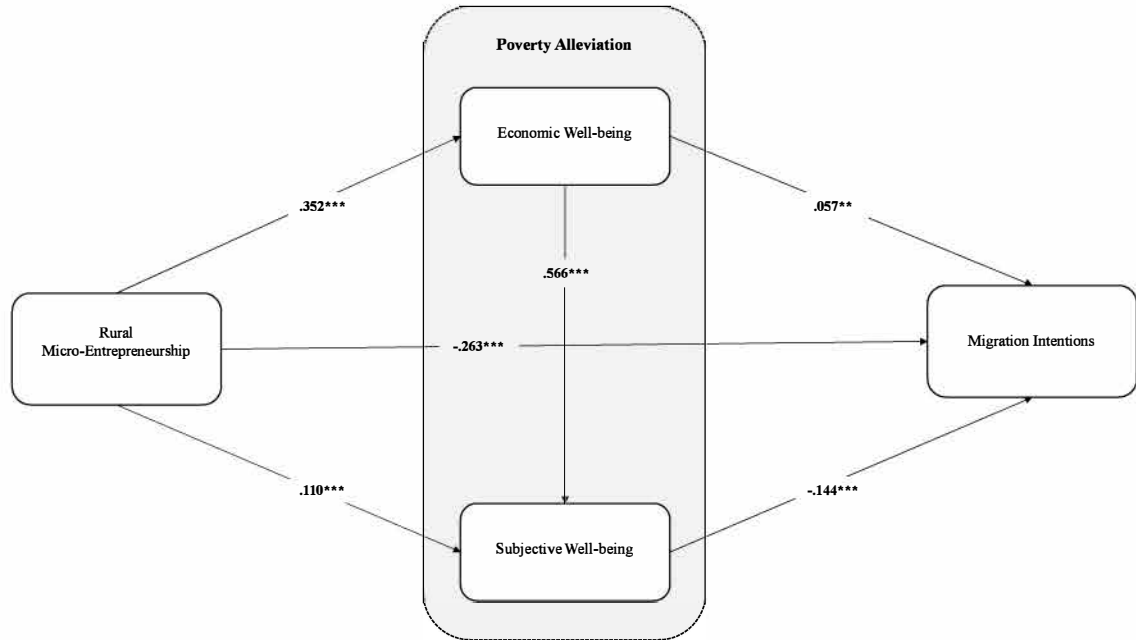
Table 14: Effects after Including Control Variables

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.211***	-0.083	0.045	-4.699	.000	-0.299	-0.123
ME → SWB	0.121***	0.061	0.026	4.698	.000	0.070	0.171
ME → EWB	0.392***	0.188	0.032	12.117	.000	0.329	0.455
SWB → MP	-0.098***	-0.076	0.026	-3.779	.000	-0.149	-0.047
EWB → MP	0.015	0.012	0.025	0.598	.550	-0.033	0.063
EWB → SWB	0.543***	0.576	0.012	45.050	.000	0.519	0.566
Indirect effects							
ME → SWB → MP	-0.012***	-0.005	0.004	-2.990	.003	-0.020	-0.004
ME → EWB → MP	0.006	0.002	0.010	0.596	.551	-0.013	0.025
ME → EWB → SWB → MP	-0.021***	-0.008	0.006	-3.616	.000	-0.032	-0.010
Total indirect effect							
ME → MP	-0.027***	-0.011	0.009	-3.027	.002	-0.044	-0.010
Total effect (dir.+indir.)							
ME → MP	-0.238***	-0.094	0.044	-5.395	.000	-0.325	-0.152

Note: Results are based on SEM model from Figure 3. Control variables covered: *Age, Age Squared, Gender, Education Level, Head of Household, Household Size, Remittances Dependency, Migration Experience, Perceived Personal Safety*. ***p < 0.01, **p < 0.05, *p < 0.1.

