



*"450 million new workers will join the
African working population between 2010 and 2035"*



How can this challenge be addressed through local Entrepreneurship?
How is the macro-economic environment in Africa influencing Entrepreneurial intent?



Environments for Entrepreneurship in Developing Countries: A cross-country comparison in Africa

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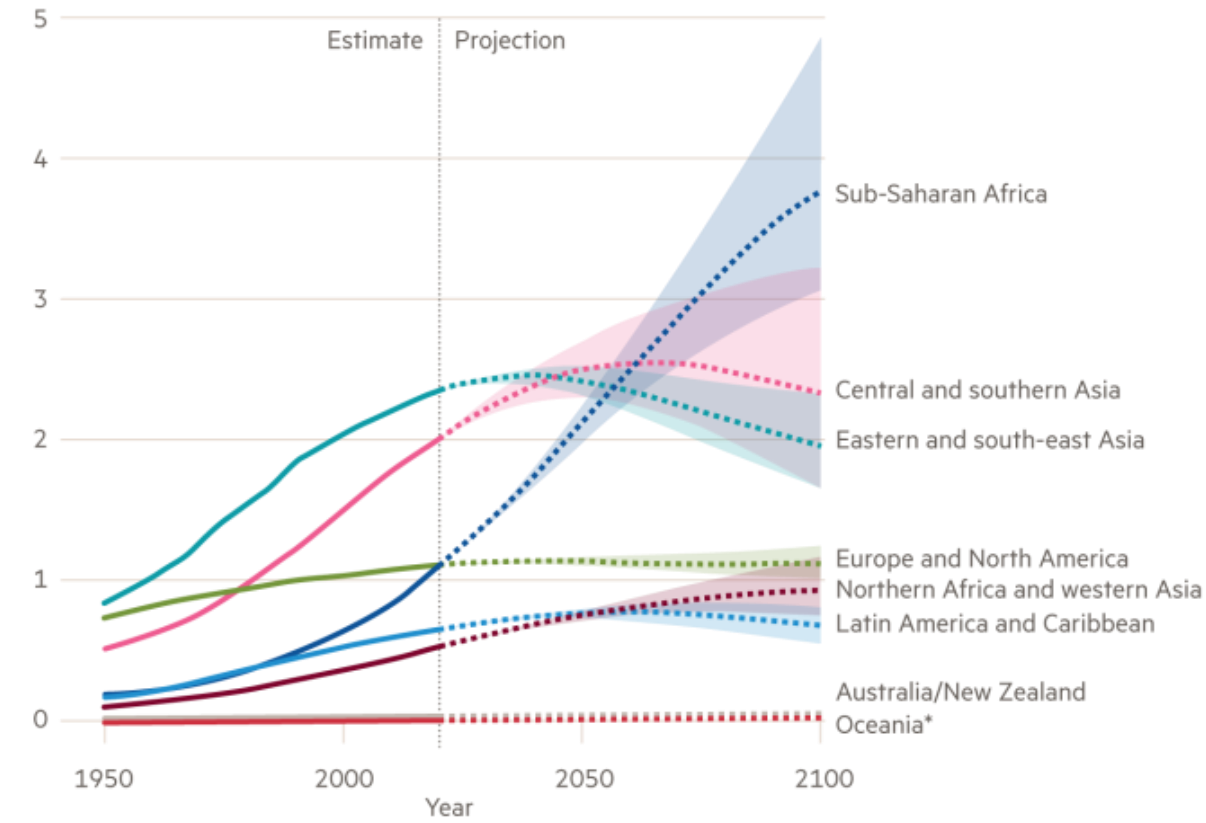
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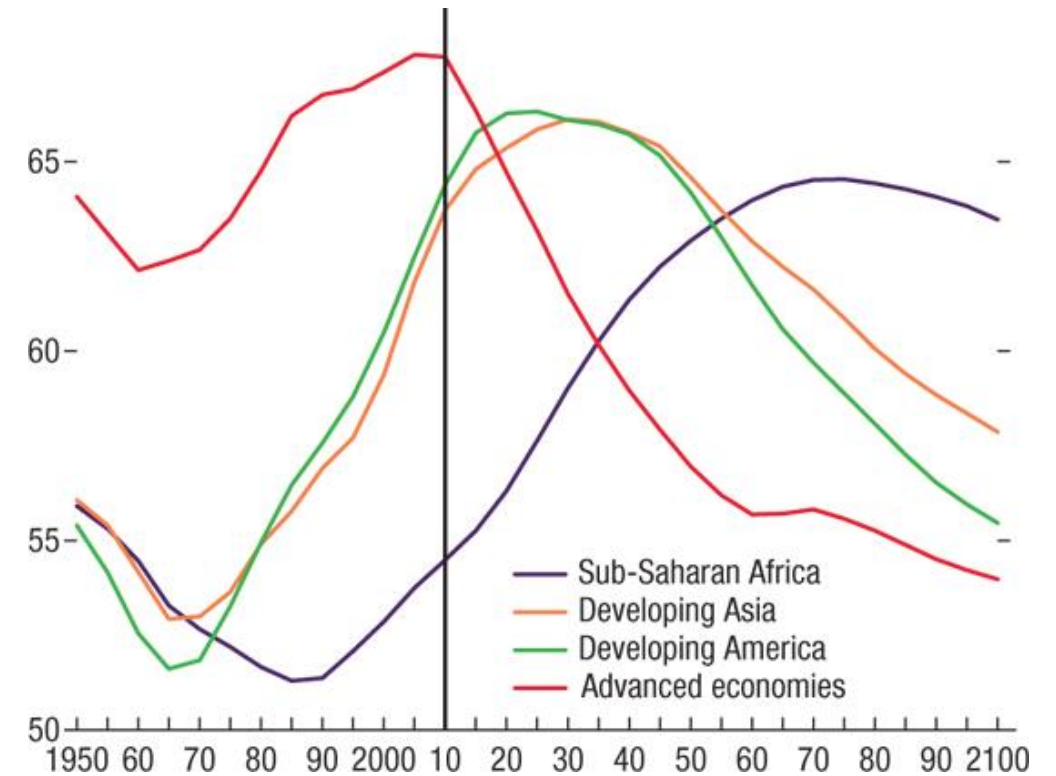
Population in Sub-Saharan Africa is expected to grow tremendously during this century, resulting in a huge share of working age population and a respective demand for new jobs

