

Gender and Finance in Sub-Saharan Africa

Are Women Disadvantaged?

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Outline

- Motivation and contribution of the study
- Related literature
- Data
- Main results
- Conclusions

Motivation

- Access to finance a key concern for policy makers
 - In SSA fewer than 1 in 5 hh have access to formal financial services
 - Access to credit is key for firm growth and new business creation
- Credit constraints have economy-wide effects
 - Reduce efficiency of capital allocation
 - Exacerbate income inequality
- Index of “legal” discrimination are especially concerning in SSA countries

Contribution of this study

- Focuses on a key dimension in the access to finance debate: the gender gap
- Analyzes both firms' access to finance and households' access to finance
 - It analyzes access not only to formal financial services but also to informal ones
- Relying on novel data compilation focusing on SSA (covering both hh and firms) presents cross-country evidence using micro-level data

Research questions

- Using enterprise data
 - Are female entrepreneurs in SSA less likely to rely on formal bank finance compared to male entrepreneurs?
 - Are female entrepreneurs in SSA less likely to rely on formal bank finance than female entrepreneurs outside SSA?
 - Is the finance gap between female and male entrepreneurs in SSA larger compared to countries outside SSA?
- Using households data
 - Is there a difference in terms of access to formal financial services between females and males?
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Existing literature

- Gender gap in access to credit (survey by Klapper and Parker 2010)
 - Previous cross-countries studies found women are less likely to get formal financing or pay higher interest rates (Murayev et al 2007)
 - While Bruhn (2000) found no gender gap in LAC in terms of access to credit by entrepreneurs
 - Howard and Finnegan (2004) found that women entrepreneurs in SSA more likely to use internal and informal finance
- Studies evaluating determinants behind this gender gap
 - Buvinic and Berger (1990) focus on difficulties with loan applications
 - Lusardi and Tufano (2009) emphasize financial literacy
 - Beck et al (2011) stress role of “tastes” and “preferences”
 - Hallward-Driemeier (2011) emphasizes the importance of legal and institutional factors (e.g. husband’s signature requirement)

Data - individuals

- Data collected by FinTrust
 - Cover 9 SSA countries (Botswana, Kenya, Malawi, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia)
 - Kenya and Tanzania covered twice
 - Cover 43,908 individuals
 - Distinguish different types of access to finance
 - Banks
 - Formal services (non banks) - i.e. insurance, mobile companies, MFIs
 - Informal financial services - i.e. ROSCAs

Variable	Variable description	n. obs.	mean	st.dev.	min	max
Banking	uses now banking services	43908	0.23	0.42	0	1
Informal	uses now unregistered financial services	43908	0.27	0.45	0	1
Excluded	not banked; not formal or informal financial institutions	43908	0.57	0.49	0	1
Female	1 if respondent female	43908	0.53	0.50	0	1
Married	1 if married	43905	0.59	0.49	0	1
HH_head	1 if household head	43897	0.46	0.50	0	1
No-education	less than primary	43240	0.29	0.45	0	1
Primary	primary complete (and) less than secondary complete	43240	0.47	0.50	0	1
Secondary	secondary or vocational training complete (and) less than tertiary compl	43240	0.20	0.40	0	1
Tertiary	tertiary complete or more	43240	0.03	0.16	0	1
Numeracy	does not know what inflation is	35590	0.41	0.49	0	1
Owns_mobile	owns/uses pre-paid or contract cell phone	43883	0.33	0.47	0	1
Age_log	age (years) -log	43736	3.51	0.40	2.77	4.65
Employed	(main) source of income is from a wage (company or individual)	43908	0.18	0.39	0	1
Self_employed	(main) source of income is from own business	43908	0.17	0.38	0	1
Agriculture	(main) source of income is from selling agricultural, livestock or fishing p	40008	0.40	0.49	0	1
Riskaverse	disagree that 'to get ahead on life one need to take some risks'	13257	0.24	0.43	0	1
Rural	lives in a rural area	43908	0.65	0.48	0	1
Earner	1 if household main earner	25962	0.69	0.46	0	1
Decision_mkr	makes financial decisions (self or with spouse)	25859	0.74	0.44	0	1
log_income	log individual monthly income -LCU (ALL in USD)	31151	2.93	3.47	-9.10	9.37
region	number identifying different regions	43908	8.0	11.1	1	55
weight	weights	42708	3189.2	4806.8	0.026	122826

Data - Enterprises

- Data collected by World Bank during period 2006-2009
 - Cover 37 SSA countries and 49 countries from RoW - focus on about 35,000 “formal” companies
 - Cover “informal” companies for 25 African countries
 - Comparable data with rich set of information on firms characteristics and access to finance
 - Access to formal finance (i.e. overdraft/loan)
 - Share of investment financed by financial institutions
 - Share of working capital financed by financial institutions

