

Empowering African Entrepreneurs

Cultivating Entrepreneurial Mindsets and Building Resilience in African Entrepreneurs through the Tony Elumelu Foundation Entrepreneurship Programme.







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The Tony Elumelu Foundation (TEF) was founded in 2010 with a mission to catalyse Africa's economic transformation through entrepreneurship development. Since the launch of the TEF Entrepreneurship Programme in 2015, the Foundation has reached over 1.5 million young Africans on its digital hub, TEFConnect, and disbursed USD\$100 million in direct funding to 20,000 young African women and men who have collectively created 400,00 jobs and generated US\$2.5 billion in revenue. TEF is empowering a new generation of African entrepreneurs, driving poverty eradication, catalysing job creation across Africa, and ensuring inclusive economic empowerment. The Foundation is inspired the economic philosophy of Africapitalism, which positions the private sector as the key enabler of economic and social wealth creation in Africa.

The Foundation's ability to fund, train, mentor, and network young African entrepreneurs, has created a unique platform for catalysing growth. The robust ability of the Foundation to reach entrepreneurs across geographies and sectors, has enabled

it to conduct innovative partnerships with the European Union, the United Nations Development Programme, the International Committee of the Red Cross, the United States Government via the United States African Development Foundation (USADF), the Organisation of African, Caribbean and Pacific States (OACPS), the French Development Agency (AFD), the German Development Finance Institution (DEG), the German Agency for International Cooperation (GIZ), the African Development Bank (AfDB), the IKEA Foundation, Google, and Sightsavers, with bespoke programmes including targeting female empowerment, support for people with disabilities, and growth in fragile states.



The Problem

Despite a young population and substantial natural resources, Africa's economy lags other regions of the world and much of its population is exposed to food insecurity, energy crises, rising inflation, and high youth unemployment. In Sub-Saharan Africa, economic growth has slowed in recent years, falling short of what is needed to lift most of the population out of extreme poverty.

The driving force behind Africa's economy is small- and medium-sized enterprises (SMEs). These firms provide the bulk of jobs, generate the majority of income, and provide essential goods and services for populations across the continent, even in locations where larger firms do not reach. Boosting entrepreneurship, both by increasing the skills of entrepreneurs and relaxing the constraints they face, is crucial to achieving rapid economic development in Africa.

TEF Impact Evaluation

A research collaboration between the Massachusetts Institute of Technology, the University of Chicago, Columbia University, and the Foundation is set to assess the impact of the TEF Entrepreneurship Programme in Africa. The evaluation uses a randomized control trial methodology to compare otherwise similar applicants who embarked on the programme versus those who did not.

TEF applicants fill out an initial application, providing basic information about the business as well as completing several short business fluency tests. Based on this application, the best-performing candidates are shortlisted to continue on the programme. The evaluation considers applicants with lower scores who are around the cutoff for acceptance for the program. Half are randomly assigned to continue with the programme and the

bottom half are invited to apply again next year. The TEF programme has several stages with entrepreneurs completing online business management training, receiving personalised mentorship, undergoing a pitching assessment, and producing a business plan. The best performers are then provided with \$5000 non-returnable seed capital to help start and grow their businesses.

We are in the process of tracking entrepreneur outcomes such as success in opening a business, income, number of employees, and business sales. Comparing those randomly selected to continue allows us to estimate the impacts of participating in the TEF programme. In addition, some locations within each country had more successful applicants and some fewer, allowing assessment of community-level impacts. We expect final results in late 2024.

Understanding What Unsuccessful Applicants Do Next

In a second, related experiment we also explored how the different messaging affected intentions to apply in subsequent years.

In late April 2023, letters were sent out to the TEF Entrepreneurship Programme applicants who were unsuccessful in their application for the 2023 cycle. Applicants were rejected for various reasons including low qualification scores, plagiarism, and unverified identity. The emails were sent in four languages: English, French, Portuguese, and Arabic. We randomly varied the content of these emails in three ways.

- received a message of encouragement to continue on their entrepreneurship journey: "While this outcome may discourage you from your entrepreneurial path, your application has some strength. It is also important to remember that there are many pathways to success and entrepreneurship is not for everyone. It is a career path that requires significant time, effort, and financial investments with no guarantee of success. For some, it is better to join a successful business than to start their own."
- Some randomly selected candidates
 received information about their
 application score relative to their rejected
 peers in their state, country, and the
 whole applicant pool or not.