Total Population by Region (bn)



*Excluding Australia and New Zealand

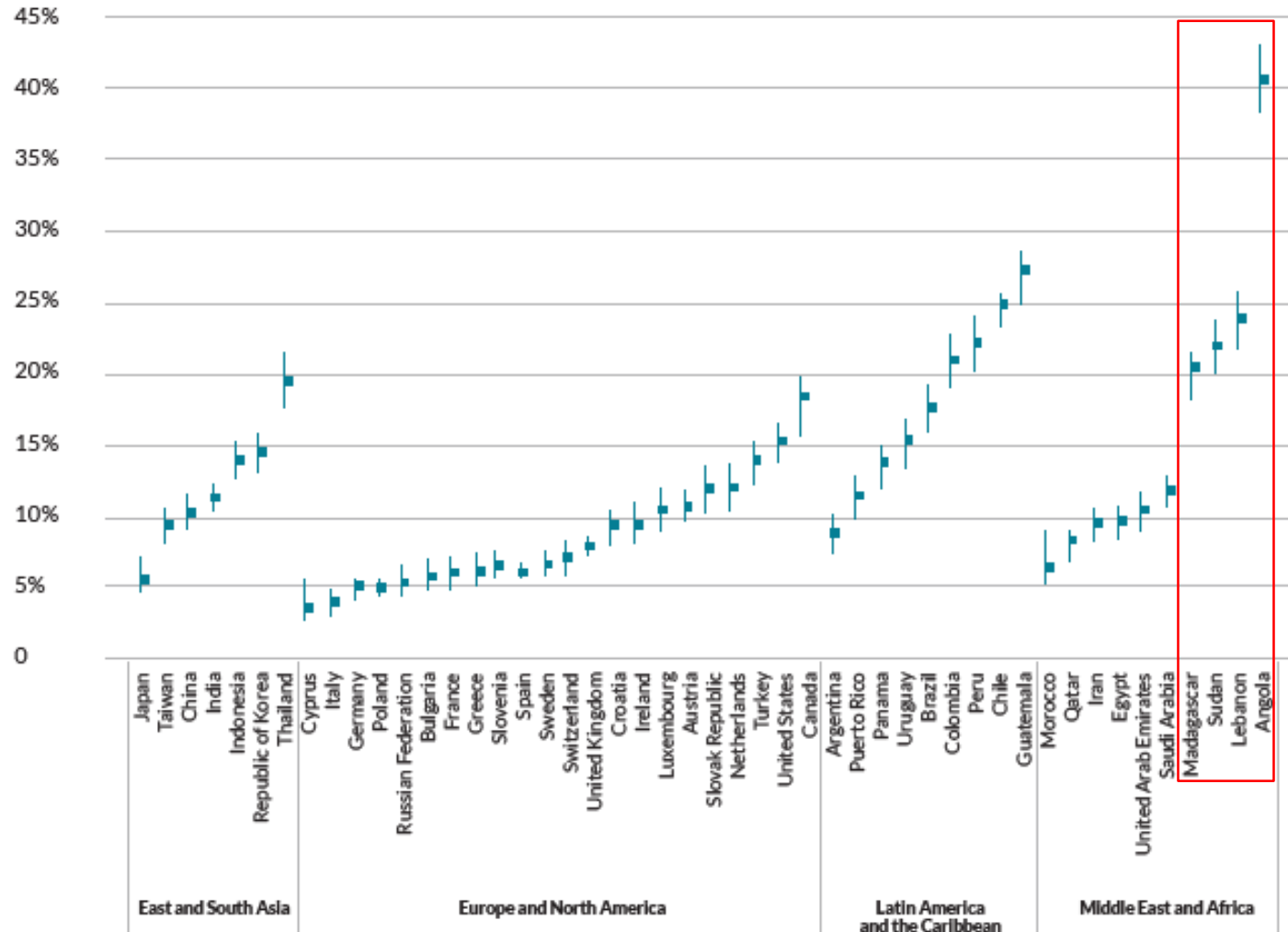
Share of Working Age Population



Source: United Nations Department of Economic and Social Affairs (FT); World Population Prospects, United Nations 2017

African countries show extremely high levels of Total early-stage Entrepreneurial Activity (TEA) based on the necessity to start your own business to be successful

Total early-stage Entrepreneurial Activity (TEA) Rates among Adults (ages 18-64) in 48 Economies



Exemplary



Angola showing by far the highest level of early-stage Entrepreneurial Activity , over 10 p.p. more than any other observed country



Population: 26 million

Below 14 yrs: 47% (2014)

GDP: \$125 billion

Despite the upcoming challenges with global relevance, limited amount of management research focusses on the African continent leading to broad research calls

BRINGING AFRICA IN: PROMISING DIRECTIONS FOR MANAGEMENT RESEARCH

Gerard George et al.; Academy of Management Journal (A+), Vol. 59, No. 2 (2016)

FIGURE 1
Number of Publications by Year (1990–2015)

