



**04**  
**2015**

**YOUTH, ENTREPRENEURSHIP AND DEVELOPMENT**

**Kjetil Bjorvatn**

# Youth, entrepreneurship and development

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*Rapport 2015:04*

*till*

*Expertgruppen för biståndsanalys (EBA)*

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ISBN: 978-91-88143-06-8

Printed by Elanders Sverige AB  
Stockholm 2015

Cover design by Julia Demchenko

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# Preface

The "demographic dividend" of Africa's young population holds great promises for the future. Currently a majority of the population in many of the countries on the continent is below the age of 20 years. When these kids and youngsters reach productive ages, the potential for further economic growth is vast. However, such a situation is also a breeding ground for social and political unrest – if people cannot find productive work, and if growing expectations may not be met, demonstrated by the "Arab spring". Clearly, the issue of youth and job creation is of utmost importance for Africa in general and for many of Sweden's development cooperation partner countries.

There will obviously be many approaches to tackling youth unemployment. Professor Kjetil Bjorvatn from the Norwegian School of Economics in Bergen, Norway, focuses on one of them; entrepreneurship training as well as microfinance targeted at young people, particularly girls. The main motive for this approach is simply that young people in East Africa and elsewhere face such difficulties in entering educations or formal employment that they will have to create their own employment opportunities in order to survive.

The report builds on research that Bjorvatn has conducted himself, together with colleagues, concerning the effects of entrepreneurship training and micro finance in Tanzania. The interventions studied have been financed by Swedish aid. Bjorvatn goes further than this to describe the state of the art of research in these areas more widely. Even though his findings show that there are no silver bullets, he points to the importance of combining interventions in more than one area in order to obtain results. One reason is that interventions are undertaken in such difficult environments that it will not be enough to tackle one obstacle at a time. "Big pushes" will be needed, tackling several obstacles simultaneously. Furthermore, given the many constraints that particularly young women face in terms of obstructive norms and even laws working to their detriment, interventions to train and support girls and young women to set up businesses have to start at early ages if they are to be successful.

Bjorvatn further underlines that microcredit of the informal kind that often has been promoted, seems not to be very efficient as a tool for reducing poverty. "Entrepreneurs" are often driven by necessity, rather than by conviction that their business ideas are very promising. In reality credits are frequently used for consumptive needs rather

than for profitable investments. Aid agencies should therefore be careful when choosing what kind of microcredits they promote.

The reference group that has accompanied Bjorvatn in his study has been chaired by the EBA member Professor Jakob Svensson. The analysis, views and recommendations articulated in the report are the sole responsibilities of the author.

Stockholm, June 2015

A handwritten signature in blue ink, reading "Lars Heikensten". The signature is written in a cursive style with a large initial 'L'.

Lars Heikensten  
Chair

# Sammanfattning

De flesta av världens människor bor i låginkomstländer, där flertalet är unga och väldigt många av dem fattiga. Att i sådana situationer komma in på högre utbildningar är mycket svårt och dessutom finns det väldigt få arbeten i den formella ekonomin. Följden blir att de flesta unga människor måste skapa sig sina egna jobb för att kunna få mat på bordet. En viktig utmaning för regeringar, biståndsgivare och organisationer i civilsamhället är därför att utbilda och inspirera unga människor att starta små företag så att de kan få både inkomster och mening i livet. Bortom frågan om hur företag startas handlar utmaningen också om hur företag kan växa till, skapa arbetstillfällen och därmed sprida entreprenörskapets positiva effekter i lokalsamhället.

## Syfte och angreppssätt

Denna studie ger en överblick av internationell forskning kring mikrofinans och kring utbildningar för företagande och entreprenörskap. Fokus ligger särskilt på unga och på jämställdhet mellan könen. Studien innehåller både en bred litteraturgenomgång och en mer djuplodande analys av resultat från min egen forskning. Syftet med studien är att diskutera vilka möjligheter och begränsningar det finns i att använda småskalig företagsutveckling som ett redskap för fattigdomsbekämpning. Därmed är studien också tänkt att vara ett underlag för svensk biståndspolitik.

## Centrala resultat

Av den litteratur som utvärderar entreprenörskapsprogram i fattiga länder framgår att det inte finns något "mikrofinans-mirakel", och inte heller något "mirakel av företagsträning" för den delen. Däremot finns det indikationer på att vissa typer av program fungerar bättre än andra: bybaserade spar- och låneprogram tycks ha starkare utvecklingseffekter än mikrokrediter; Program som omfattar åtgärder för att främja uppbyggnaden både av finansiellt och humankapital är mer effektiva än de som enbart inriktar sig mot den ena av dessa delar; Att stimulera utveckling av företag som ägs av män är enklare än att stimulera utvecklingen av kvinnors företag; Insatser som inriktas mot



unga kvinnor ger lovande effekter i form av nystartade företag. Dessa resultat kan få viktig betydelse för biståndspolitiken.

## Rekommendationer

Utifrån litteraturen, och även utifrån min egen forskning, landar rapporten i tre rekommendationer för svensk biståndspolitik:

1. **Mikrofinans:** Traditionell mikrofinans ger inte några samhällsomvandlande effekter. Däremot ger de mer flexibla formerna av mikrofinans, som exempelvis mikrosparande, positiva effekter. Det är viktigt att lära sig mer kring vad som fungerar och vad som inte fungerar. Bistånd bör därför inriktas mot innovativa former av mikrofinans och utformas på ett sätt så att effekter kan utvärderas.
2. **Finans- och humankapital:** Det finns komplementära effekter av mikrofinans och företags-träning. ”Big push”-insatser som kombinerar båda delarna har större chans att lyckas. Bistånd bör ges till program som gemensamt hanterar hinder både vad gäller brist på finanser och på mänsklig kompetens.
3. **Jämställdhet och ungdom:** Entreprenörskapsprogram bör riktas mot kvinnor i unga år. När de hunnit gifta sig och få barn kan det vara för sent, och även ”big push” insatser kan visa sig otillräckliga. Bistånd inom området entreprenörskapsträning bör därför inriktas mot unga, och särskilt då mot flickor eftersom de ofta möter större svårigheter än pojkar gör.

## Entreprenörskap för utveckling

En läsare kan förstås fråga sig ifall stöd till entreprenörskap verkligen är den rätta vägen till utveckling. Ska entreprenörskap stå i fokus i svenskt bistånd? Det korta svaret är: givet hur världen ser ut kan det vara det bästa vi kan göra. Vad som driver ekonomisk tillväxt är ytterst investeringsvänliga institutioner på nationell nivå (Acemoglu, Johnson och Robinson, 2001). Därför blir sysselsättningskapande i stor skala snarare ett resultat av reformer som minskar korrupktion och byråkratisk ineffektivitet, än av program som syftar till att främja mikro-företagande. Men att reformera ”systemet” är en omfattande uppgift, och även om det lyckas kommer resultaten i form av fler arbetstillfällen först att förverkligas efter lång tid.

Även om inriktningen mot småskaligt entreprenörskap alltså kan motiveras som en pragmatisk ansats är det viktigt att komma ihåg att bistånd till entreprenörskap genomförs i väldigt komplexa miljöer ofta med dåligt fungerande nationell politik, byråkratisk ineffektivitet och diskriminerande normer. Detta betyder att vi inte bör förvänta oss några mirakel.

En annan följd av den besvärliga miljön är att "big push"-ansatser kan bli nödvändiga: att enbart angripa en enda begränsande faktor (som tillgången på finanser) kanske inte är tillräckligt för att stimulera företagsutveckling. I en miljö med dålig tillgång till information och låg grad av medvetenhet bör insatser för att tillhandahålla krediter kombineras med insatser för att samtidigt angripa andra hinder (som exempelvis lågt "humankapital").

## Entreprenörskap för kvinnors egenmakt

Ett bredare utvecklingsmål handlar om kvinnors egenmakt. Diskriminering av kvinnor och flickor är en följd av traditionella normer, och i vissa fall också av formella lagar. Helst bör sådana formella och informella institutioner förändras så att kvinnor uppnår lika rättigheter. Men, liksom i fallet med ekonomiska institutioner, tar sådan förändring sannolikt lång tid. Mikrofinans kan då ses som en pragmatisk väg för att försöka förbättra kvinnors situation i en ofullständig värld. Återigen är det dock viktigt att komma ihåg att just de diskriminerande institutioner som motiverar insatsen också kan begränsa insatsernas effektivitet. Att utforma system och policies som fungerar i sådana svåra miljöer är utmanande. Att lära sig av erfarenheter, vilket innebär att experimentera och använda sig av vetenskapliga metoder för att utvärdera långsiktiga effekter, blir nödvändigt.

## En underifrån ansats till utveckling

Även om mikro-entreprenörskap i sig själv inte är någon mirakelmedicin för fattigdomsminskning eller för kvinnors egenmakt är det sannolikt så att sådana underifrån ansatser på sikt leder till förändringar även på nationell nivå. Om unga människor får något meningsfullt att göra kan detta till exempel bidra till ökad politisk och social stabilitet, vilket i sig är en förutsättning för att ett land ska kunna locka till sig investeringar i större skala.

# Summary

Most people in low-income countries are young, and a majority of these are poor. Access to higher education is limited, and there are few formal sector jobs. As a consequence, young people typically have to create their own jobs to put food on the table. A key challenge for donors, governments and NGOs is therefore how to educate and inspire youth to start a business, thereby giving them an income and a purpose in life. And going beyond establishing a business: how to stimulate business growth and job creation, thereby spreading the benefits of entrepreneurship to the local community.

## Approach and aim

The present report gives an overview of the international research frontier on microfinance, business training, and entrepreneurship, with a particular focus on youth and gender empowerment. It does so by providing both a comprehensive overview of the literature and a more in-depth analysis of findings from my own research. The aim of the report is to discuss the potential and limitations of small-scale business development as a tool for poverty reduction, and thereby inform Swedish development policy.

## Key findings

The literature evaluating entrepreneurship programs in developing countries shows that there is no “miracle of microfinance”, or any “miracle of business training” for that matter. There are, however, indications that certain types of programs work better than others: village savings and loans programs seem to have a stronger development impact than traditional microcredit; programs that include both financial and human capital interventions are more effective than any intervention alone; stimulating the development of businesses owned by males is easier than those owned by females; interventions targeting young women show promising effects on business startups. These findings can potentially have important implications for aid policy.