 Some candidates received information about how popular the industry of their business idea was compared to peers in their state, country, and the whole applicant pool or not.

Randomizing the recipients of each of these three messages resulted in eight blocks of applicants. Each email was then customized to the applicants' personal information regarding their score and industry choice. At the end of the email, recipients were asked whether over the next year, they are most likely to:



- Continue to try to start or build [their] business
- 2. Pursue other income-earning activities such as working for other established businesses
- 3. Unsure

In addition, after clicking an option above recipients were asked to fill out a further

survey that collected information on what they think is the industry with the best opportunities, what they think their income would be in 12 months and 60 months if they were to continue as an entrepreneur, what they think their income would be if they became an employee for another business, and which careers they think they will pursue over the next 5 years.

Analyzing The Responses

Out of a sample of 75,027 rejected applicants, 7,637 responded to the inemail survey. Out of those who responded, 86% indicated that they want to continue with their entrepreneurship career; 11.81% indicated that they want to change; and the remaining 2.19% are unsure. Out of the 7,637 individuals who responded to the inemail survey on continuing versus changing their career path, 4,288 went on to complete the extended survey in its entirety.

We separate the rejected applicants into four score quadrants from one to four; the higher the quadrant number indicates the higher the applicant scores when compared to other rejected applicants. We ran a linear regression to explore whether the applicant was more likely to answer that they intended to switch to paid employment depending on the content of the email. As shown in Figure 1, controlling for the country of origin and the industry of the entrepreneur's business, receiving their application scores had a

statistically significant negative impact on the applicant's likelihood to change. Specifically, they were 2.7 percentage points more likely to say they would continue with entrepreneurship if they were shown their score. At the same time, lower-scoring individuals were 9.3 percentage points less likely to say they would continue in entrepreneurship (whether or not they were shown their score). This is consistent with worse-performing applicants knowing they were less prepared for entrepreneurship. But surprisingly, lower-scoring candidates were not differentially responsive to being shown their score—i.e. a low-scoring candidate was not more likely to say they would no longer pursue entrepreneurship when they were shown their score.

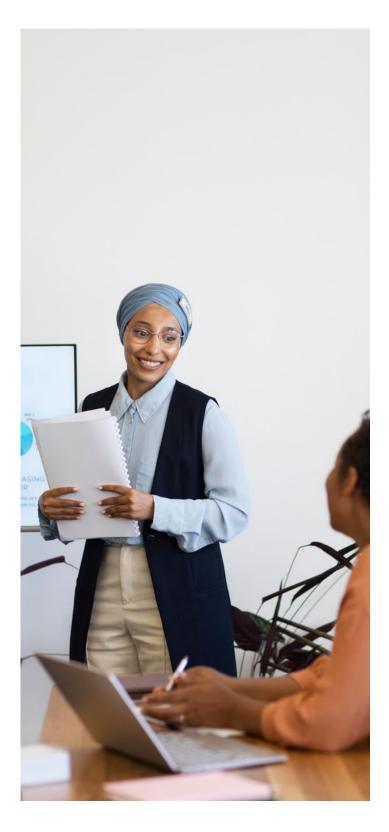
With the data from the applicants who fill out the online survey to completion, we run another regression on the applicants' likelihood to shift to wage work in the next five years (see Figure 2). We found

that—similar to the one-year case—having access to their score decreases the likelihood of shifting out of entrepreneurship by 1.9p.p.; those in the bottom quadrant are even more likely to change to employment than those in the top quadrant (20.7p.p. compared to 9.3p.p); but once again there is no significant interaction term.

Finally, alongside the applicants' likelihood of shifting out of entrepreneurship in the next five years, we collected information on their expected monthly wage for each path in both the next year and the next five years (converted into U.S. dollars for comparability). Seeing the reinforcement message significantly increases an applicant's estimation of their future wage in all categories; effects are particularly large for wages in entrepreneurship and greater in one year than in five years. The reinforcement treatment increases the estimated monthly wage for entrepreneurship in one year by 23.3% and in five years by 20.0%. The reinforcement treatment increases the estimated monthly wage for wage employment in one year by 18.5% and in five years by 12.7%. These results are presented in Figure 3.

Curiously, applicants in the lower score quadrants also estimate their future earnings to be more than those in the top quadrant. In the extreme case, applicants in the bottom quadrant estimate their monthly employment wage in five years to increase 121.6% more than those in the top quadrant.