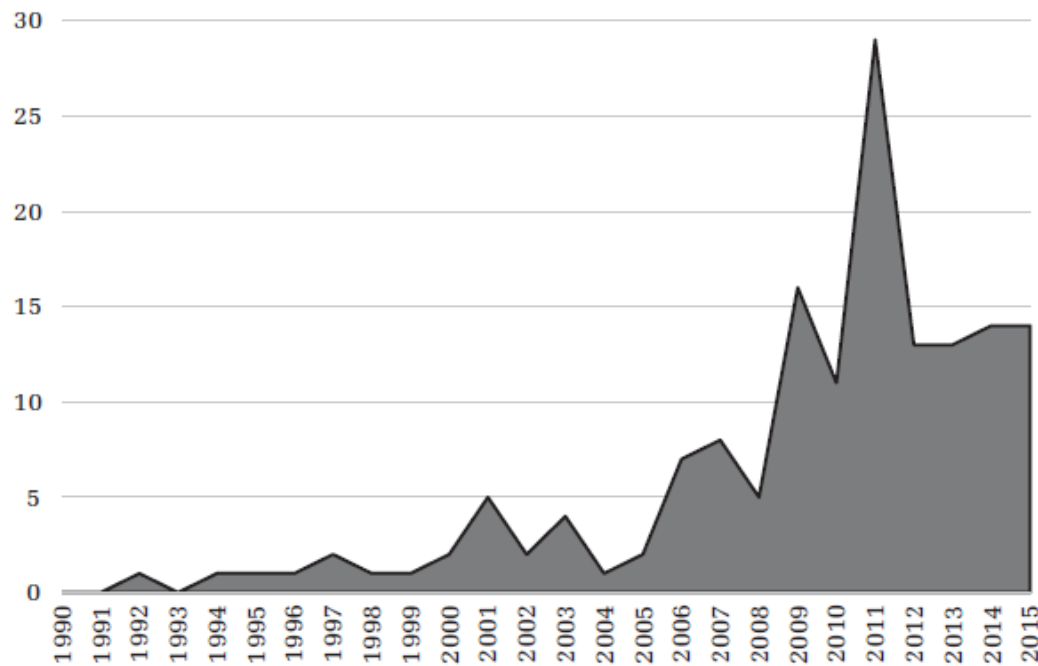
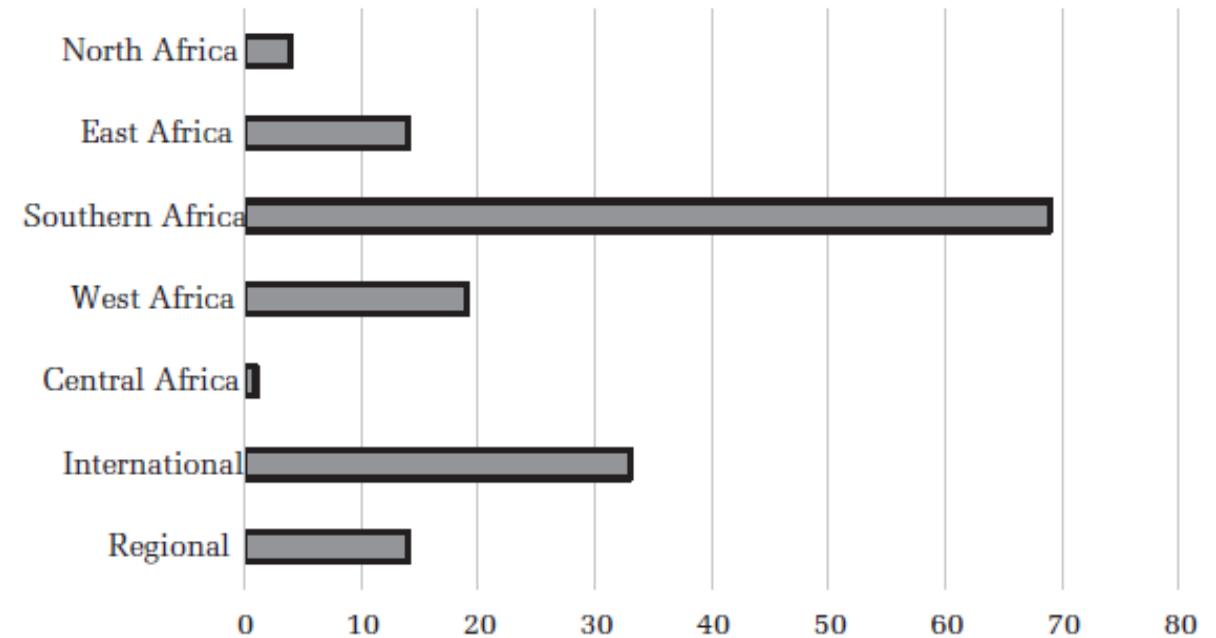


FIGURE 2
Number of Publications by Region



"Africa offers great potential as a context for management research, and more empirical and conceptual work is warranted to explain the richness of the opportunities on the African continent and address the challenges within them."

Existing literature emphasizes importance of Africa and calls for inclusion of new parameters in cross country comparisons like stage of economic development and focus on specific geographic contexts

"The **450 million new workers who will join the African working population** between 2010 and 2035 will form a vast labor pool, but will also pose enormous challenges for job creation. **One response** to these challenges is to **encourage and support local entrepreneurship**, an area **management research** has already **started to explore**."

George et. al; 2016; Academy of Management Journal

"Additionally, by **exploring new data**, it could be possible increase the amount of instruments for the simultaneous analysis. [...] it encourages the possibility to extend the objective presented in this paper, by **exploring and including additional institutional factors** into the opportunity entrepreneurship equation."

Aparicio; 2016; Technological Forecasting and Social Change

"However, this study has certain limitations. The main limitation is that this study lacks a better measure for cultural factor than corruption index in 2012, for all countries. [...] The purpose is to see whether **differences exist between cultural, social, and economic factors** of these countries. This study also suggests a better measure for these countries' cultural factors: the Eurobarometer database."

Castaño et. al; 2015; Journal of Business Research

"The inclusion of variables that differentiate **opportunity entrepreneurship** (active choice to start a new enterprise based on the perception that an unexploited, or underexploited business opportunity exists) and **necessity entrepreneurship** (to start a new firm because other employment options are either absent or unsatisfactory), is suggested, **also considering specific contexts**, such as Latin America."