## Recommendations

Based on the literature, including my own research, the report offers three main recommendations for Swedish development aid:

1. **Microfinance:** Traditional microfinance does not have a transformative effect on societies. There is, however, suggestive evidence of positive effects of more flexible forms of microfinance, for instance in the form of microsaving. It is important to learn more about what works, and what does not work: aid should therefore be directed towards innovative forms of microfinance, and be designed so that impact can be evaluated.
2. **Financial and human capital:** There are complementarities between microfinance and business training: “big push” policies that combine the two are more likely to succeed. Aid should be directed towards programs that address both financial and human capital constraints.
3. **Gender and youth:** Entrepreneurship programs should target girls when they are young: after marriage and childbearing, it may be too late, and even a “big push” policy may not be enough.

## Entrepreneurship for development

While offering these recommendations, the reader may rightfully ask whether stimulating entrepreneurship is really the road to development. Should entrepreneurship be the focus of Swedish aid? The short answer is: given the world as it is, it may be the best we can do. Ultimately, what drives economic growth is investment friendly institutions at the national level (Acemoglu, Johnson, and Robinson, 2001). Hence, job-creation on a large scale is likely to be a result of reforms that reduce corruption and bureaucratic inefficiencies, rather than programs attempting to stimulate micro-entrepreneurship. But clearly, reforming “the system” is demanding, and even given successful reforms, the impact on job creation will only be felt over time.

While the focus on small-scale entrepreneurship is clearly justified as a pragmatic approach to development, it is important to keep in

mind that aid for entrepreneurship is carried out in a very complex landscape of inefficient macro policies, bureaucratic inefficiency, and discriminating norms. This also implies that we cannot expect miracles.

Another implication of the imperfect environment is that “big push” approaches may be necessary: addressing one constraint (such as access to finance) may not be enough to stimulate business growth. In an environment with low levels of information and awareness, and where both females and youth are discriminated, addressing the credit constraint should be combined with interventions that also address complementary constraints (such as human capital and social norms).

## Entrepreneurship for female empowerment

A broader development goal includes female empowerment. Discrimination of girls and women is the result of traditional norms, and in some cases also formal laws. Ideally, these formal and informal institutions need to be changed to give women equal rights. However, as in the case of economic institutions, such changes are likely to take time. Microfinance can be seen as a pragmatic approach, trying to improve the situation for women in an imperfect world. But again, it is important to keep in mind that the discriminatory institutions that justify the interventions may also reduce their impact. Designing policies that work in this complex landscape is clearly challenging. Learning from experience, which means experimenting and using scientific methods to evaluate impacts, is needed.

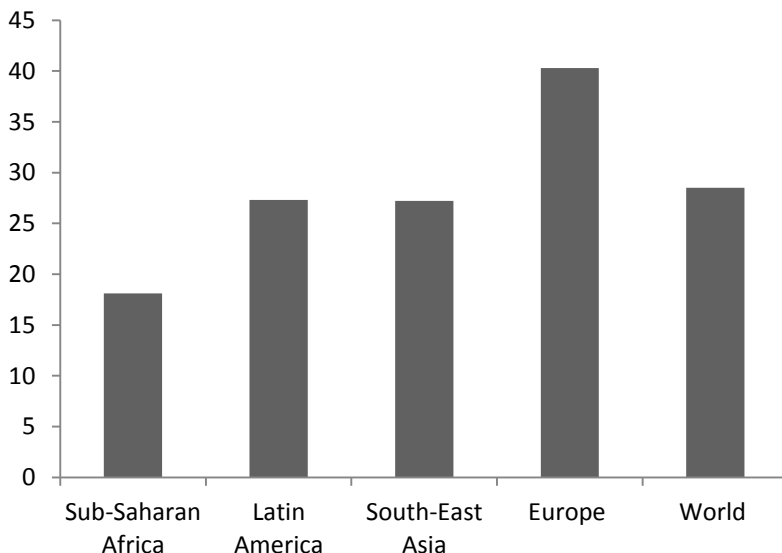
## A bottom-up approach to development

Even if micro-entrepreneurship by itself is not a magic bullet for poverty reduction or female empowerment, an optimistic scenario is that such “bottom-up” interventions over time promote changes also at the macro level. For instance, giving young people something meaningful to do may contribute to social and political stability, which is a prerequisite for attracting investments at a larger scale.

# 1 Background

Most people in low-income countries are young, and a majority of these are poor. In Sub-Saharan Africa, the poorest region in the world, half of the population is below 18. For the world as a whole, the median age is 28.5, and for Europe, 40 years.

**Figure 1. Median age, selected regions, 2010**



Most young people dream of taking a higher education and of a steady, formal sector job. The reality, however, is that in poor countries very few will have the opportunity to pursue education beyond secondary school, and most of them will have to create their own jobs to put food on the table. The school system typically leaves them ill prepared for a future as entrepreneurs.

## The challenge of job creation

A key challenge for donors, governments and NGOs is therefore how to educate and inspire youth to start a business, thereby giving them an income and a purpose in life.<sup>1</sup> And going beyond establishing a business: how to stimulate business growth and job creation, thereby spreading the benefits of entrepreneurship to the local community. Reflecting the importance of issue, the Heads of State and Governments made a commitment at the Millennium Summit in 2000 to “develop and implement strategies that give young people everywhere a real chance to find decent and productive work”. More recently, ILO has proposed job creation as a new development goal for the United Nations, with entrepreneurship promotion as one recommended policy tool.

Education and job-creation has also been emphasized as key tools against violent extremism. In his speech at the White House Summit on Countering Violent Extremism in Washington, February 19, 2015, the Norwegian minister of foreign affairs, Børge Brende, stated that: “We cannot eliminate the breeding ground of the extremists unless we create jobs and opportunities for young people....We must improve the quality of schools and expand access to education and vocational training for marginalized groups....Classrooms are where young people prepare for a meaningful future; where they enable themselves to find a job and take care of their families, and perhaps even start businesses on their own.”<sup>2</sup>

In Tanzania, in which I have conducted most of my own research, self-employment is promoted in the National Youth Development Policy from 2007 (URT 2007). However, the support systems are very limited, both from the government and from family, due to financial constraints and poverty. This puts young people in a very vulnerable position (Helgesson, 2006). An estimated 700 000-800 000 youth leave the school system every year in Tanzania looking for ways to earn an income. Although the Tanzanian economy is growing fast (around 7 percent per year), this does not automatically translate into productive

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<sup>1</sup> The United Nations classifies the age category 15-24 years as “youth”.

<sup>2</sup> [https://www.regjeringen.no/en/aktuelt/speech\\_CVEsummit/id2396865/](https://www.regjeringen.no/en/aktuelt/speech_CVEsummit/id2396865/)

jobs for a growing labor force. Only around five percent of the young people entering the labor force obtain formal employment.<sup>3</sup>

## Relevance for Swedish aid

The aim of the report is to discuss the potential and limitations of small-scale business development as a tool for poverty reduction, and thereby inform Swedish development policy. In particular, the report is relevant for Sida's focal areas of *Market development* and *Education*. The relevance of the report for Swedish development cooperation is strengthened by the fact that most of my own research on this topic is from Tanzania, a long-term partner for Swedish development aid. Moreover, this research has been carried out in close collaboration with the social media platform Femina Hip and the microfinance organization PRIDE Tanzania, both of which have received Swedish support for a number of years.

Indeed, microfinance is still highly aid dependent. According to Morduch (2013), microfinance reached more than 200 million customers in 2011, and microfinance investment vehicles held \$7.5 billion in assets. Half of these relied on subsidies of one kind or another, in particular microfinance institutions with a poverty focus. According to Cull, Morduch and Demirgüç-Kunt (2009), 39 percent of funding of non-government microfinance institutions came from donations, with another 16 percent coming from non-commercial (soft) loans.

The main added value of the report is to discuss the topic of youth and entrepreneurship, which has not received a lot of attention in the academic literature. This lack of knowledge hampers the policy debate, as argued by Chigunta et al. (2005) in an ILO report:

*In Sub-Saharan Africa, the issue of youth unemployment and underemployment remains as one of the major challenges for governments and development partners alike. It is the region that has the largest proportion of young women and men in the overall population. (...) For the ILO as for many other agencies, a major*

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<sup>3</sup> See Finscope survey Tanzania, 2013 (<http://www.fsdt.or.tz/>) and World Bank report "Tanzania: Productive jobs wanted", 2014, The World Bank Group. Also: <http://www.worldbank.org/en/country/tanzania/publication/tanzania-economic-update-harnessing-rapid-urbanization-create-jobs-thriving-cities>; <http://www.worldbank.org/en/country/tanzania/overview> - 1.



*obstacle in trying to tackle this problem is the lack of reliable and up-to-date data and related analysis on the scale, distribution and complexity of employment/unemployment and livelihood situations in general, as well as on effective policies, programs and approaches for young African women and men.*

## Microentrepreneurship and economic development

Should entrepreneurship be the focus of Swedish aid? The short answer is: given that the world looks the way it does, it may be the best we can do to stimulate job creation. Ultimately, what drive economic growth are investment friendly institutions at the national level (Acemoglu, Johnson, and Robinson, 2001). Hence, jobcreation on a large scale is likely to be a result of reforms that reduce corruption and bureaucratic inefficiencies, rather than programs attempting to stimulate micro-entrepreneurship. But clearly, reforming “the system” is demanding, and even given successful reforms, the impact on job creation will only be felt over time.

Moreover, if the Norwegian minister of foreign affairs is right about the link between unemployment and extremism, then job creation at the micro-level may be necessary to provide social stability, which in turn is necessary in order to attract investments at a larger scale.

## Microentrepreneurship and female empowerment

A broader development goal includes female empowerment. Systematic discrimination of girls and women is the result of traditional norms, and in some cases also formal laws (Peterman, 2011, Tillmar, 2015). Ideally, these need to be changed to give women equal rights. However, as in the case of economic institutions, such changes are likely to take time. Microfinance can be seen as a pragmatic approach, trying to improve the situation for women in an imperfect world. And empowerment programs may create female role models, which can change gender norms (Beaman et al., 2008). But again, it is important to keep in mind that the discriminatory institutions that justify the interventions may also reduce their impact. Designing policies that work in this complex landscape is clearly challenging.

Learning from experience, which means experimenting and using scientific methods to evaluate impacts, is the only way forward.

## Methods

My report gives an overview of the international research frontier on entrepreneurship, microfinance, and business training, with a particular focus on youth and female empowerment. It does so by providing both a comprehensive overview of the literature and a more in-depth analysis of findings from my own research.