In conclusion, there are likely to be merits to future rejection emails including the applicant's score which makes applicants more likely to continue in entrepreneurship and hence reapply. There also may be a case for providing an encouragement message which boosts wage perceptions. In contrast, we found no benefits from providing information about how much competition an entrepreneur might face (by revealing how many other applicants also proposed businesses in the same industry)



Discussion 1: A Twist in Entrepreneur's Tenacity and Perspectives Needed to Succeed

Findings showed that entrepreneurs who received their application scores increased their likelihood to continue with their entrepreneurship journey by 2.7% regardless of the setback. By receiving their scores, applicants may feel more motivated to improve and reapply, rather than giving up on their entrepreneurial aspirations. This could reflect that seeing their scores provides a sense of accomplishment and progress, even if they didn't get accepted into the program. This feedback helps entrepreneurs identify areas for improvement and increases their chances of success in future applications (Tony Elumelu Foundation, 2020).

However, further findings showed that lower-scoring individuals were 9.3% less likely to continue with entrepreneurship in the next year compared to higher-scoring rejected applicants. This indicates that they may feel less prepared or less capable of succeeding as entrepreneurs. However, it's worth noting that this finding doesn't necessarily mean that lower-scoring

individuals are less talented or less capable than higher-scoring individuals - it may simply mean that they need more support or resources to develop their skills. The entrepreneur would become more aware of the depth of capacity gaps and how much work is needed.

Contrary to what might be expected, lower-scoring candidates were not more likely to give up on entrepreneurship when their score was revealed compared to higher-scoring candidates seeing their score. This result suggests that simply providing scores may not be enough to deter lower-scoring candidates from pursuing entrepreneurship. While their scores may be low, these candidates seem sufficiently motivated and resilient that revealing their scores does not change their belief in their potential for success. A study by the Global Entrepreneurship Monitor (GEM) found that entrepreneurs in Africa are more likely to start businesses out of necessity rather than opportunity, indicating a strong need to succeed despite challenges (GEM, 2020).

Discussion 2: Motivating increased estimated future wages for both entrepreneurship and employment

While these entrepreneurs were not successful in getting to the final funding stages of the programme, findings suggest that providing a positive and encouraging message can have a significant impact on applicants' perceptions of their future earning potential. By receiving a reinforcement message, applicants may feel more confident and optimistic about their abilities, leading them to estimate higher future wages. This could indicate the message provides a sense of validation and support, which can boost applicants' self-efficacy and motivation.

Another twist in our findings showed that one might expect that higher-scoring applicants would estimate higher future earnings. However, it suggests that lower-scoring applicants may be more optimistic about their future earning potential, despite their lower scores. This could indicate that these applicants are more resilient and motivated, or that they may have a growth mindset and believe that they can. These are qualities that need to be honed and amplified further.



Insights

Motivation:

Receiving scores and reinforcement messages can motivate applicants to continue pursuing entrepreneurship.

Self-efficacy:

Seeing scores and receiving positive messages can increase applicants' selfestimated future wages, an indicator of their belief in their ability.

Resilience:

Lower-scoring applicants may be more resilient and motivated as they are just as likely to continue pursuing entrepreneurship despite seeing their low scores.

Accountability:

Access to scores, which is a form of transparency in the selection process may provide a sense of accountability, motivating applicants to stay invested in their entrepreneurial journey.

Support:

Reinforcement messages may provide a sense of validation and support, boosting applicants' confidence and motivation.

Contextual factors:

The program's context, such as the selection process and feedback mechanisms, can impact applicants' decisions and perceptions.

Recommendations

Incorporating encouraging messages in rejection emails can boost applicants estimated future wages and likelihood to continue in entrepreneurship, potentially by boosting their confidence and outlook. TEF will continue to incorporate messages that emphasize the potential for growth and improvement in entrepreneurial skills.

Developing resources or workshops for rejected applicants to help them improve their skills, and business concepts and keep them committed to the pursuit of their entrepreneurial journey.

Creating a community or platform for all applicants, not just those who were selected. This is to build and encourage continued learning and networking. TEFConnect, the Foundation's proprietary digital platform, offers free business resources and training, to building a community of millions of African entrepreneurs from across all 54 African countries and the diaspora. The platform is set to do even more.