Urbano & Alvarez; 2014; Small Business Economics

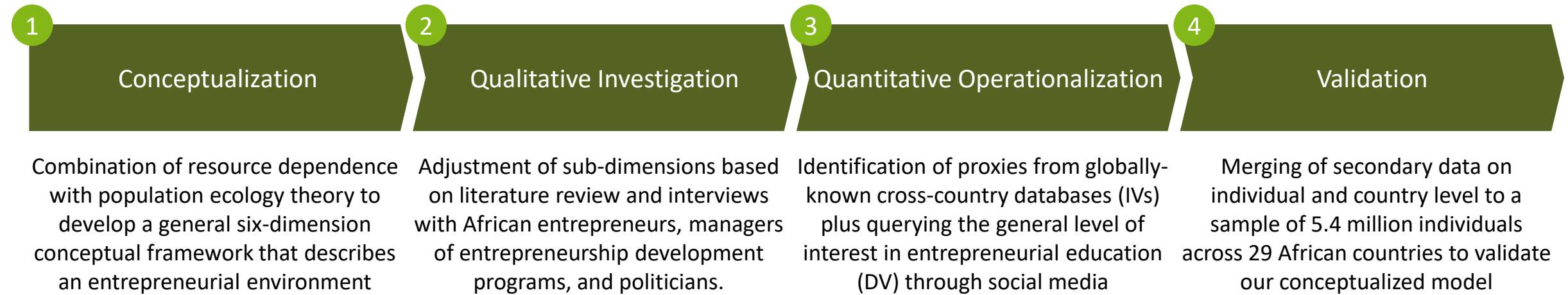
"Dimensions not measured in this study may relate to **interest in business start-up**. Variables ranging from population density to **social networks** to individual psychological tendencies have received attention. [...] Objective factors such as **stage of economic development, career opportunity structures, or government involvement** in the economy may come into play."

Begley et. al; 2005; Entrepreneurship Theory and Practice

"An important agenda for research is to identify the **relative importance of each factor in developing entrepreneurship**. It would be useful to know the relative importance of each factor [...]. Also, it might be appropriate to **study inter-country differences in the level of ability and propensity to enterprise...**"

Gnyawali & Fogel; 1994; Entrepreneurship Theory and Practice

Research approach follows four steps and aims at better understanding the composition of an environment in developing economies that fosters necessity-driven entrepreneurship



Rationale for research approach

Academy of Management Review

*"Intermediate theory, positioned between mature and nascent, presents **provisional explanations of phenomena**, often introducing a new construct and **proposing relationships between it and established constructs**"*

Edmondson & McManus, 2007



Administrative Science Quarterly

*"Intermediate theory research [...] propose **new constructs and/or provisional theoretical relationships**. The resulting papers may present **promising new measures, along with data consistent with the provisional theory presented.**"*

Jick, 1979



Organizational Research Methods

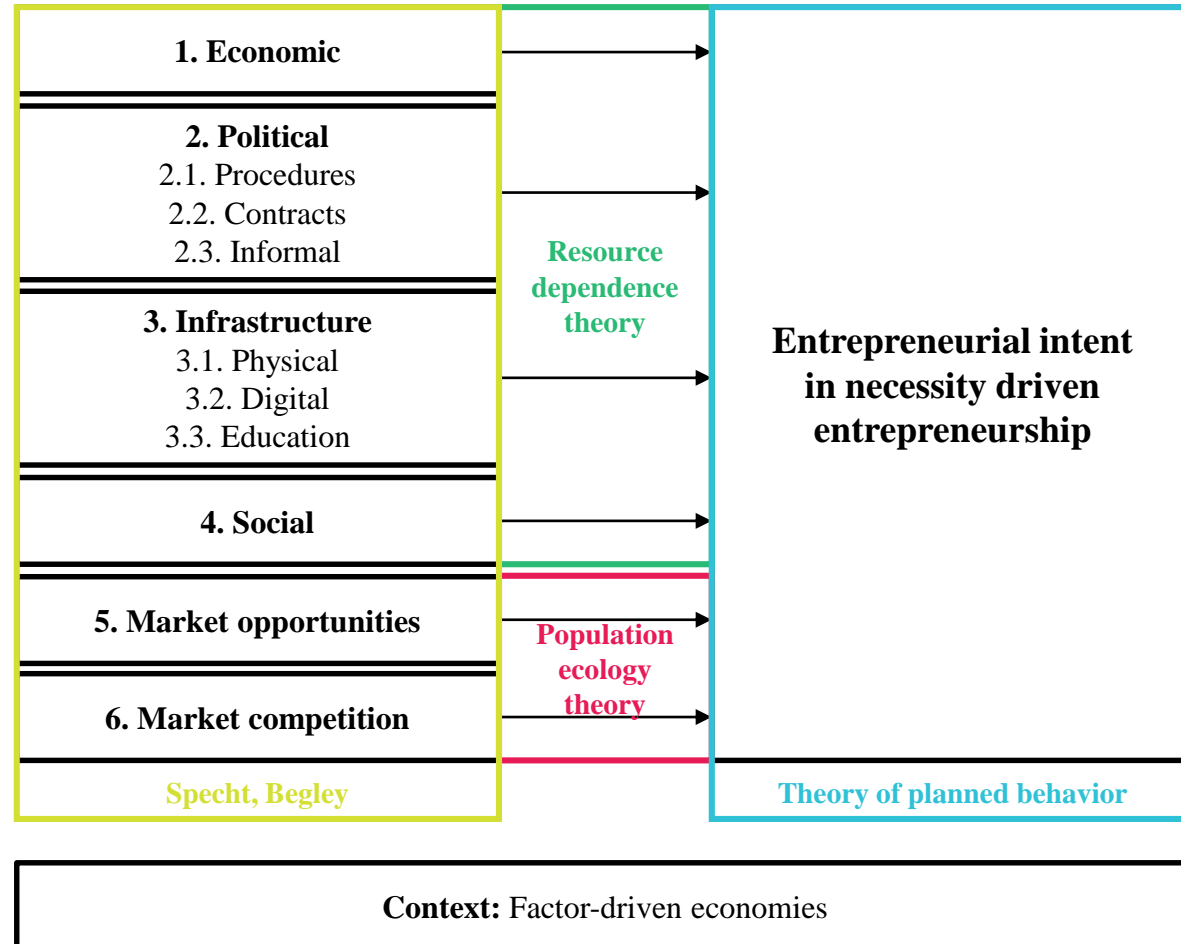
*"The **combination of qualitative data** to help **elaborate a phenomenon** and **quantitative data** to provide **preliminary tests of relationships** can promote both **insight and rigor**"*