The insights will be based on a broad set of methodological approaches: (i) Randomized control trials (RCTs); (ii) lab experiments; (iii) open-ended interviews and focus group discussions; and (iv) financial diaries. RCTs are the “gold standard” of impact evaluation, as it allows the researcher to make statements about the causal impact of (aid) programs. Lab experiments, focus group discussions and financial diaries complement RCTs by giving us a deeper understanding of mechanisms, that is, of *why* something does, or does not, work. This broad methodological approach has been recommended by for instance Deaton (2010) and Falk and Heckman (2009).

## Structure of the report

The report starts by defining entrepreneurship, and highlights the fact that there are different kinds of entrepreneurs; necessity-driven and opportunity-driven. Chapter 3 gives an overview of the literature on microfinance: what do we know about the impact of microfinance on business growth and household outcomes? Chapter 4 discusses human capital interventions, notably business training programs, and also asks whether there are complementarities in offering both financial and human capital.

The next three chapters zoom in on youth, gender and entrepreneurship, and offer a more in depth analysis of topics from my own work. Chapter 5 analyzes the impact of business and gender training programs for teenage girls in rural Tanzania. While the training program in Chapter 5 is of a rather traditional class-room type, chapter 6 asks whether *edutainment by television* can inspire young people to start a business. Clearly, using television has the

potential to reach many at a low cost. Chapter 7 takes a more detailed look at how young people in (teenagers in Dar es Salaam) deal with the challenge of starting a business, initiated by an investment grant, using an anthropological approach, including financial diaries.

Chapter 8 concludes and offers recommendations for aid.

## 2 What is entrepreneurship? Who is an entrepreneur?

An entrepreneur is a person who sets up a business or businesses, taking on financial risks in the hope of profit (oxforddictionaries.com). Schumpeter (1934) defines an entrepreneur as one who innovates, by making new things or by making things differently. Lazear (2005) emphasizes that entrepreneurship requires the ability to combine resources simultaneously and efficiently; entrepreneurs need to be “jacks-of-all trade”.

The Global Entrepreneurship Monitor (GEM) defines entrepreneurship as “Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business.” (GEM, 2014) Accordingly, in this report I will define anybody running a business as an entrepreneur.

### Two types of entrepreneurs

Running a business, and hence being an entrepreneur, is not evidence of an entrepreneurial *mindset*. de Mel, McKenzie, Woodruff (2010) compare the knowledge, mindset, and social background of larger-scale business owners, small-scale business owners (who they call “own-account workers”), and wage workers in Sri Lanka. de Mel et al argue that (page 65): “Understanding who the own-account workers are is critical, given their weight in the labor force. If the sector is an incubator for larger firms, then their growth may be an important source of employment generation. If, on the other hand, the owners of the smallest businesses are unlikely to grow to be employers, then current employers might be a source of employment growth.”

Broadly speaking, the literature divides entrepreneurs according to their mindset: necessity-driven and opportunity-driven. A person who sets up a business for the lack of alternative options cannot be expected to have the same drive for growth as a person who chooses to set up a business with other income generating options available. Willingness to take risk and to compete are attitudes that are often associated with an entrepreneurial mindset.

The Global Entrepreneurship Monitor (GEM), which has been surveying entrepreneurship since 1999, and which currently covers 73 countries, shows (perhaps not surprisingly) that necessity-driven entrepreneurship is more common in developing countries than in developed countries. Moreover, GEM has shown that opportunity-driven businesses have a greater impact on employment than necessity-driven businesses.

## Constrained by capital or mindset?

According to de Mel, McKenzie, Woodruff (2010) capital is not the only and perhaps not even the primary constraint to growth for the majority of the own-account workers. Their data thus sheds light on the lack of dynamism among recipients of microfinance. Microfinance institutions are concerned that few enterprise owners grow large enough to graduate to more formal lending programs. They propose that one explanation for this could be due to the fact that the majority of the microenterprise owners are more like wage workers than larger enterprise owners in cognitive ability, personality, and ambition: “For a substantial part of the microenterprises, the lack of growth is likely to derive from a lack of ability or desire to grow rather than a lack of finance.” (page 84) That is, entrepreneurship is necessity driven rather than opportunity driven.

Echoing the emphasis on knowledge and mindset as binding constraints to microenterprise development, Donath Olomi, former head of University of Dar es Salaam Entrepreneurship Centre (UDEEC) states that (Olomi, 2007):

*Micro- and small scale enterprises play a crucial role in the Tanzanian economy. However (...) a large majority remain trapped in the informal sector where they operate micro and small enterprises earning low incomes and sustaining poor quality jobs. One of the most debilitating constraints is limited awareness and capacity of existing and potential business operators, in terms of exposure, values, attitudes, knowledge and skills. The result is that most simply duplicate what their neighbours are doing and do not appreciate the importance of innovation, quality, credibility and customer care.*

Berge et al (2014b) use evidence from the lab and the field to show that the willingness to compete in the lab is strongly associated with field choices made by small-scale entrepreneurs in a developing

country context, and to some extent also positively associated with the profits of their businesses. Other non-cognitive skills, such as risk- and time preferences and confidence, as well as cognitive skills, are also associated with some field variables, but arguably less consistently than competitiveness. These results therefore suggest that the willingness to compete is a key entrepreneurial trait, and possibly more important than other non-cognitive skills often measured in the lab.

Woodruff (2007: 53-54) concludes that: “The evidence suggests that microenterprises are unlikely to become powerful engines of growth for the overall economy, even if government barriers to entrepreneurship are removed. However, this does not imply that the sector should be ignored. Rather, attention should shift to the power of microenterprises to reduce poverty and the capacity of the sector to serve a self-help safety net in low- and middle-income countries.”

## Social constraints

In addition to lack of entrepreneurial skills and mindset, the literature also points to social factors, and in particular sharing norms, as a significant constraint on investment. For instance, Grimm et al (2013) find that investment among tailors in Burkina Faso decline strongly with pressure for redistribution. The pressure is likely to be particularly strong for female entrepreneurs, since most societies are male dominated. Accordingly, Anderson and Baland (2002) show that Kenyan women protect their savings from their husbands by secretly participate in savings clubs (Roscas).

Clearly, redistributive pressures may discourage individuals from investing in their businesses: visible signs of business success may attract the attention of needy relatives, and the marginal “tax rate” may well exceed 100% (Platteau, 1996).

## 3 Microfinance

This chapter presents evidence from the research on the development impact of microfinance. I focus on the “classic” topics of credit and saving. Space constraints prevent a more comprehensive analysis of financial services, such as insurance, remittance services and digital transfers. I recommend Karlan and Morduch (2009) for a broader evaluation of financial services and development, including a discussion of technology for remittances and other money transfers as well as risk management and insurance.

### Microcredit

Microcredit can be defined as small loans to underserved entrepreneurs. There has been a tremendous growth in microcredit, today reaching more than 200 million customers worldwide. Most of the suppliers are non-commercial. Karlan and Morduch (2009) refer to a study of 94 million borrowers, showing that 17 percent of these are served by commercially based microfinance banks, the remainder being served by NGOs or partnerships between NGOs and banks. Karlan and Morduch also document that two-thirds of commercially oriented microfinance banks lent through individual methods, while three-quarters of nongovernment organizations used group-lending methods. The NGO banks tend to target poorer households and often use the groups for social support, while the commercial banks tend to target somewhat more wealthy clients looking for larger loans. The role of commercial players in microfinance is increasing, a phenomenon sometimes referred to as “mission drift”: the microfinance movement is drifting from a poverty focus to a profit focus, a tendency that may be driven by increased competition.

In 2006, the Nobel peace prize was awarded to Grameen Bank and its founder, Mohammad Yunus, “for their efforts to create economic and social development from below.” Indeed, there has been a lot of optimism associated with microfinance as way out of poverty.<sup>4</sup> But what does research say about the impact of microfinance on business development and social improvement?

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<sup>4</sup> For an overview of microfinance, see de Aghion and Morduch (2010), and more broadly on finance for development, Karlan and Morduch (2009).

Research on a wide range of microfinance institutions shows only modest impacts on development. The American Economic Journal: Applied Economics recently published a special issue on microfinance, including six randomized trials from six countries on four continents, with urban and rural areas and with diverse borrower characteristics, loan characteristics, and lender characteristics. Various types of microfinance are represented in this special issue: group lending and individual lending; small groups and large groups; female-only and mixed gender; with and without collateral requirement; for profit and not-for-profit institutions; small loans and large loans, etc. In the introduction chapter, Banerjee, Karlan and Zinman (2015) summarize the overall finding as “modestly positive, but not transformative”. They do, however, point to more positive effects of microsaving, on which I will have more to say below.

In the same vein, Morduch (2013: 52) argues that “business growth is hardly the obsession for microfinance customers that it is for donors and development experts. Evidence from Indonesia, Mongolia and Bangladesh shows that only about half of all microloans finance business investments. The rest goes to financing household expenses and paying down other debt. That’s not necessarily a bad thing (and could be a very good thing). But it does suggest a gap between the way we’ve looked at microfinance and what it actually is.”

In a randomized field study of the impact of microfinance in India, Banerjee et al (2015) find first of all that demand for microfinance is relatively limited (33 percent of the households take up a loan from an MFI during a three-year period), and moreover that the impact on business outcomes and household outcomes is very limited. Similarly, Karlan and Zinman (2011) study the long-run impact of microfinance in the Philippines, and document effects on risk management and community ties, but no effect on the number of businesses or employment.

Tarozzi, Desai, and Johnson (2015) study the impacts of increasing access to microfinance on a number of socioeconomic outcomes, including income from agriculture, animal husbandry, nonfarm self-employment, labor supply, schooling and indicators of women's empowerment in rural Ethiopia. Despite substantial increases in borrowing in areas assigned to treatment, they do not find strong evidence of positive effects for the large majority of outcomes.

Attanasio et al (2015) investigate the impact of a joint-liability microcredit program targeting women in Mongolia. They find a positive impact of access to group loans on female entrepreneurship



and household food consumption but not on total working hours or income in the household. A simultaneously introduced individual-liability microcredit program delivered no significant poverty impacts.

Crépon et al (2015) show that microfinance in rural Morocco has led to a significant increase in agricultural sales and profits, but with no impact on consumption, and with treatment effects depending on whether or not the household was operating a business at the time of the baseline. Take-up rates were quite low, with only thirteen percent of the households in treatment villages taking a loan.

Angelucci et al (2015) survey over 16,000 households to estimate impacts of an expansion by the largest microlender in Mexico. They find no evidence of transformative impacts on microentrepreneurship, income, labor supply, expenditures, social status, and subjective well-being.