Figure 1: Change in the Next Year

Figure 2: Change in the Next 5 Years

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	Dependent variable: Change in 1 Year					Dependent variable:				
						Change in 5 Years				
	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)	
HasReinforcement	-0.880	-0.608	-0.407	-0.399	HasReinforcement	-2.189**	-1.885*	-1.377	-1.378	
	(0.755)	(0.759)	(0.757)	(0.757)		(1.033)	(1.022)	(1.002)	(1.003)	
HasScore	-2.782***	-2.724***	-2.571***	-0.813	HasScore	-2.072**	-1.887*	-1.442	-1.995	
	(0.748)	(0.751)	(0.749)	(1.928)		(1.027)	(1.014)	(0.995)	(2.488)	
HasIndustry	-0.213	-0.269	-0.245	-0.242	HasIndustry	-0.917	-0.916	-0.739	-0.717	
	(0.748)	(0.753)	(0.751)	(0.751)		(1.028)	(1.017)	(0.997)	(0.997)	
ScoreQ1			7.960***	9.274***	ScoreQ1			20.659***	20.693***	
			(1.225)	(1.729)				(1.612)	(2.265)	
ScoreQ2			5.423***	6.575***	ScoreQ2			14.859***	13.585***	
			(1.219)	(1.725)				(1.596)	(2.256)	
ScoreQ3			3.059***	3.837**	ScoreQ3			9.938***	10.091***	
			(1.182)	(1.696)				(1.538)	(2.211)	
ScoreQ4					ScoreQ4					
HasScore:ScoreQ1				-2.579	HasScore:ScoreQ1				-0.150	
				(2.401)					(3.158)	
HasScore:ScoreQ2				-2.248	HasScore:ScoreQ2				2.611	
				(2.416)					(3.156)	
HasScore:ScoreQ3				-1.470	HasScore:ScoreQ3				-0.307	
				(2.357)					(3.067)	
HasScore:ScoreQ4					HasScore:ScoreQ4					
Constant	13.677***	23.844	17.021	16.144	Constant	26.757***	26.481	7.215	7.868	
	(0.707)		(15.276)	(15.306)				(18.754)		
Country fixed effects	No	Yes	Yes	Yes	Country fixed effects	No	Yes	Yes	Yes	
Industry fixed effects		Yes	Yes	Yes	Industry fixed effects	No	Yes	Yes	Yes	
Observations	7,457	7,457	7,457	7,457	Observations	4,288	4,288	4,288	4,288	
\mathbb{R}^2	0.002	0.014	0.020	0.021	\mathbb{R}^2	0.002	0.058	0.096	0.096	
Adjusted R ²	0.002	0.003	0.009	0.009	Adjusted R ²	0.002	0.041	0.079	0.078	
Note:		*p<0.1; *	*p<0.05; *	****p<0.01	Note:		*p<0.1;	**p<0.05;	***p<0.01	

Figure 3: Comparison of Expected Wage, w/ Score and Country & Industry Fixed Effects

	Dependent variable:							
	log(Entreprenuership, 12m) log(Entreprenuership, 60m) log(Employment, 12m) log(Employment, 12m)							
	(1)	(2)	(3)	(4)				
HasReinforcement	0.233***	0.200***	0.185***	0.127*				
	(0.066)	(0.077)	(0.062)	(0.073)				
HasScore	-0.074	-0.071	-0.033	-0.049				
	(0.065)	(0.077)	(0.061)	(0.073)				
HasIndustry	0.017	0.108	0.030	0.055				
	(0.065)	(0.077)	(0.061)	(0.073)				
ScoreQ1	0.420***	0.813***	0.649***	1.216***				
	(0.106)	(0.124)	(0.099)	(0.118)				
ScoreQ2	0.432***	0.747***	0.735***	1.133***				
	(0.105)	(0.123)	(0.098)	(0.117)				
ScoreQ3	0.334***	0.681***	0.519***	0.845***				
	(0.101)	(0.119)	(0.095)	(0.113)				
ScoreQ4								
Constant	8.351***	9.770***	5.336***	7.415***				
	(1.232)	(1.447)	(1.157)	(1.374)				
Country fixed effects	Yes	Yes	Yes	Yes				
Industry fixed effects	Yes	Yes	Yes	Yes				
Observations	4,288	4,288	4,288	4,288				
R^2	0.186	0.156	0.180	0.158				
Adjusted R ²	0.171	0.140	0.164	0.142				
Residual Std. Error (df = 4207)	2.121	2.491	1.992	2.365				
F Statistic (df = 80; 4207)	12.030***	9.721***	11.509***	9.834***				

Note:

*p<0.1; **p<0.05; ***p<0.01



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