Yauch & Steudel, 2003

Research model follows work of Specht and Begley and argues relationship between environment and entrepreneurial intent through resource dependence and population ecology theory

1

Overall research model



Resource Dependence Theory (Hawley, 1988)

Resource dependence theory highlights the importance of external resources for small firms. Given the fact that people who are considering starting their own business normally have very limited internal resources, we can expect a positive relationship between the availability of external resources and the intent to start a new business.

Population Ecology Theory (Hannan & Freeman, 1977)

Population ecology discusses the dependence of organizations on external resources and stresses the low level of control that new firms have over their environments. From these points, we can see that the competitiveness of the environment must strongly influence the decisions of potential entrepreneurs.

Competitiveness of Nations (Porter, 1990)

Three stages of competitiveness: (1) the factor-driven stage, in which businesses' competitive advantage is based on their endowments of labor and raw materials; (2) the efficiency-driven stage, in which businesses' competitive advantage is based on production efficiency and (3) the innovation-driven stage, in which businesses' competitive advantage is based on innovations at the world technology frontier.

Study aims to test six hypotheses in line with the dimensions of the overall research model with sub-dimensions be individually hypothesized and tested

1

H1: *A low level of economic development positively affects entrepreneurial intent in necessity-driven entrepreneurship.*

H2: *A strong political environment, in terms of (a) easy procedures to set up a business, (b) solid contractual enforcement, and (c) low levels of informal activities, positively affects entrepreneurial intent in necessity-driven entrepreneurship.*

H3: *A good infrastructure, in terms of (a) transportation and energy, (b) internet and cell phone coverage, and (c) education, positively affects entrepreneurial intent in necessity-driven entrepreneurship.*

H4: *A supportive and encouraging social network positively affects entrepreneurial intent in necessity-driven entrepreneurship.*

H5: *A growing economy with plentiful business opportunities positively affects entrepreneurial intent in necessity driven entrepreneurship.*

H6: *Low competition within the market positively affects entrepreneurial intent in necessity-driven entrepreneurship.*

Field trip to Ghana and Togo resulted in 11 interviews conducted with entrepreneurs, managers of entrepreneurship development programs, and politicians in urban and rural locations

2

Country	Location	Interview partner	Main findings
Ghana	Urban	Entrepreneur who returned from Germany	<ul style="list-style-type: none"> - Easier to get a business started and running compared to Germany, but most is done informally - Very limited number of well-paid jobs available, biggest chance to start something on your own
Ghana	Rural	Manager of a local bank	<ul style="list-style-type: none"> - Most companies don't have the official documents to apply for a loan (informal businesses) - Loans have high interest rates between 22-28%, prime rate from Bank of Ghana at 18%
Ghana	Rural	Leader of entrepreneurship support program	<ul style="list-style-type: none"> - 80% of the people in his area are entrepreneurs but only 20% of those have a registered business - Biggest challenge is business knowledge: people often ask for money without a plan for how to invest it - People are very proud to be entrepreneurs and can make a good living compared to the available employment - General infrastructure very challenging, especially the extremely bad roads which are mostly not tarred
Ghana	Rural	Diversified entrepreneur	<ul style="list-style-type: none"> - Process to register a business very challenging as it can only be done in the capital and takes multiple days - Has registered his business to protect his brand and get access to official loans but fully understands why most people don't do it - Biggest challenge is to find reliable and well educated employees
Ghana	Urban	Manager of a foundation from a big telco company	<ul style="list-style-type: none"> - Mobile phones essential to stay informed in the rural areas of the country and owned by nearly every family - Foundation created a free of charge number to educate and provide basic news (e.g. weather)
Ghana	Urban	High government official in the ministry of education	<ul style="list-style-type: none"> - Reason for a lot of the challenges is the lack of causal thinking capabilities to understand the consequence of own behavior - School system and teacher education focused on transferring knowledge rather than thinking skills
Togo	Urban	Accountant who returned from the UK	<ul style="list-style-type: none"> - Medical care not sufficient resulting in a low life expectancy (7 of his employees died within the last 10 years)
Togo	Urban	Leader of entrepreneurship support program	<ul style="list-style-type: none"> - By far the biggest part of the economy is informal, estimates that 5% of companies are registered - Support is focused on providing vocational training and teaching basic business skills (e.g. writing a business plan)
Togo	Rural	Film maker	<ul style="list-style-type: none"> - Had to start his own business because there were no adequate opportunities in the job market - Has never considered officially registering his business because he has not enough money to do so and does not see any benefits
Togo	Rural	Shop owner	<ul style="list-style-type: none"> - Opened his shop because he could not find a job that pays enough to support his family - Has never considered to officially register his business, does not see any benefits in doing so

Interviews and literature review resulted in a total of 21 indicators along the six dimensions to holistically describe and entrepreneurial environment