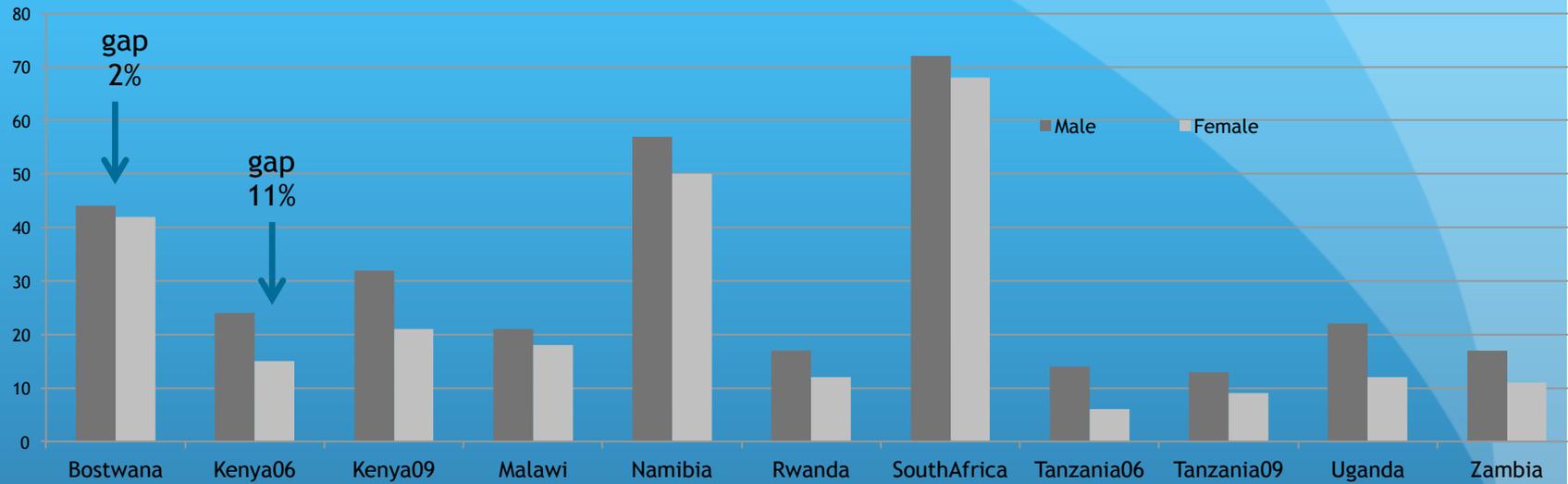
Variable	Variable description	n. obs.	share	st.dev.	min	max
Female	At least 1 principal owner is female	35,135	0.36	0.48	0	1
Africa	Firm is in an Africa country	35,135	0.30	0.46	0	1
Micro	1-5 employees	35,135	0.13	0.33	0	1
Small	6-10 employees	35,135	0.23	0.42	0	1
Medium	11-49 employees	35,135	0.38	0.49	0	1
Large	50 or more employees	35,135	0.27	0.44	0	1
public	Government ownership	35,135	0.05	0.22	0	1
private, limited	Private, limited ownership	35,135	0.55	0.50	0	1
sole proprietor	Sole proprietor	35,135	0.30	0.46	0	1
partnership	Partnership ownership	35,135	0.07	0.26	0	1
other	Other ownership	35,135	0.02	0.14	0	1
Fin_Formal	1 if overdraft or checking/saving account or creditline or loan	35,135	0.55	0.50	0	1
Fin_inv	% New investments paid w/ (priv or gvmt) banks or fin.inst.	18,807	17.54	33.04	0	100
Fin_wkcap	% Working capital paid w/ (priv or gvmt) banks or fin.inst.	24,791	9.18	21.36	0	100
logEmployment	Number of permanent workers -log	35,135	3.13	1.38	0	9.94
Innov_prod	Firm improved products in last 3yrs	9,375	0.61	0.49	0	1
Innov_proc	Firm improved production process in last 3yrs	9,385	0.57	0.49	0	1
lgCity	Firm is in the capital or city w/ population of 1Mn or more	35,135	0.40	0.49	0	1
Age	Age of firm -log	34,827	2.46	0.85	0	5.74
Exporter	Firm exports directly at least 10% of total sales	35,086	0.13	0.34	0	1
Foreign	at least 10% of firm is owned by foreign private sector	35,032	0.10	0.31	0	1
Index Women-Business&Law ¹	1=equality; 0=no equality;	79	0.71	0.26	0.13	1