Augsburg et al (2015) analyze the impacts of microcredit in Bosnia. They find evidence of higher self-employment, increases in inventory, a reduction in the incidence of wage work and an increase in the labor supply of 16-19-year-olds in the household's business. They also find evidence of the program leading to an increase in profits and a reduction in consumption and savings. There is no evidence that the program increased overall household income.

There are many reasons why the impact of microfinance is relatively muted: (i) Small loans, typically with high interest rates and very rigid conditions; (ii) loans are used for many other things than business (money is fungible, a business loan may end up being used to finance household expenditures); (iii) non-business motives for joining savings groups and microfinance institutions (for instance issues related to the spouse or the extended family; see Anderson and Baland, 2002, and Baland et al., 2011). Moreover, the standard microfinance contract is very rigid, and designed to minimize cost and risk to the lender. The downside is that the contract biases the investments into activities that generate a quick return, such as commerce (eg. buying in bulk and selling in smaller quantities), but where the growth potential and social returns (eg. employment creation) are minimal.

Together with co-authors, Andreas Madestam at Stockholm university has analyzed how varying the various contract components typically associated with microfinance, such as constant and monthly repayments and small initial loan amounts, affects the clients' use of inputs, profits, and repayment performance (see Gulesci et al. 2015, and Battaglia et al, 2015). Similarly, Armendariz de Aghion and

Morduch (2000) and Giné and Karlan (2009) have experimented with individual vs group lending for loan repayment (and find that, typically, loans are paid back in any case).

## Business grants

Microfinance typically come with a lot of strings attached (small loans, rigid repayment schedules, high interest rates), which may make them unattractive, and less conducive to business growth. Accordingly, there have been studies of the effect of business grants, which can be viewed as the loans without *any* strings attached (including zero interest rates, and indefinite maturity date). One prominent study of the impact of such grants is de Mel et al. (2008) which documents large returns to business grants on average for poor entrepreneurs in Sri Lanka. This result is, however, driven entirely by male entrepreneurs: for female-owned businesses, the returns are in fact zero (see also de Mel et al., 2009a, 2012a).

In a study from Ghana, Fafchamps et al. (2011) find positive effects of in-kind grants on both male and female-owned businesses. They point to the more active economic involvement of African females compared to Asian females as a possible explanation for the stronger effect of business grants in the African setting. But also in the Ghana study, treatment effects are heterogeneous, depending for instance on the initial profitability of the business.

Blattman et al. (2015) evaluates a government program in Uganda designed to help poor and unemployed young adults become self-employed artisans. People were invited to form groups and prepare proposals for how they would use a grant to train in and start independent trades. Funding was randomly assigned among 535 eligible applicant groups. Successful proposals received one-time unsupervised grant of 7500 USD on average, equivalent to the average annual income of each group member. Groups invested the grants in skills training but most of all in tools and materials. Tracking the treatment group and control group over a four-year period, the researchers find that the program led to substantial increases in investment, work, and income, from activities such as carpentry, metalworking, tailoring, and hairstyling.

## Microsaving

Village Savings and Loans Associations (VSLAs) relies on local financial mobilization, where groups of 15-30 people meet on a weekly basis to pool their savings and to allocate loans to each other. I took the picture below (Figure 2) from the savings book of a member from the VSLA called We Can Manage in Mbale, Eastern Uganda. This is a good saver! Maximal savings every week (which usually brings a round of applause among the members)!

Figure 2 Savings book We Can Manage

The image shows an open savings book with two pages. The left page is labeled '2' and the right page is labeled '3'. Both pages have a header 'Date' and 'Shares Bought'. The grid on page 2 shows dates from 21-1-13 to 13-2-13, with stars in the 'Shares Bought' column. The grid on page 3 shows dates from 1-4-13 to 21-5-13, with stars in the 'Shares Bought' column. The stars are arranged in a grid pattern, indicating the number of shares bought each week.

| Date    | Shares Bought |
|---------|---------------|
| 21-1-13 | ★             |
| 28-1-13 | ★             |
| 4-2-13  | ★             |
| 11-2-13 | ★             |
| 18-2-13 | ★             |
| 25-2-13 | ★             |
| 4-3-13  | ★             |
| 11-3-13 | ★             |
| 18-3-13 | ★             |
| 25-3-13 | ★             |
| 1-4-13  | —             |
| 8-4-13  | ★             |
| 15-4-13 | ★             |
| 22-4-13 | ★             |
| 29-4-13 | ★             |
| 6-5-13  | ★             |
| 13-5-13 | ★             |
| 20-5-13 | ★             |
| 27-5-13 | ★             |

VSLAs function like small, unregulated financial institutions, providing members with an accessible source of credit, a safe place to save regularly, and a solidarity fund for emergencies. This is informal microfinance, and differs from formal, group-based microfinance programs, like Grameen Bank, by the fact that the groups are self-contained; savings and loans are made up entirely from the group's own resources.

The savings- and loans cycle is typically one year, after which there is a “share-out”, when all savings and interest payments are divided by the number of shares and paid out. The group then decides on whether to start a new cycle or not. In most cases, they do.

VSLAs stimulate savings by offering people a safe place to store their money (in VSLAs, money is stored in a cashbox, locked with three padlocks, and with three different members holding a key to the box, and with the box being stored in the house of a fourth member). The possibility of moving money out of the house, and out of the sight of husbands or other family members, may be an important rationale for joining a savings group (Anderson and Baland, 2002). Perhaps equally important, the VSLAs can increase savings by helping the participants to commit to a savings plan (Ashraf, Karlan, Yin, 2006).

Evidence from East Africa suggests that VSLAs can indeed mobilize savings. Findings from a project in Malawi shows increased savings, increased use of fertilizer and improved seed varieties, and increased agricultural productivity in villages where VSLAs were initiated (Ksoll et al., 2013). In a report to Innovations for Poverty Action, Karlan et al. (2012) report from similar initiatives in Ghana, Malawi, and Uganda, and show that savings have gone up, businesses have been opened, and business incomes have increased, at least modestly. Their study, however, finds no impact on agriculture, health, housing, or consumption. In sum, VSLAs show promising effects on financial outcomes, but more research is needed in order to conclude about the development impact of this type of microfinance.

## 4 Business training

Partly as a result of the mixed evidence on the importance of financial capital, there has been an increased focus on other constraints to microenterprise development, in particular human capital, as evidenced by the nascent literature investigating the impact of business training on business performance.

Human capital interventions typically take the form of training programs, but also mentoring. The traditional training programs vary in detail, but the present structure (taken from our PRIDE-project, Berge et al., 2014a) should be relatively representative:

1. What is an entrepreneur?
2. Marketing
3. Customer care
4. Managing workers
5. Keeping business records
6. Costs and pricing
7. Financing your business

McKenzie and Woodruff (2012) provide an overview of the literature evaluating business-training programs. Here, I offer a brief overview of what I see as some of the key contributions.

### Evaluations of business training programs

Karlan and Valdivia (2011), in a study of business training for female microfinance clients in Peru, document an impact on business practices, but no robust effects on sales or profits. Field et al (2010) analyze the effect of a two-day training program for small-scale female entrepreneurs in India. Focusing on the social and religious backgrounds of the women, they find positive treatment effects on upper-caste Hindus, but no such effects on either lower-caste Hindus or Muslims. They ascribe this heterogeneity in treatment effects to differences in the number of social restrictions that the groups face.

Bulte et al (2015) evaluate the impact of a gender and business training program offered to female clients of a leading microfinance

organization in northern Vietnam. The treatment consisted of nine monthly meetings, each of 45-60 minutes, and also the option of receiving individual guidance at a weekly level. The novel feature of their intervention is that husbands were invited to take part in the training program in some of the groups. The idea was that training should have a stronger, positive effect, if also the husbands were involved. They find evidence of persistent effects on business knowledge and business practices, and some, but less robust, effect on business outcomes like sales and profits. Interestingly, the effect on the sales and profits seems to be growing over time. They do not, however, find any impact of bringing on board the husbands in the training program.

Drexler, Fischer, and Schoar (2014) in a study from the Dominican Republic find positive effects of a simple “rule-of-thumb” training program on business practices, but relatively weak effects on business outcomes. Bruhn and Zia (2011) study the impact of a business and financial literacy training program on young entrepreneurs in Bosnia and Herzegovina, who are members of one of the largest microfinance institutions in the country. They document that training has led to the implementation of new production processes and new investments, and, for entrepreneurs with relatively high ex ante levels of financial literacy, also higher sales.

Calderon, Cunha and De Giorgi (2013) randomized the offer of a free, 48-hour business skills course to female entrepreneurs in rural Mexico and find that the training program led to higher profits and revenues, increased the client base, made the business owners more likely to use formal accounting techniques, and more likely to be registered with the government. The positive impact was particularly strong amongst the participants who at the baseline had operated more profitable businesses. The authors speculate that the success of the training program in Mexico, compared to the lack of impact found in much of the literature, could be due to the fact that it was intensive, with a total of 48 hours of classes over 6 weeks, and very practically oriented.

Business training programs are not unique to developing countries: Fairlie al. (2012) evaluate the impact of entrepreneurship training in the US, and find that training increases short-run business ownership and employment, but find no evidence of broader or longer-run effects.

Some studies evaluate the impact of individualized consultancy services rather than classroom training programs. Bloom et al. (2012)

offered free consulting services on management to large Indian textile firms, and find significant, positive effects on productivity. Bruhn, Karlan and Schoar (2012) find strong effects of consultancy services offered to small- and medium-scale businesses in Mexico. Consultants spent approximately four hours per week with the entrepreneur over a year assisting the firm in overcoming constraints to growth. While consultancy services may have a stronger impact on outcomes than more standardized classroom programs, it is important to remember that consultancy is quite expensive to implement. If the ambition is to raise entrepreneurial skills and ambitions on a large level, it is doubtful whether consultancy is the way to go.

While the focus of this report is on entrepreneurship, it is worth mentioning another type of intervention addressing human capital constraints of particularly relevant for youth, namely job-training programs. Groh et al (2012) studies the impact of a randomized experiment in Jordan designed to assist female community college graduates find employment. One randomly chosen group of graduates was given a voucher that would pay an employer a wage subsidy; a second group was invited to attend 45 hours of employability skills training designed to provide them with the soft skills employers say graduates often lack; a third group was offered both interventions; and the fourth group forms the control group. The authors find no strong evidence of the soft-skills training increasing employment, but do find that the wage subsidies had helped increase employment, at least in the short term. Similarly, Card et al (2011) investigate the labor market impacts of youth training in the Dominican Republic and find little indication of a positive effect on employment outcomes but some evidence of a modest effect on earnings, conditional on working.