2

Dimension		Indicator	Origin	Rationale
Economics		High standard of living	Interview	Added based on local context
		Long life expectancy	Interview	Added based on local context
Political climate	Procedures	Easy business start-up procedures	Literature	Dana, 1990
	Contracts	Reliable contract enforcement	Literature	Gnyawali & Fogel, 1994
		Strong bankruptcy laws	Literature	Gnyawali & Fogel, 1994
		Strong investor protection	Literature	Gnyawali & Fogel, 1994
	Informal	Low corruption levels	Interview	Added based on local context
Infrastructure	Physical	High infrastructure quality	Interview	Added based on local context
	Digital	High internet coverage	Literature	Gnyawali & Fogel, 1994
		High mobile phone penetration	Interview	Added based on local context
	Education	High quality education system	Literature	Phillips, 1993
		High quality primary education	Interview	Added based on local context
		High primary education enrollment	Interview	Added based on local context
		Good business education	Literature	Davidsson, 1991
		Good entrepreneurial skills	Literature	Gnyawali & Fogel, 1994
		Good technical skills	Literature	Gnyawali & Fogel, 1994
Society	High entrepreneurial presence	Literature	Gnyawali & Fogel, 1994	
	Good recognition of entrepreneurs	Literature	Swanson & Webster, 1992	
Market opportunity		Strong economic growth	Literature	Gnyawali & Fogel, 1994
Market competition		Easy cross-border trading	Literature	Gnyawali & Fogel, 1994
		Low market entry barriers	Literature	Specht, 1993
Control	Finance	Availability of VC financing	Literature	Pennings, 1982

Based on qualitative investigation indicators have been identified, controlled and selected ...

3



Dimensions



Indicator availability



Indicator quality



Data distribution



Area	Dimension	Indicator	Source	Indicator fit	Years covered	Countries covered	Dataset	Skewness	Kurtosis	Regression	Variable
1. Government Policies and Procedures	1. Restrictions on imports and exports	Trading across borders	World Bank - EODB	High	2015 - 2019	90%	Yes	-0,392	-0,515	Yes	eodb_trad
		6.10 Trade tariffs	World Economic Forum - GCI	Medium	2008 - 2018	65%	No				gcio_imex
	2. Provision of bankruptcy laws	Resolving insolvency	World Bank - EODB	High	2015 - 2019	74%	Yes	-0,063	-0,024	Yes	eodb_insv
		8.08 Legal rights index	World Economic Forum - GCI	Medium	2008 - 2018	65%	No				gcio_legal
	3. Entry barriers	Dealing with construction permits	World Bank - EODB	Low	2015 - 2019	87%	No				eodb_cons
		Getting electricity	World Bank - EODB	Low	2015 - 2019	87%	No				eodb_elec
		Paying taxes	World Bank - EODB	Low	2016 - 2019	90%	No				eodb_taxe
		Registering property	World Bank - EODB	Low	2016 - 2019	92%	No				eodb_prop
	4. Procedural requirements for registration and licensing	6.09 Prevalence of non-tariff barriers	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	-0,303	-0,497	Yes	gcio_barr
		6.06 Number of procedures required to start a business	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	0,486	-0,42	Yes	gcio_start
		6.07 Time required to start a business	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	1,153	0,595	Yes	gcio_days
	5. Number of institutions for entrepreneurs to report to	Starting a business	World Bank - EODB	Low	2015 - 2019	92%	No				eodb_start
		Enforcing contracts	World Bank - EODB	High	2016 - 2019	92%	Yes	-0,351	-1,211	Yes	eodb_cont
	6. Rules and regulations governing entrepreneurial activities	1.09 Burden of government regulation	World Economic Forum - GCI	Low	2008 - 2018	65%	No				gcio_regu
		Protecting minority investors	World Bank - EODB	Low	2015 - 2019	90%	No				eodb_prot
2. Socioeconomic Conditions	7. Laws to protect proprietary rights	1.20 Protection of minority shareholders' interests	World Economic Forum - GCI	Low	2008 - 2018	65%	No				gcio_minp
		1.21 Strength of investor protection	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	0,358	-0,023	Yes	gcio_invp
	1. Public attitude towards entrepreneurship	Attitudes toward entrepreneurial risk	World Economic Forum - GCI	Medium	2015 - 2018	69%	No				gcio_rska
		4. Networking	Global Entrepreneurship Index	High	2015 - 2017	63%	Yes	0,47	-0,459	Yes	gei_netw
	2. Presence of experienced entrepreneurs	GII Score	Global Innovation Index	Low	2015 - 2018	37%	No				gii_score
		3. Risk Acceptance	Global Entrepreneurship Index	Yes	2015 - 2018	63%	Yes	2,283	5,501	No	gei_risk
	3. Successful role models	5. Cultural Support	Global Entrepreneurship Index	High	2015 - 2018	63%	Yes	0,861	-0,112	Yes	gei_cult
		6. Proportion of small firms in the population of firms	Number of MSMEs / Total Population	Medium	2019	60%	No				msme_share
	4. Existence of persons with entrepreneurial characteristics	Economic Complexity Index	Harvard Economic complexity	High	2014 - 2016	55%	No				hrv_ecl
		7. Diversity of economic activities	GDP growth (2011 PPP \$)	High	2014 - 2017	94%	Yes	0,354	1,064	Yes	hdi_gdp
	5. Recognition of exemplary entrepreneurial performance	Growth projection	Harvard Economic complexity	Low	2014 - 2016	49%	No				hrv_grow
		5.03 Quality of the education system	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	0,473	-0,406	Yes	gcio_edu
	6. Proportion of small firms in the population of firms	Education index	United Nations - HDI	Low	2014 - 2017	92%	No				hdi_edu
		5.05 Quality of management schools	World Economic Forum - GCI	Yes	2008 - 2018	65%	Yes	0,129	-0,962	Yes	gcio_mgmt
3. Entrepreneurial and Business Skills	2. Business education	5.08 Extent of staff training	World Economic Forum - GCI	Low	2008 - 2018	65%	No				gcio_staff
		2. Startup Skills	Global Entrepreneurship Index	High	2015 - 2017	61%	Yes	1,451	1,434	Yes	gei_skil
	3. Entrepreneurial training programs	Quality of vocational training	World Economic Forum - GCI	Yes	2018	69%	Yes	-0,123	-0,635	Yes	gcio_voct
		5.07 Local availability of specialized training services	World Economic Forum - GCI	Low	2008 - 2018	65%	No				gcio_train
	4. Technical and vocational training programs	9.04 Internet users	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	0,821	0,035	Yes	gcio_www
		Internet users, total (% of population)	United Nations - HDI	High	2014 - 2016	94%	No				hdi_int
	5. Availability of information	8.05 Venture capital availability	World Economic Forum - GCI	High	2008 - 2018	65%	Yes	-0,316	-0,433	Yes	gcio_vc
		14. Risk Capital	Global Entrepreneurship Index	High	2015 - 2017	63%	Yes	2,226	4,501	No	gei_cptl
	1. Venture capital	8.03 Financing through local equity market	World Economic Forum - GCI	Medium	2008 - 2018	65%	Yes	0,373	0,004	Yes	gcio_ecm
		3. Low-cost loans									
	2. Alternative sources of financing	8.04 Ease of access to loans	World Economic Forum - GCI	Low	2008 - 2018	65%	No				gcio_loan
		4. Willingness of financial institutions to finance small entrepreneurs									
	3. Credit guarantee program for start-up enterprises										
		5. Competition among financial institutions									
4. Financial Assistance	1. Hofstede culture dimensions	Power distance index (pdi)	Hofstede Institute	High	2010	16%	No				hof_pdi
		Individualism versus collectivism (idv)	Hofstede Institute	High	2010	16%	No				hof_idv
		Masculinity versus femininity (mas)	Hofstede Institute	High	2010	16%	No				hof_mas
		Uncertainty avoidance index (uai)	Hofstede Institute	High	2010	16%	No				hof_uai
		Long term orientation (lto)	Hofstede Institute	High	2010	16%	No				hof_lto
		Indulgence versus restraint (ind)	Hofstede Institute	High	2010	15%	No				hof_ivr
5. Culture	1. Hofstede culture dimensions										