*B.2.3 Using Migration Intentions as Dependent Variable

Figure 9: SEM Model with Migration Intentions



Note: Estimator: DWLS. N=4,430. ***p < 0.01, **p < 0.05, *p < 0.1.

Table 15: Effects with Migration Intentions as Dependent Variable

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MI	-0.263***	-0.111	0.043	-6.071	.000	-0.348	-0.178
ME → SWB	0.110***	0.056	0.026	4.167	.000	0.058	0.162
ME → EWB	0.352***	0.169	0.033	10.553	.000	0.286	0.417
SWB → MI	-0.144***	-0.120	0.026	-5.550	.000	-0.195	-0.093
EWB → MI	0.057**	0.050	0.025	2.318	.020	0.009	0.106
EWB → SWB	0.566***	0.601	0.012	47.318	.000	0.543	0.590
Indirect effects							
ME → SWB → MI	-0.016***	-0.007	0.005	-3.274	.001	-0.025	-0.006
ME → EWB → MI	0.020**	0.008	0.009	2.272	.023	0.003	0.038
ME → EWB → SWB → MI	-0.029***	-0.012	0.006	-4.937	.000	-0.040	-0.017
Total indirect effect							
ME → MI	-0.024***	-0.010	0.009	-2.865	.004	-0.041	-0.008
Total effect (dir.+indir.)							
ME → MI	-0.287***	-0.121	0.043	-6.744	.000	-0.371	-0.204

Note: MI=Migration Intentions. Results are based on SEM model from Figure 9.

***p < 0.01, **p < 0.05, *p < 0.1.

*B.2.4 Subset to Low-income Countries and Middle/High-income Countries

Table 16: Effects for Low-income Countries

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.452***	-0.192	0.055	-8.169	.000	-0.560	-0.343
ME → SWB	0.109***	0.056	0.035	3.155	.002	0.041	0.177
ME → EWB	0.312***	0.158	0.041	7.591	.000	0.232	0.393
SWB → MP	-0.162***	-0.134	0.032	-5.034	.000	-0.226	-0.099
EWB → MP	0.037	0.031	0.031	1.167	.243	-0.025	0.098
EWB → SWB	0.583***	0.591	0.016	35.412	.000	0.550	0.615
Indirect effects							
ME → SWB → MP	-0.018***	-0.008	0.007	-2.619	.009	-0.031	-0.004
ME → EWB → MP	0.011	0.005	0.010	1.156	.248	-0.008	0.031
ME → EWB → SWB → MP	-0.030***	-0.013	0.007	-4.230	.000	-0.043	-0.016
Total indirect effect							
ME → MP	-0.036***	-0.015	0.011	-3.387	.001	-0.057	-0.015
Total effect (dir.+indir.)							
ME → MP	-0.488***	-0.208	0.055	-8.905	.000	-0.595	-0.380

Note: Results are based on SEM model from Figure 3. Low-income countries (according to GNI per capita in USD 2016-2018): Benin, Burkina Faso, Gambia, Guinea, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Senegal, Sierra Leone, Tanzania, Togo, Uganda, Zimbabwe.

***p < 0.01, **p < 0.05, *p < 0.1.

Table 17: Effects for Middle/High-income Countries

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.051	-0.021	0.070	-0.725	.468	-0.187	0.086
ME → SWB	0.130***	0.067	0.044	2.981	.003	0.045	0.216
ME → EWB	0.464***	0.213	0.057	8.206	.000	0.354	0.575
SWB → MP	-0.059	-0.047	0.042	-1.398	.162	-0.141	0.024
EWB → MP	0.016	0.015	0.038	0.438	.661	-0.057	0.090
EWB → SWB	0.529***	0.589	0.018	29.940	.000	0.494	0.564
Indirect effects							
ME → SWB → MP	-0.008	-0.003	0.006	-1.247	.212	-0.020	0.004
ME → EWB → MP	0.008	0.003	0.017	0.438	.661	-0.027	0.042
ME → EWB → SWB → MP	-0.014	-0.006	0.010	-1.384	.166	-0.035	0.006
Total indirect effect							
ME → MP	-0.014	-0.006	0.015	-0.936	.349	-0.045	0.016
Total effect (dir.+indir.)							
ME → MP	-0.065	-0.026	0.068	-0.957	.339	-0.198	0.068