## Complementarities between business training and microfinance?

A few studies evaluate the effect of both financial and human capital, in order to compare which is the more effective tool to promote small-scale business development, and in order to test whether there are complementarities between the two types of interventions.

In Berge et al. (2014a), we consider a program of business training and business grant, randomly offered separately or in combination to a sample of microfinance clients in Tanzania. Our main finding is that the combined human capital and financial capital intervention caused a

substantial improvement for male entrepreneurs, both in the short term and in the long term, while business training or business grant alone had much more muted effects. For females, we find no impact of any of the interventions on business outcomes. These results are based on self-reported measures on business performance and living conditions, but administrative data from the microfinance institution confirms this pattern. We believe an important reason for the lack of impact on business outcomes for female owners is the fact that they face different social constraints than males, for instance domestic obligations and a weak bargaining power in the household. One indication of this is the fact that females are much more likely than males to run their business from home. Moreover, we find that there is a difference in entrepreneurial attitudes between the genders. In particular, in line with much of the literature (Niederle and Vesterlund, 2007, Fletschner et al., 2010), the females in our sample are less willing to compete. In other research, we have shown that willingness to compete is an important predictor of business success (Berge et al., 2014b).

Giné and Mansuri (2011) investigate the effects of business training, a microfinance loan, and the combination of the two, among microfinance clients in rural Pakistan. They find positive impacts from all interventions (training, loan, and the combination) on business practices, but then only for male entrepreneurs. They do not, however, find any effect of the interventions on sales and profits. The authors ascribe the lack of treatment effects for women to the lack of decision-making power of females. Indeed, 40 percent of the business women reported that their spouses were responsible for most of their business decisions. Moreover, training did not have any impact on the females' decision-making power.

Fiala (2014) reports from an experiment with business owners from semi-urban locations across Uganda, who were randomly selected to receive loans, cash grants, loans paired with business skills training or cash grants paired with business skills training, or to be part of a control group. The author finds that men with access to loans-with-training report 54% greater profits. There is no sustained effect of the loan without training, and no effect of the cash grant at all. Strikingly, in line with many other results in the literature, there is no treatment effect on female businesses, which the author ascribes to family pressure on women. While the loans-with-training program had large effects on male-run businesses, there is no evidence of the



programs having an impact on child health, general savings or household consumption.

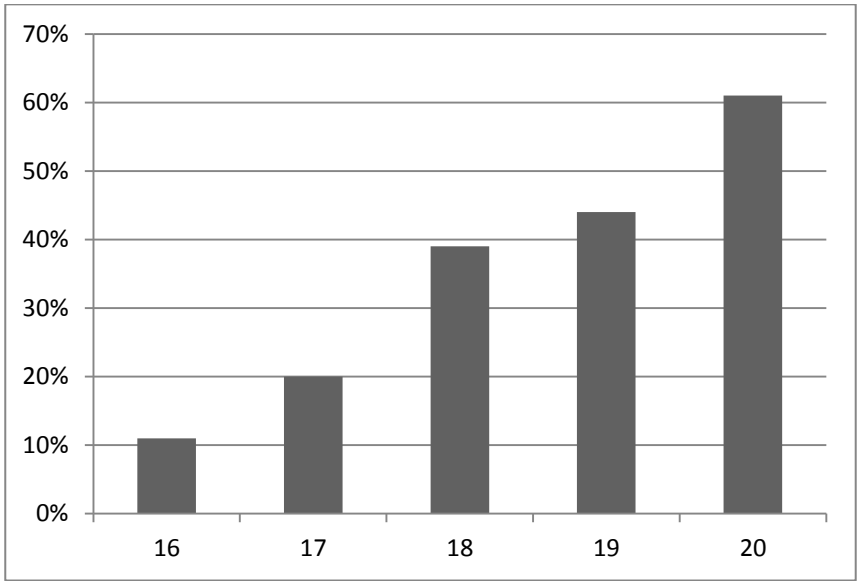
de Mel et al. (2012b) analyze the effect of training, and the effect of training and a cash grant combined, on a representative sample of women, both with and without existing businesses, in Sri Lanka. Impacts are documented through four rounds of follow-up studies over a two-year period. They find that for women who already had a business at the time of the interventions, training alone had no impact on business outcomes, while training and the grant combined had a large, but short-lived effect on business outcomes. Training did, however, improve the profitability of the newly established businesses for women who did not have any business prior to the intervention.

Karlan, Knight and Udry (2012) consider the effect of consultancy services and a cash-grant to small-scale tailors in Ghana. The consultancy service took place during the course of a year, with each entrepreneur visited at his or her place of work between one and four times per month, each visit lasting from 30 minutes to an hour. Eight months after the start of the consultancy, a sub-set of tailors from both the trained and non-trained group was offered a business grant, approximately equivalent to twice the average baseline income. The authors find positive, but short-lived, effects of consultancy on business knowledge, business practices, and record keeping, while the business grant led to a short-lived increase in investments. They do not, however, find any positive treatment effects on sales or profits, in fact, if anything treatments effects are negative, an observation they attribute to entrepreneurs in the treatment group experimenting with new and risky business techniques, techniques which most of them did not master. Moreover, they find no evidence of complementarity effects between capital and consultancy.

# 5 Entrepreneurship for gender empowerment

Many young girls in developing countries experience pregnancy and lifelong dependence upon family and partners, which may prevent them from reaching their full productive and social potential. Adolescent fertility rates are, for example, more than four times higher in Sub-Saharan Africa than in OECD (108 vs. 25 births per 1000 women in the ages 15-19, data.worldbank.org), with rates often being particularly high in rural areas.

**Figure 3. Childbearing (%) in Tanzania, by age**



Source: DHS (2010)

Teenage pregnancies are often unplanned and in many cases involve a relationship with an older male (Dupas, 2011, Luke and Kurz, 2002). They are associated with negative effects on a woman’s health outcomes, educational attainment (Rasul, 2008, Goldin and Katz, 2002) and future employment and economic opportunities (Bailey, 2006, Miller, 2010). Female empowerment may therefore have positive consequences both in the health domain and in the economic domain, and the two domains are clearly linked. Delayed pregnancies and improved health may enable young girls to exploit economic

opportunities, while an improved economic situation may allow them to postpone marriage and child bearing with corresponding health benefits.

## Literature

Health training represents the standard approach to the problem, where the underlying idea is that teenage pregnancies and risky behavior reflect lack of relevant information and personal control. Evaluations of such programs have often found that knowledge and attitudes have changed, while biological impacts (on STIs or fertility) have been less clear. Gallant and Maticka-Tyndale (2004), in an overview article on the impact of school based HIV prevention programs, find that it may be possible to influence knowledge and attitudes, but that inducing changes in sexual behavior is much more difficult. Similarly, Ross et al. (2007) study both behavioral and biological impacts of a multicomponent adolescent sexual health intervention in Tanzania. They find that knowledge, attitudes and self-reported behavior had improved, but found much more muted biological impacts when studying the occurrence of sexual transmittable diseases. Dupas (2011 a,b) finds that an information program on the risks of intergenerational sex leads to a significant reduction in childbearing among adolescent girls, in particular those involving an older man. In contrast, she finds no effect of the official HIV/AIDS curriculum that emphasizes abstinence.

An alternative approach focuses on entrepreneurship training, the assumption being that the underlying problem is lack of economic opportunities. Bandiera et al. (2014) studies the impact of a program offering both vocational training and “life skills” through youth clubs in Uganda. Around 1.5-2 years after the initiation of the program, they find a strong impact on business startups and a reduction in pregnancies and involuntary sex.

Duflo et al (2015) investigates the impact of a school-based HIV-prevention program in Kenya and contrasts it with school subsidies. While each of the single-pronged programs was found to have beneficial impacts, only the combined program reduces sexual transmittable diseases, indicating important inter-linkages between economic opportunities and fertility decisions.

## Business or babies? A field experiment in rural Tanzania

Here, I report from an empowerment program offered to adolescent girls in rural Tanzania that I evaluated together with co-authors (see Berge et al., 2015). The program involved two training modules, one on reproductive health and the other on entrepreneurship. We evaluated the impact of the modules separately and in combination, allowing us to investigate the relative effectiveness of the two approaches, and whether there is a complementarity between them. Moreover, we conducted both a short-term and a long-term follow-up study of the intervention, enabling us to shed light on the sustainability of such interventions.

Together with our partner Femina Hip, we decided to focus on girls in semi-urban areas who were in their last year of secondary school (Form IV in Tanzania). During baseline, most of them were in the age interval 16-18, which is where we observe a sharp increase in fertility. During the baseline in April 2013, we sampled 80 schools with at least 20 girls in Form IV in the regions Tabora, Singida, Morogoro and Dodoma, reaching almost 3500 girls.

Among these schools, we randomly allocated 20 to each treatment arm, and 20 schools to the control group. That is 20 schools to entrepreneurship training (“build your life”), 20 schools to health training (“protect your life”), 20 schools to receive both entrepreneurship and health training, and 20 schools to control.

### Interventions

After the baseline survey, in June 2013, one or two teachers per (treated) school attended a one-week instructor session organized by Femina Hip (two weeks for the teachers involved in the combined treatment). After this instructor sessions, in July-September 2013, the teachers implemented the training sessions (treatments) with all the Form IV girls of their school. Both the entrepreneurship and the health treatments had 8 weekly training sessions of 1.5 to 2 hours, 1 session per week, while those who got the both treatments received 16 training sessions per week. Both treatments were offered in a classroom setting, and most schools finished the treatments in 8-10 weeks.

The aim of the entrepreneurship training was to economically empower the girls, inspiring and enabling them to “build your life”,

providing the girls with knowledge on how to establish and run their own business. Topics included customer care, marketing, record keeping, pricing of products, personal finance, and sessions aiming at improving entrepreneurial mindset and self-confidence.

**Figure 4. The booklets of the Girl Power project**



The aim of the reproductive health training was to enable the girls to take control of their own body and health, or to “protect your life”. The training provided practical and objective information about reproductive health and gender empowerment, including information and guidance about contraception and the consequences of risky sexual behavior, as well as making the girls aware of basic gender equality rights.

In both treatments all the girls received their own copy of either a “build your life” or a “protect your life” booklet/magazine, and in many cases this was one of very few school related books the girls had. Those who received both the training programs, received both magazines.