Combined research models from Gnyawali & Vogel, 1994 plus Lee & Peterson, 2000

Indicator matching research demand as close as possible and data from legitimate source

Second screening of indicators plus temporal & geographic data coverage

Skewness & Kurtosis between -2 and +2

Source: Gnyawali & Vogel, 1994; Lee & Peterson, 2000; World Bank; World Economic Forum; Global Entrepreneurship Index; United Nations; Harvard University; Global Innovation Index; Hofstede Institute; Sposito et al., 1983

... resulting in a comprehensive dataset fed with information from the United Nations, World Economic Forum, Transparency International and Global Entrepreneurship Development Institute

3

Dimension		Measure	Source	Skewness	Kurtosis
Economics		GNI per capita	UN - HDI	1.45	.97
		Life expectancy index	UN - HDI	.39	.00
Political climate	Procedures	Procedures required to start a business	WEF - GCI	-.49	-.42
	Contracts	Enforcing contracts	WB - EODB	-.35	-1.21
		Resolving insolvency	WB - EODB	-.06	-.02
		Strength of investor protection	WEF - GCI	.36	-.02
	Informal	Corruption Perception Index	TI - CPI	.63	.15
Infrastructure	Physical	Quality of overall infrastructure	WEF - GCI	.17	-1.13
	Digital	Internet users	WEF - GCI	.82	.04
		Mobile-cellular telephone subscriptions	WEF - GCI	.41	-.70
	Education	Quality of the education system	WEF - GCI	.47	-.41
		Quality of primary education	WEF - GCI	.14	-.92
		Primary education enrollment rate	WEF - GCI	-1.58	2.43
		Quality of management schools	WEF - GCI	.13	-.96
		Startup Skills	GEDI - GEI	1.45	1.43
		Quality of vocational training	WEF - GCI	-.12	-.64
Society		Networking	GEDI - GEI	.47	-.46
		Cultural Support	GEDI - GEI	.86	-.11
Market opportunity		GDP growth (2011 PPP \$)	UN - HDI	.35	1.06
Market competition		Trading across borders	WB - EODB	-.39	-.52
		Prevalence of non-tariff barriers	WEF - GCI	-.30	-.50
Control	Finance	Venture capital availability	WEF - GCI	-.32	-.43

Source: United Nations; World Economic Forum; Transparency International; Global Entrepreneurship Development Institute

In the absence of studies around entrepreneurial interest in Africa, we rely on users educations interest in business articles posted on Facebook in order to operationalize our dependent variable

Academic rational for the usage of Educational interest on Facebook as DV

Theory of Planned Behavior

*"Attitudes toward the behavior, subjective norms with respect to the behavior, and perceived control over the behavior are usually found to **predict behavioral intentions with a high degree of accuracy.**"*

Ajzen, 1991

Journal of Service Research

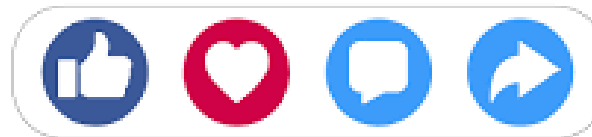
*"CE literature refers to the **behavioral dimension of engagement** as the "activation" dimension expressed through consumer's energy, time, and effort **invested in the interaction with the brand**"*

Brodie et. al, 2011

Journal of Advertising

*"After conceptualizing **DCE in an applicable form for social networks [...]** we now operationalize DCE to enable quantitative analysis. To do this, we use **Facebook metrics [...]** for various reasons."*

Gavilanes et. al, 2018



$$\text{Click-Through- Rate (CTR)} = \frac{\text{Clicks}}{\text{Impressions}}$$

Penetration of social media in Africa and size of R:Ed allows to use the reactions of 5.4M individuals across 29 African countries to measure entrepreneurial intent in this remote region of the world