¹ average: property, inheritance, law, work all industries; same night hrs; married women; tax liability; pregnant, nursing women

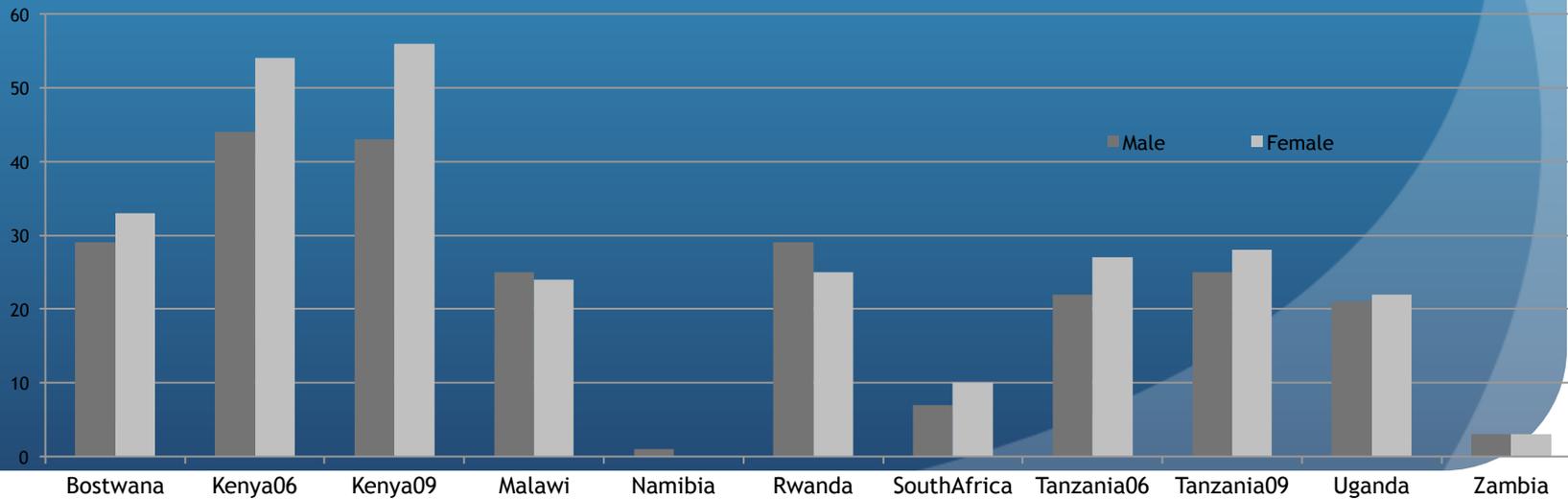
Main Results

Individuals - “Not big surprises”

Panel A: Banking



Panel B: Informal



Individuals - “Surprising”

- When controlling for individual characteristics
 - Individual characteristics: Location, education, age,
 - Employment: status (employed, self-employed), sector
 - Personal circumstances: married, head hh, ownership of cel
 - Skills and attitudes: risk attitude, numeracy
- Women are not less likely to use formal financial services - except in South Africa 2008
 - Instead key individuals characteristics, that are less prevalent among women, significantly and positively correlate with access to finance: education, being head of hh, having a formal employment, ownership of mobile phones
- Women are more likely to use informal financial services - results driven by Botswana and East African countries and especially Kenya

Enterprises

- “Not surprising” findings
 - Enterprises in SSA more financially constrained than elsewhere
 - Larger companies have more access to financial services
- “Surprising” findings
 - Female ownership is not associated with worse access to external finance
- Possible explanations → Formal female entrepreneurs are a “selected” group - the gap arises “before” entry
 - Females less likely to be sole proprietor
 - Females owned business tend to be smaller
 - Females owned business are “more” innovative
 - Females less likely to operate in sectors “more dependent” on finance

Conclusions

- Limited evidence of “gender gap” either for enterprises or households
- While “prima facie” surprising these results suggest we should look beyond simple gender comparisons and explore the “mechanisms” behind selection
 - For enterprises, evidence of selection bias - female entrepreneurs had to overcome initial higher “entry barriers” than male entrepreneurs
 - More innovative companies, with smaller size, more prevalent in industries that require less external finance
 - For individuals females score lower in key attributes such as education, formal employment, being head of households which in turns are key in accessing formal finance
- Policy implications
 - Women appear to be disadvantaged in access to financial services but key reasons seem outside the financial system
 - Policies to expand access to finance for women should focus on those dimensions determining “selection” and “exclusion” (especially on the “demand” side)