## Findings

The main finding of the paper is that entrepreneurship training is the more effective approach to female empowerment in the economic domain. We find that girls who have received entrepreneurship training 16-18 months after the intervention are much more likely to be involved in business activities and are happier with their economic situation. In contrast, we find very little evidence of the reproductive health training, alone or in combination with the entrepreneurship training, having an impact in the economic domain. None of the interventions have an impact in the health domain, but this null result may partly reflect that it takes more time for health changes to be observable. Finally, we also document that some of the positive short-term effects of the training on gender equality perceptions do not survive in the long term, which may reflect a tension between local social gender norms and the messages of the female empowerment program. The short-term positive effects on locus of control, however, remain and are also present in the long-term follow-up.

As part of our *Girl Power* project, we asked the girls to write a short essay about where they envision themselves in 5 to 10 years' time in terms of education, livelihood, marriage and the challenges they expect to face.<sup>5</sup> Some of these essays have been translated into English, and I here present some quotes from these translations.<sup>6</sup> The quotes point to constraints facing the girls, but also to how the training programs have affected their plans about starting a business and delaying pregnancy and marriage.

### *Poor and discouraged: How do I avoid getting pregnant?*

*My first priority in life is to educate myself and once I do, I will use my education to prevent cruel practices that other girls are being subjected to such as child marriage, circumcision and arranged marriages. (...) Since I started Form one, it was very difficult for my parents to pay my fees or buy school uniform. I have many problems that bother me, for instance I am completing form four and to date my parents have not paid the school*

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<sup>5</sup> This approach is inspired by the United Nations Development Group's project A million voices: World We Want ([worldwewant2015.org](http://worldwewant2015.org)).

<sup>6</sup> The essays were translated by Amina Mohamad Maalim, as part of her Master's thesis at NHH Norwegian School of Economics; see Maalim (2014).

fees. Sometimes when I go back home, I often cry. Therefore I would like to say that I have many aspirations in life. However, I feel that I will not be successful due to the difficulties I am encountering. (...) I do not have much more to say but I do have one worry. I would like you to give me advice. After I complete high school (form four), how do I avoid getting pregnant without expecting to get married at an early age? (Control group)

### ***Optimistic: Business brings independence***

*I am a 17 year-old girl who studies at Kisemu secondary school. In August, I received training on entrepreneurship, which has enabled me to understand the opportunities available to me as a girl. (...) After the training, I became more informed on how to start my own business, which will make me work hard for my future. In the next 5 years, I will have a huge business, which I know will bring in income. After completing my education, my life will be based in Morogoro. I do not expect to have children during this time until when I am employed or running my own business that will bring in income and not depend on anyone else. (Business trained)*

### ***Wants to start beauty shop if fails to continue education***

*I am very grateful because I did not know that I as a woman have the ability to do what I had intended to. I would like to open a beauty products shop here in Mtamba because they are girls and women who like to beautify themselves but they cannot get access to beauty products. It is for this reason that I if am not successful in continuing with my education then it will be better for me to be an entrepreneur who sells various beauty products. (Business trained)*

### ***Business mitigates abuse***

*Once the results are out, I will check whether I passed or failed. If I pass, I will continue with school, but if I fail, I think that I will continue with my business....*

*To me, doing business mitigates abuse from the man who will marry me. I will ensure that I will conduct business until I make profits and then after that I will start planning a family. (Business trained)*

### ***No light to study***

*Factors that can discourage me include people in the neighbourhood who say that “how many have studied and are still at home?” and another thing, in the house in which I live, there is no light which I can use to study. When I go back home, I perform household tasks and after work, night sets in and no one will give you a battery or kerosene lamp to do some self study. You will stay in the dark until dawn. That is all, I don’t have much. (Business trained)*

### ***Stand firm and say no to casual sex***

*After I finish school, I will open up a business. When the results are out and I pass, I will continue with school and if I do not succeed then I will not continue with school. I will become a business woman. If I succeed in my business then I will start a business in raising chickens for eggs. Later on, I will move to Arusha where I will conduct a survey on which businesses are successful. If the business of selling clothes is lucrative then I will start a business selling clothes.... I have received training on fertility and health and been taught how to say no when a man asks you to have sex with him. You should have a firm stand in saying no and not fear him and start to bite your nails or dig your foot into the ground. You have to stare at him in the face and be serious. All the girls should receive education on how to say no. (Health trained)*

### ***Discouraged: No access to funding***

*I think that to a large extent I will not be able to reach my goals because the life I currently lead is not good and if I fail school, there is no one who can help me continue. And there is no one who can provide me with capital and if you tell me to borrow, I have no collateral such as a house or other assets. (Health trained)*



## 6 Edutainment for entrepreneurship

Edutainment shows have a long history in the developed world and are increasingly used in developing countries in order to educate the population in different spheres of life, including health, human rights, and financial literacy.<sup>7</sup> But what are the effects of these shows on the viewers? Do they succeed in becoming a source of knowledge or inspiration and initiate behavioral change, or are they largely pure entertainment?

These questions are particularly important in the developing world, where poor quality and severe resource constraints in the educational sector make it pertinent to consider complementary approaches to education (Banerjee and Duflo, 2011).

### Literature

Berg and Zia (2013) evaluate the impact of incorporating financial messages in a soap opera in South-Africa. They use a symmetric encouragement design, where the treated group was encouraged to watch a soap opera containing financial messages and the control group was incentivized to watch another soap opera, aired at the same time. In a follow-up study around four months after the show ended, they find evidence of behavioral change, where the treated participants are more likely to borrow from formal sources and less likely to engage in gambling.

They find some evidence of increased financial literacy on topics that were prominent in the soap opera, but no effect on general financial literacy knowledge. Finally, they do not find any effect on the likelihood of seeking financial advice, a topic extensively promoted in the soap opera, and they argue that this may be due to this message being communicated by an external character who failed to connect emotionally with the viewers. The importance of emotional

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<sup>7</sup> An edutainment show is typically defined as a program that purposely design and implement a media message to both entertain and educate, in order to “increase audience knowledge about an educational issue, create favorable attitudes, and change behavior” (Singhal, Cody, Rogers, and Sabido, 2004). For an overview of recent developments in entertainment education, see Singhal (2013).

connections is very much in line with the thinking of the designers of Ruka Juu, where a main idea was to introduce real life individuals, rather than soap opera fictional characters, as role models for the viewers.

More broadly, there is a growing literature studying how TV and radio may cause behavioral change. Jensen and Oster (2009) show that the gradual expansion of cable TV in India caused a decrease in the reported acceptability of son preference, domestic violence toward women, and fertility, and La Ferrara, Chong and Duryea (2012) find that exposure to soap operas in Brazil, which typically depict families with few children, led to a reduction in fertility, particularly among poorer women. In a very different context, Yanagizawa-Drott (2014) shows how a radio station contributed to the Rwandan genocide, by significantly affecting participation in violence and killings.

Edutainment for entrepreneurship also relates to the literature on business training, which have largely looked at whether classroom training of small-scale entrepreneurs may contribute to increased profits and growth of the businesses, but the scalability of such interventions remains an open question. (Berge et al., 2012; Berge et al., 2014a). Edutainment shows for entrepreneurship represent an alternative to classroom training, and the present study demonstrates that such shows can inspire the viewers to become more interested in entrepreneurship and can initiate more business startups, but also suggests that it may be challenging to teach more complex business knowledge through television.

## Evaluating an edutainment show for entrepreneurship in Tanzania

We conducted a randomized control field experiment studying an edutainment show for entrepreneurship, Ruka Juu (Jump Up), which was aired on national television in Tanzania during the spring of 2011. Ruka Juu is an edutainment show produced by the NGO Femina HIP, which is a multimedia platform working with youth and communities across Tanzania. Femina HIP has since 1999 promoted

healthy life styles and gender equality, and in recent years increasingly also entrepreneurship and financial literacy.<sup>8</sup>

Figure 5. Ruka Juu logo



The first season of Ruka Juu was aired on national television in Tanzania from March to May 2011. The edutainment show consisted of 11 weekly episodes built up around six young entrepreneurs (three females and three males). They competed for “the opportunity of their life,” to win a money prize of 5 million Tsh (around 3100 USD). The contestants, all running their own small-scale businesses, were recruited from semi-urban areas throughout Tanzania with the aim of establishing role models for the viewers.

The audience followed each contestant through a number of challenges engaging both the contestants and the viewers to reflect on how to plan and operate a business. Important topics were market

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<sup>8</sup> In addition to Ruka Juu, Femina HIP also produce Fema Magazine, Fema Radio Show, and Fema TV Show. For a further discussion of Ruka Juu, see (Ekström and Helgesson Sekei, 2014).

assessment, customer care, marketing, record keeping, credit, savings, insurance, health, and appearance. The edutainment show had a particular focus on female empowerment and one episode was specifically assigned to gender issues. It had an estimated 3.1 million viewers (Tanzania All Media Product Survey) and was awarded the second prize in the 2013 Pan-African Awards for Entrepreneurship in Education, in competition with over 350 organizations from 33 different countries.

Our study represents, to our knowledge, the first randomized control field experiment of an edutainment show in a developing country. The overall aim of the edutainment show was to educate and motivate Tanzanian youth on entrepreneurship, business skills, and financial literacy in order to realize their potential and enable them to lift themselves out of poverty.

We randomly selected 43 secondary schools in Dar es Salaam to take part in a field experiment, 21 randomly selected to treatment and 22 to control, and our sample consists of more than 2000 adolescent girls and boys. We used a symmetric encouragement design, where the treatment group was incentivized to watch the edutainment show and the control group was incentivized to watch a weekend movie. To analyze the impact of the edutainment show, we rely on a broad set of data. A few weeks after the end of the show, we conducted an extensive lab experiment to measure impact on ambitions, business knowledge, and entrepreneurial traits such as risk, time and competitiveness preference.

Eight months later, at the end of the school year, we collected administrative data on school performance. Further, almost two years after the show ended, we conducted a long-term follow-up survey of a randomized subset of the participants in order to capture the impact of the edutainment show on occupational status, in particular business startups. Finally, we complemented the quantitative analysis with focus group discussions.

## **Findings**

Our study provides three main findings, where the effects are largely more pronounced for the female viewers. First, we find strong evidence of the edutainment show inspiring the viewers in the short term, by increasing their entrepreneurship ambitions and to some extent also strengthening entrepreneurial traits, and, consistent with

these short-term effects we observe that the show caused increased number of business startups in the long run. Second, we do not find consistent evidence of the edutainment show having an impact on the business knowledge of the viewers. Third, we find that the show in the long-term has a negative impact on school performance; fewer participants in the treated group pass the final school exam and continue studying.