Country	Economic Stage	Impressions	Reach	Clicks	CTR
Algeria	Transitioning	613,083	435,828	11,541	1.88%
Benin	Factor-driven	60,266	39,022	1,194	1.98%
Botswana	Transitioning	55,603	36,022	749	1.35%
Burundi	Factor-driven	124,719	77,737	2,632	2.11%
Cameroon	Factor-driven	197,432	125,504	3,819	1.93%
Chad	Factor-driven	21,970	11,881	395	1.80%
Côte d'Ivoire	Factor-driven	18,617	14,139	638	3.43%
Egypt	Efficiency-driven	76,314	65,332	1,209	1.58%
Ethiopia	Factor-driven	1,894,003	1,195,683	41,313	2.18%
Gambia	Factor-driven	157,909	85,159	3,018	1.91%
Ghana	Factor-driven	792,649	578,637	74,683	9.42%
Guinea	Factor-driven	568,859	399,811	11,004	1.93%
Kenya	Factor-driven	94,468	69,517	2,340	2.48%
Liberia	Factor-driven	135,285	86,793	2,854	2.11%
Malawi	Factor-driven	38,109	17,504	494	1.30%
Mali	Factor-driven	222,073	155,110	5,228	2.35%
Morocco	Efficiency-driven	86,553	69,468	2,184	2.52%
Mozambique	Factor-driven	219,209	157,251	8,591	3.92%
Namibia	Efficiency-driven	18,835	13,039	444	2.36%
Nigeria	Transitioning	449,604	327,302	16,903	3.76%
Rwanda	Factor-driven	62,735	44,097	1,411	2.25%
Senegal	Factor-driven	303,806	198,736	9,810	3.23%
Sierra Leone	Factor-driven	288,655	179,050	7,478	2.59%
South Africa	Efficiency-driven	64,095	49,989	907	1.42%
Swaziland	Efficiency-driven	4,446	3,059	80	1.80%
Tanzania	Factor-driven	1,113,486	737,203	55,186	4.96%
Tunisia	Efficiency-driven	63,228	50,666	998	1.58%
Uganda	Factor-driven	219,652	135,395	4,556	2.07%
Zambia	Factor-driven	65,998	46,952	1,058	1.60%
Total		8,031,661	5,405,886	272,717	3.40%

Transitioning refers to the transition from a factor to efficiency-driven economy

Regression analysis confirms our hypothesis for economic, social, market opportunity & competition factors with $r^2 \sim 10\%$, political and infrastructure show conflicting results or no significance

Factor	Indicator	Coefficient	Std. Err.	t	P>t	[95% Conf. Interval]				
Economic	High standard of living	-.259*	.125	-2.080	.038*	-.504	-.014	H1:	Confirmed	
	Long life expectancy	.101	.105	.960	.336	-.105	.307			
Political	Procedures	Easy business start-up procedurs	-.156	.087	-1.800	.072	-.326	.014	H2A:	Rejected
	Contracts	Reliable contract enforcement	-.116	.081	-1.430	.154	-.275	.044	H2B:	Rejected
		Strong bankruptcy laws	-.033	.047	-.710	.481	-.126	.059		
		Strong investor protection	.221*	.100	2.210	.027*	.025	.418		
	Informal	Low corruption levels	-.283*	.122	-2.330	.020*	-.522	-.044	H2C:	Rejected
Infrastructure	Phyiscal	High infrastructure quality	.041	.079	.520	.605	-.114	.196	H3A:	Rejected
	Digital	High internet coverage	-.220*	.107	-2.050	.041*	-.430	-.009	H3B:	Rejected
		High mobile phone penetration	.233*	.094	2.490	.013*	.049	.416		
	Education	High quality education system	-.153*	.070	-2.170	.030*	-.290	-.015	H3C:	Rejected
		High quality primary education	.240*	.102	2.370	.018*	.041	.440		
		High primary education enrollment	.097	.051	1.890	.059	-.004	.197		
		Good business education	-.089	.084	-1.050	.294	-.254	.077		
		Good entrepreneurial skills	-.041	.071	-.570	.568	-.181	.099		
	Good technical skills	-.241**	.076	-3.180	.002**	-.390	-.092			
Social	High entrepreneurial presence	.065	.073	.890	.373	-.078	.207	H4:	Confirmed	
	Good recognition of entrepreneurs	.254**	.077	3.320	.001**	.104	.404			
Market opportunities	Strong economic growth	.154**	.056	2.770	.006**	.045	.263	H5:	Confirmed	
Market competition	Easy cross-boarder trading	-.009	.055	-.170	.869	-.117	.098	H6:	Confirmed	
	Low market entry barriers	-.159**	.060	-2.660	.008**	-.276	-.041			
Control	Finance	Availability of VC financing	-	-	-	-	-			
		Constant	.000	.032	.000	1.000	-.063	.063		

N = 886, $r^2 = .106$, $r^2 (\text{adj.}) = .084$, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Four key insights can be distilled from the regression analysis which can provide some guidance for policy makers but the natures of the articles also imposes some limitations of this study

Four key insights from regression analysis ...

1. Lower levels of prosperity increase interest but is fostered by a positive outlook in terms of GDP growth and a supportive culture (combination of necessity and opportunity driven)
2. Easy government procedures not significant due to limited impact on day to day business. However, significant relation for corruption as a mean to "get things done"
3. Higher quality of overall infrastructure not significant to raise entrepreneurial interest but a better mobile phone penetration strongly does
4. Protection of investors important to raise entrepreneurial interest as well as some external market protection to lower competition



... can provide some "guidance" for policy makers

- Economic potential in quite poor countries – people recognize entrepreneurship as a way to get a better life (necessity driven entrepreneurship)
- Government policies and procedures need to become applicable for day-to-day life before any fighting of corruption should take place
- Governmental investments should be focused on setting up a communication infrastructure after basic things are in place ("don't built fancy motorways before having connectivity")
- Investor protection should be prioritized, also to increase the chance to raise capital from abroad. Market protection could be considered to give local products a chance (e.g. vs. China)

Limitations

- R:Ed business and entrepreneurship articles are written with a very easy language and inform on basic level
- Better primary education increases educational interest but generally higher level of education lowers it
- Well educated people not fairly represented in this sample, but also a minority in Africa if the overall population is considered

Thank you for your attention

Your feedback is highly appreciated



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