Note: Results are based on SEM model from Figure 3. Middle/High-income countries (according to GNI per capita in USD 2016-2018): Botswana, Cabo Verde, Cameroon, Côte d'Ivoire, Eswatini, Gabon, Ghana, Lesotho, Mauritius, Namibia, Nigeria, São Tomé and Príncipe, South Africa, Sudan, Zambia.

***p < 0.01, **p < 0.05, *p < 0.1.

*B.2.5 Distinction between Non-farm and Agricultural Entrepreneurs.

Table 18: Effects for Non-farm Entrepreneurs

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.050	-0.018	0.059	-0.839	.401	-0.166	0.067
ME → SWB	0.045	0.020	0.037	1.227	.220	-0.027	0.118
ME → EWB	0.422***	0.175	0.049	8.597	.000	0.326	0.519
SWB → MP	-0.109***	-0.090	0.032	-3.350	.001	-0.173	-0.045
EWB → MP	-0.001	-0.001	0.030	-0.043	.965	-0.060	0.057
EWB → SWB	0.571***	0.613	0.014	39.445	.000	0.543	0.599
Indirect effects							
ME → SWB → MP	-0.005	-0.002	0.004	-1.139	.255	-0.013	0.004
ME → EWB → MP	-0.001	0.000	0.013	-0.043	.965	-0.025	0.024
ME → EWB → SWB → MP	-0.026***	-0.010	0.008	-3.145	.002	-0.043	-0.010
Total indirect effect							
ME → MP	-0.032***	-0.012	0.011	-2.819	.005	-0.054	-0.010
Total effect (dir.+indir.)							
ME → MP	-0.082	-0.030	0.058	-1.399	.162	-0.196	0.033

Note: Results are based on SEM model from Figure 3. Sectors covered: Trader/Hawker/Vendor, Retail/Shop, Unskilled Manual Worker, Artisan/Skilled Manual Worker, Clerical/Secretarial, Supervisor/Foreman/Senior Manager, Security Services, Mid-level Professional, Upper-level Professional, Other.

***p < 0.01, **p < 0.05, *p < 0.1.

Table 19: Effects for Agricultural Entrepreneurs

	β	std.est	SE	z	p>z	95% Conf. Int.	
						LLCI	ULCI
Direct effects							
ME → MP	-0.481***	-0.226	0.068	-7.041	.000	-0.615	-0.347
ME → SWB	0.208***	0.119	0.039	5.340	.000	0.131	0.284
ME → EWB	0.449***	0.251	0.046	9.728	.000	0.359	0.540
SWB → MP	-0.148***	-0.122	0.041	-3.635	.000	-0.228	-0.068
EWB → MP	0.048	0.040	0.041	1.183	.237	-0.031	0.127
EWB → SWB	0.547***	0.561	0.021	25.684	.000	0.505	0.588
Indirect effects							
ME → SWB → MP	-0.031***	-0.014	0.010	-2.930	.003	-0.051	-0.010
ME → EWB → MP	0.022	0.010	0.018	1.177	.239	-0.014	0.057
ME → EWB → SWB → MP	-0.036***	-0.017	0.011	-3.411	.001	-0.057	-0.015
Total indirect effect							
ME → MP	-0.046**	-0.021	0.019	-2.398	.017	-0.083	-0.008
Total effect (dir.+indir.)							
ME → MP	-0.527***	-0.248	0.066	-7.976	.000	-0.656	-0.397

Note: Results are based on SEM model from Figure 3. Sectors covered: Agriculture/Farming/Fishing/Forestry.

***p < 0.01, **p < 0.05, *p < 0.1.