Taken together, the results suggest that edutainment shows on television can be a powerful source of inspiration and may shape attitudes and initiate behavioral change, but also that they do not necessarily work as a vehicle for knowledge transmission.

The fact that an edutainment show for entrepreneurship caused the students to invest less in education carries a general lesson to the field experimental literature, by showing the importance of taking a broad picture of possible implications of a field intervention. It also raises the question of whether it is recommendable to encourage entrepreneurship among youth if this causes them to put less effort into education. We believe that it is crucial to evaluate this finding in light of the poor quality of the secondary education presently in Tanzania.<sup>9</sup> A plausible interpretation of the finding is that the formal education was largely considered irrelevant by some students, while the edutainment show was perceived to present perspectives that were beneficial for their future life situation. It is easy, however, to envision that the encouragement of entrepreneurship may work differently in a society with a high quality formal education, where entrepreneurial ambitions may inspire students to invest more in schooling.

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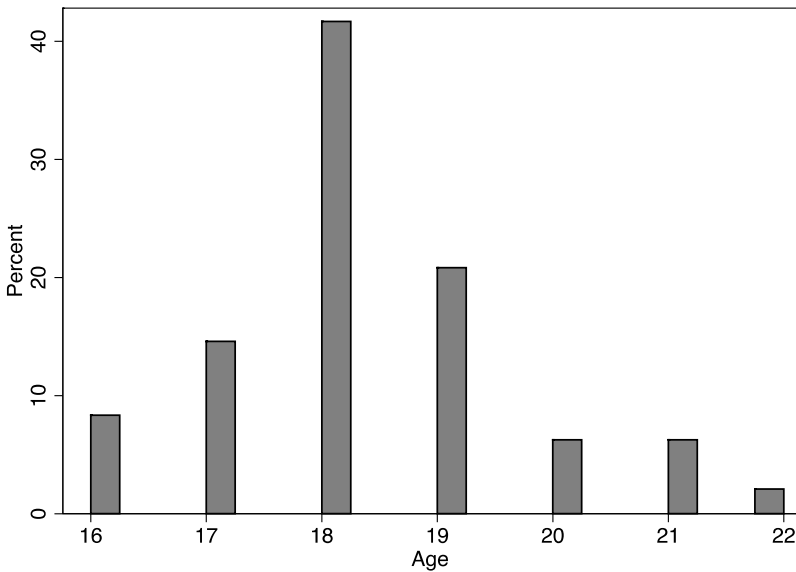
<sup>9</sup> A recent survey of the educational sector in Tanzania showed huge problems with teacher attendance and the quality of the teaching; see <http://www.theeastafrican.co.ke/news/Spectre-of-poorquality-education-stalks-Tanzania/>.

# 7 Youth and business startups

## The business start-up project

We randomly chose 49 youths, 28 girls and 21 boys, in Dar es Salaam, who had taken part in the Ruka Juu project described in the previous chapter, and had expressed an interest in starting a business, and offered them a business grant of 200 000 Tsh (around 125 USD). The average age of the participants was 18, but ranged from 16 to 22.

**Figure 6. Age distribution of participants in business start-up project**



## Financial diaries

The youth were formed into four groups, which met on a monthly basis with the researchers, and tracked from December 2012 to December 2013. They kept individual weekly financial diaries of their personal economy, business income statements, time spent on various daily activities, a happiness index and quantitative information about weekly plans, thoughts, experiences and challenges. They were offered

incentive money to show up at monthly meetings with detailed accounts of income, costs, saving, investment, expenditure, and time spent on various activities, and with a bonus if they met on time and supplied complete accounts. In addition, they were offered the prospect to win a 1 million Tsh business prize, where to qualify a minimum of seven out of 12 diaries had to be submitted. In addition, the research team visited the participants on a regular basis to observe them in their natural social environment.

Collins et al. (2009) argue that neither large surveys nor small-scale anthropological studies are very helpful in answering questions about how poor people conduct their financial lives. They write (pages 2-3): “Large surveys give snapshots of living conditions. They help analysts count the number of people worldwide and measure what they typically consume during a year. But they offer limited insight into how the poor actually live their lives week by week – how they create strategies, weigh trade-offs, and seize opportunities. Anthropological studies and market surveys examine behaviour more closely, but they seldom provide quantified evidence of tightly defined economic behaviour over time.”

## The businesses

The participants started various types of businesses based on the initial business grant, the most common being selling vegetables, clothes and textiles, DVDs and videos, food and drinks, and raising poultry. Other activities included bike transport, operating a training center, renting out a boat to fishermen, and buying and selling cows. One participant got pregnant early in the project and didn't manage to start a business.

The businesses had at most one employee (typically a family member), and were normally operated from home or on the street. Many of the participants had to change line of business during the project year, or took part-time jobs to make ends meet.

Out of the 49 who received a business grant, only 29 actually managed to, or chose to, run their businesses until the end of the project period. The most common reason for dropping out of was pregnancy, family obligations, going back to school, or wage work. One of the participants in fact had his stocks stolen, and did not manage to get back into business. Yet another participant was visited by the tax authorities and had his stocks confiscated due to lack of business registration.

## Social pressure to share

An important insight from the project is the strong social pressures facing the youth when trying to develop their businesses. They reported feeling obligated to contribute part of their business income to their households so they could meet their basic needs or support them in case of emergencies. One of the contestants, Amina, contributed to the domestic budget when the parents were not around, and paid 30 000 Tsh for school fee to a younger brother. Husna paid for her younger sister's education; in fact she is responsible for all her needs in school. Pilly helped her family for food at least once a week. Moreover, she also rescued her mother from a financial crisis with a bank, which forced Pilly to sell the computer worth of 250 000 Tsh to pay her mother's bank loan. Mariam had to pay for her own food and transportation, and also once had to bail out her uncle from jail (!).

Others, like Straton, received more support from parents. According to him, his parents respected the fact that he was saving his business money to start a big business later, and in fact supported him by providing him with work to make additional money.

Business income created tensions; some participants were upset with their family members, blaming them for using their resources, which they could have invested in their businesses. Some of the participants keep their savings with friends and relatives, without the knowledge of people in the household, in order not to have the funds confiscated, directly or indirectly (for instance by being asked to help out in emergencies).

## Business survival and profits

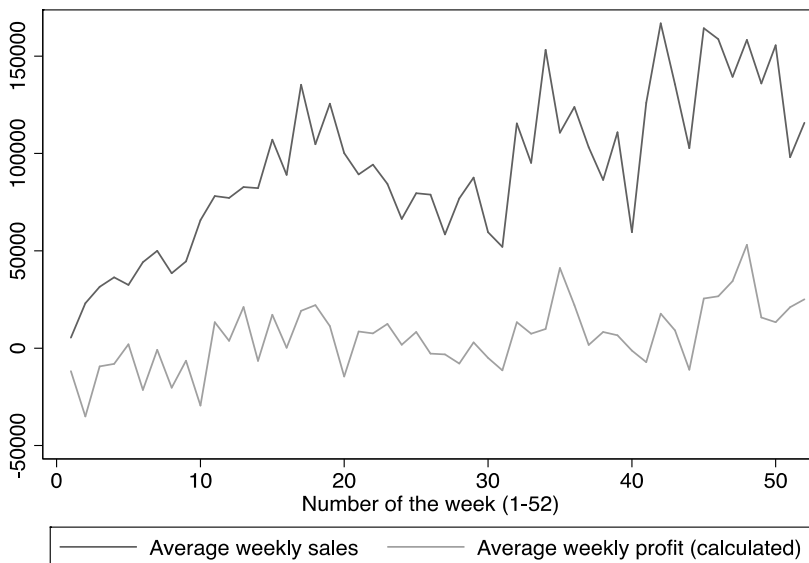
On average, only 60 percent of the participants reported positive weekly profits over the year, with median self-reported business income of 27000 Tsh (16 USD) and profit of 10 000 Tsh (6 USD). Note, however, that in particular profits are notoriously difficult to measure (see de Mel, McKenzie, and Woodruff, 2009b), and the numbers should therefore be interpreted with some caution.

Naturally, it took some time for the businesses to start and generate an income. This is evident from Figure 7, which shows the development of sales and calculated profits over the year. Overall, there has been an upward trend. The higher sales at the end of the year



probably partly reflect higher overall demand around Christmas time. It is, however, also clear that there are many ups and downs in sales and profits. Many of the participants changed line of business during the year, as the initial business venture turned out to be less profitable than expected.

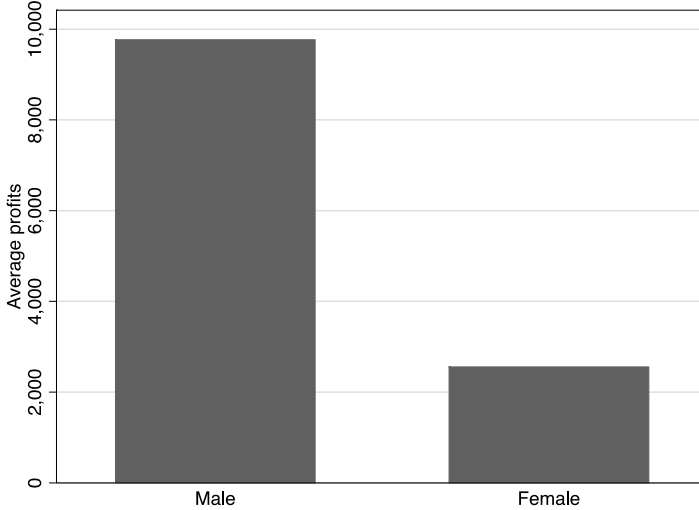
**Figure 7. Average sales and profits (calculated) over the year.**



## Gender and business outcomes

We note that the girls in our sample have markedly lower profits than the boys; the average weekly profits for girls was 2500 Tsh, while that of boys almost four times higher, at 9800 Tsh. This is illustrated in Figure 8. More domestic obligations are likely to be one explanation for this. But the literature, including our own research, points to differences in mindset between females and males as an additional factor which may determine business success.

Figure 8. Average (calculated) profits, by gender.



In particular, willingness to compete has received a lot of attention in the literature (see for instance Niederle and Vesterlund, 2007). We have a unique dataset, with lab-data on the participants' willingness to compete (as well as other background variables which may be relevant for business choices and outcomes, see the Appendix for a more comprehensive analysis).

Consistent with the findings in the literature, the girls in our sample are less competitive than boys (see the Appendix for how competitiveness is measured). This is illustrated in Figure 9, where we see that 33% of the males and only 21% of the females choose to compete.

Figure 10 then decomposes the correlation between (calculated) profits and competitiveness according to gender. We observe that there is a positive correlation between competitiveness and profits for both male and female, but that it is particularly strong for females. Hence, we can conclude that willingness to compete is a particularly important entrepreneurial trait for the females in our sample. Our results thus indicate that not only social constraints, but also internal constraints, in the form of a lesser willingness to compete, limit the girls' ability to transform the business grant into successful business outcomes.

Figure 9. Gender and competitiveness

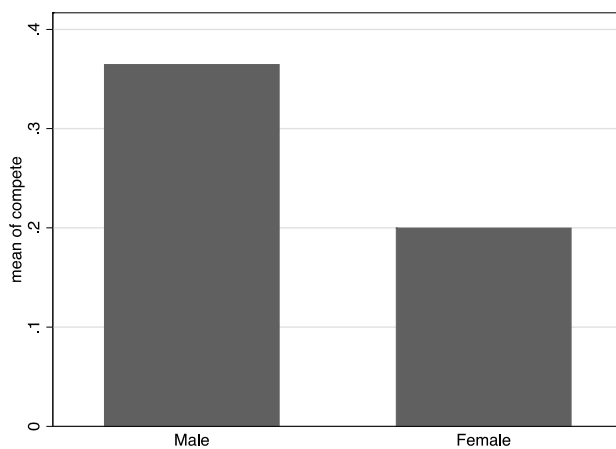
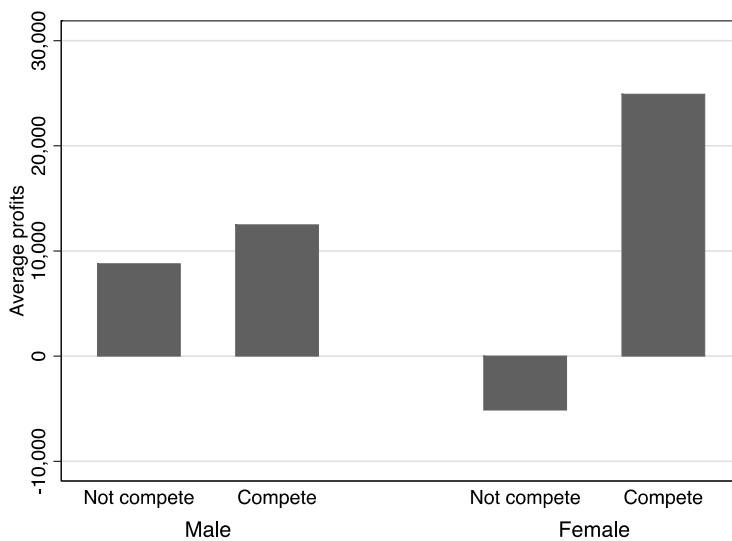


Figure 10. Profits and competitiveness, by gender.



## 8 Concluding remarks

The literature evaluating finance and human capital interventions to promote business development and improved household outcomes shows mixed results. The general impression is that there is no “miracle of microfinance”, or any “miracle of business training” for that matter. The literature does, however, suggest that *combining* financial capital with business training may have more positive effects on business outcomes than any single intervention in isolation.

One reason why it is difficult to transform the small-scale businesses by microfinance is probably that capital is not the only and perhaps not even the primary constraint to growth for small-scale entrepreneurs: lack of ability or desire to grow in many cases is more important. And business-training programs do not necessarily transform the ambitions of necessity-driven business owners.

The literature points to particular challenges for girls and women, who face social constraints on their ability to start a business and spend time on it. One possible implication of the difficulty in developing female microenterprises is that female empowerment for entrepreneurship should take place at an early age, before the girls get married and have established a family and thereby bound by domestic obligations; once she is a wife and a mother, change is more difficult to achieve.

Our research on youth and entrepreneurship shows promising results, not the least for girls. We evaluated an edutainment program shown on national television in Tanzania aimed at promoting entrepreneurship among the youth. We find strong evidence of the edutainment show inspiring the viewers in the short term, by increasing their entrepreneurship ambitions and to some extent also strengthening entrepreneurial traits. Moreover, the show caused an increase in the number of business startups. Hence, edutainment shows on television can be a powerful source of inspiration and may shape attitudes and initiate behavioral change.

Similarly, in a field experiment involving more than 3000 teenage girls in rural Tanzania, we find entrepreneurship training led to a sharp increase in business activities. Hopefully, the economic empowerment will also lead to a more general empowerment, allowing the girls to delay marriage and pregnancies, and to lead more healthy lives. We shall track these girls over time and see whether this is true

or not. Judged by the statements of the girls themselves (as reported in Chapter 7) at least, business has the potential to delay pregnancies.

Stimulating entrepreneurship through business training and investment grants is clearly only part of a strategy to fight poverty, not the only solution. Clearly, large-scale investments in infrastructure and industry are needed to bring a country like Tanzania out of poverty. Sub-Saharan Africa has indeed experienced positive and relatively stable growth rates during the last decade, but it takes time for economic growth at the macro level to lead to reductions in poverty levels. In the meantime, well-designed interventions stimulating small-scale business development can improve the lives of many people. Moreover, targeting young people with such measures can also ensure social and political stability, which is a prerequisite for attracting investments at a larger scale. Hence, even if micro-entrepreneurship by itself is not a magic bullet for poverty reduction or female empowerment, an optimistic scenario is that such “bottom-up” interventions, properly designed, over time can promote changes also at the macro level.

Finally, my report has naturally focused on particular topics, leaving out many interesting dimensions of entrepreneurship and development. In particular, I would recommend the following two topics for future reports to inform the Swedish aid debate: (i) the role of communication technology, such as mobile phones and tablets and computers with internet access, for education, health, and income generation; (ii) the importance of bureaucratic barriers to business growth.

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# Appendix. Determinants of business success

In this appendix, I provide a more detailed analysis of the determinants of business success based on the business-startup project.

## **Willingness to compete**

Competition preferences are measured along the same lines as in Niederle and Vesterlund (2007). The participants were first asked to add numbers for a period of time (3 minutes) with a fixed rate compensation (200 Tsh per correct answer), and then asked to perform the same kind of test, but where the participants first choose whether to work for a fixed rate (as in the first round) or a competition rate, which pays a higher amount (300 Tsh per correct answer), but only if they perform at least as good as the average in the previous round; if they performed worse than the average, the competition rate would pay zero.

## **Confidence**

Confidence is measured as the participants' stated belief about own performance in the first round (fixed rate) of adding numbers. They were asked to place their performance relative to the rest of the participants in their session, with 1 being the lowest decile and 10 the top decile.

## **Risk**

To elicit risk preferences, we asked the participants in the lab to choose between a safe alternative and a risky alternative in three different situations, where one of the situations was randomly selected to determine the payment from this part of the experiment. The payoffs were always the same, in the safe option 2000 Tsh and in the risky option 4000 Tsh if lucky and zero if unlucky. The only



difference between the situations was the probability of the lucky outcome in the risky option (25 percent, 50 percent, 75 percent).

### **Time preferences**

Time preferences were estimated by asking the participants to make choices in two sets of situations. In the first set of situations, the participants chose between receiving 1000 Tsh today and a larger sum of money after eight weeks. They made this choice in three situations where the amount of money received at the later dates varied (1500, 3000, and 5000 Tsh). In the second set of situations, they made the same three choices, but now between eight weeks or sixteen weeks. For each of the two sets of situations, one situation was randomly drawn to determine the payment from this part of the experiment. We measure patience as the number of times they chose the later time option (0-6).

### **What determines profits?**

Profits are both in the form of “calculated” and “stated”, where calculated profits are income minus costs, while stated profits are simply what the participant reports as profits in a given period. We also look at both the full sample (49 participants) and the “survival” sample (29 participants), that is, those who continued with a business to the end of the observation period (one year).

Table A.1 shows the regressions results, using ordinary least squares. We observe that competition is the only variable that consistently, and positively, predicts profits. The female indicator variable is negative, and significantly so for stated profits. Willingness to take risk also correlates negatively with profits, but is only significant for stated profits, survival sample. Patience predicts profits positively, and significantly so for stated profits. The score on the math test tends to be negatively correlated with profits, and the same goes for confidence. The regressions should of course be treated with some care, as the numbers are very small. It is interesting, however, to observe that the results are broadly consistent with those for established micro-entrepreneurs, reported in et Berge al. (2014 b).

**Table A.1 The correlates of profits (in 1000 Tsh)**

|                | Calculated profits  |                     | Stated profits       |                      |
|----------------|---------------------|---------------------|----------------------|----------------------|
|                | Full sample         | Survival sample     | Full sample          | Survival sample      |
| Female         | -7.297<br>(11.972)  | -16.456<br>(15.740) | -16.419**<br>(6.508) | -17.426*<br>(8.844)  |
| Compete        | 25.515*<br>(13.516) | 36.481*<br>(19.023) | 17.272**<br>(7.347)  | 20.569*<br>(10.689)  |
| Risk           | -1.743<br>(8.481)   | -10.530<br>(12.308) | -6.439<br>(4.610)    | -12.980*<br>(6.916)  |
| Confidence     | -2.664<br>(2.544)   | -3.632<br>(3.470)   | -2.010<br>(1.383)    | -3.134<br>(1.950)    |
| Patience       | 3.119<br>(4.439)    | 4.621<br>(5.842)    | 4.482*<br>(2.413)    | 5.896*<br>(3.283)    |
| Math test      | -0.595<br>(0.476)   | -1.194*<br>(0.674)  | 0.047<br>(0.258)     | -0.083<br>(0.379)    |
| Constant       | 27.261<br>(30.866)  | 54.015<br>(38556)   | 28.687*<br>(16.778)  | 45.939**<br>(21.665) |
| Observations   | 49                  | 29                  | 49                   | 29                   |
| R <sup>2</sup> | 0.15                | 0.29                | 0.28                 | 0.37                 |

Note: Numbers in parentheses are standard errors; \*  $p < 0.10$ , \*\*  $p < 0.05$ .

Removing two outliers, the one with lowest calculated profits and the one with highest calculated profits, would lead to a loss of statistical significance of competition in the first regression, that is, calculated profits for the full sample, but would not change the significance level of competition in the other specifications.

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