
Are there gender differences in perceived obstacles to operation and expansion of SMEs in Papua New Guinea: Evidence from a survey ?

Vinod Mishra

Monash University, Australia

Francis Odhuno

National Research Institute, Papua New Guinea

Russell Smyth

Monash University, Australia

Dr Francis Odhuno
Economic Policy Research Program
PNG National Research Institute
Port Moresby

The Question is...

Which elements of the business environment are women more or less likely than men to feel disadvantaged?

Introduction

- ❑ Women represent the fastest growing group of entrepreneurs
 - ❑ Internationally, women have establishing enterprises at double the rate of men (Heilman & Chen, 2010; Mauchi et. al., 2014)
 - ❑ In 2010, 180 million women established or operated enterprises globally (GEM, 2010)
 - i.e. 42% of entrepreneurs in the world are women
 - ❑ There are 8-10 million formal female-owned SMEs in emerging markets (IFC, 2011)
 - i.e. 31-38% of SMEs in emerging markets are owned by women

Benefits of women in SMEs

- ❑ Assist to reduce poverty
 - Promote employment opportunities
 - Create wealth
 - Narrow income gap between men and women
- ❑ Improves women's intra-household bargaining power
 - Their husbands are more likely to listen to them
- ❑ Positive inter-generational effects
 - Likely than their partners to invest business earnings in their children's education and health

Barriers to women's involvement SMEs

- ❑ There are obstacles to realising greater women's involvement in SMEs
 - ✓ Despite the growth in female owned, controlled and operated SMEs
 - ✓ Despite the economic benefits of women in SMEs
- ❑ In what way/areas do SME business women feel disadvantaged?
 - ✓ More likely to cite lack of finance – 1st or 2nd biggest
 - ✓ Non-financial barriers – business and social environments may affect men and women differently; e.g.
 - Social networks
 - Human capital and training
 - Cultural norms
 - Legal and regulatory framework; etc.

What is the situation in PNG?

- ❑ PNG has high levels of gender inequality
 - ✓ 2014: rank 158/188 countries on Gender Development Index (UNDP, 2015)
 - ✓ 2015: ranked 116/173 countries on gender differences in legal barriers to doing business (World Bank, 2016)

- ❑ PNG women have not benefited from recent high economic growth

- ❑ PNG female participation in SMEs is low
 - ✓ See table next slide

Gender of owners of SMEs in PNG by region and area, %

Gender composition	Total	Region				Area		
		Southern	Highlands	Islands	Momase	Urban	Rural	Remote
A man/all men	67	64	72	61	73	68	67	63
Majority men	4	3	4	5	5	4	3	4
A woman/all women	8	9	8	8	5	9	3	4
Majority women	1	1	1	2	1	1	—	3
Equal men/women	17	23	14	15	16	15	24	21
Does not apply	3	1	1	9	—	2	3	4
Base: sample	1117	317	335	263	202	862	184	71

What is being done about the situation?

- ❑ Commitment by the PNG Government & Development Partners
 - ✓ Close school and college enrolment and completion gender gap
 - To increase human capital among women
 - ✓ Expand microfinance
 - To improve female access to credit for business e.g. Women's Micro Bank
 - Improve financial literacy among women
- ❑ Programs to boost women in SMEs (mostly by NGOs)
 - ✓ Entrepreneurial skills development and training
 - ✓ Basics like cooking, handcrafts, and sewing
- ❑ Creation of women's business forums.
 - ✓ E.g. Women in Business Initiative
 - ✓ Give opportunities for women to network
 - ✓ Disseminate information about market opportunities
 - ✓ Improve opportunities for women for promotion
 - ✓ Mentoring by other (successful) business women

The issue/question is...

Despite

- ✓ Commitment by Government & Development Partners
- ✓ NGO Programs to boost women in SMEs
- ✓ Creation of women's business forums.

There are still some concerns about gender bias;

- ✓ A business environment that may be differentially impacting on male and female-owned SMEs

Hence;

- ✓ Women need additional support from policymakers

But which obstacles are women more or less likely than men to feel disadvantaged?

Objective, Data and Method

❑ Objective

- ✓ To examine gender differences in:-
 - ❖ Perceived obstacles to business operation and expansion
 - ❖ Views on options to improve business

❑ Data

- ✓ Tebbutt Research (2014) survey data
- ✓ Covers 1,117 formal/registered SMEs across PNG

❑ Method

- ✓ Descriptive statistics
- ✓ Regression analysis (Logit Model, Marginal Effects)
 - **Dependent variable:** major or moderate obstacle = 1, otherwise 0
 - **Focus explanatory variable:** majority female ownership = 1, otherwise 0
 - **Control variables:** owner and firm characteristics, area and region fixed effects

Obstacles to women's vs. men's participation in SMEs

Top 10 perceived obstacles (%) Sample: Males = 861, Females = 256	Major obstacle		Moderate obstacle		Minor obstacle		Not an obstacle	
	M	F	M	F	M	F	M	F
Tax rates	34.5	41.4	23.0	18.8	19.6	18.4	21.7	20.7
Difficulty leasing or buying land	38.2	37.5	18.5	15.2	15.3	20.7	27.9	25.8
Government corruption	37.6	36.7	21.0	17.6	19.2	21.1	21.4	23.8
Difficulty dealing with banks	35.4	30.9	21.1	23.4	19.3	19.1	23.8	26.2
Access to finance/loans/capital	38.4	30.9	19.9	21.5	13.8	16.8	27.1	29.7
Unfair practices of competitors	28.6	30.1	18.0	23.0	22.3	23.8	30.5	22.7
Government regulation	26.0	27.3	21.6	24.2	25.7	22.7	26.4	25.8
Difficulty transporting or moving goods across the country	33.8	27.0	17.2	18.0	16.5	17.6	31.8	36.7
Political instability	25.2	26.6	18.7	18.4	24.7	19.5	30.7	34.4
Customers not paying on time or at all for services purchased	25.1	26.6	15.7	16.0	22.4	25.0	36.0	32.4

Ease/difficulty getting a credit/loan

	≥ 50% Female	> 50% Male	Total
Very easy	12	11	11
Somewhat easy	22	26	25
Somewhat difficult	29	34	33
Very difficult	31	25	26
Don't know/ refused	6	4	5
	100	100	100

Source: Tebbutt Research (2014, Table 68); Females = 292; Males = 795.
Subsamples exclude shareholder organisations and co-operative societies (N=30).


11 Most preferred support item to improve business by gender (%)

Sample: Males = 861, Females = 256		1 st		2 nd		3 rd	
		M	F	M	F	M	F
1	Better access to finance/loans/capital	53.9	46.9	9.2	9.4	5.7	9.8
2	Management and financial skills training	9.9	13.3	20.3	19.5	14.5	10.5
3	ICT, including computers and reliable Internet	7.9	7.0	9.6	9.0	6.6	5.9
4	Better communications	5.3	6.3	7.9	10.5	7.7	7.4
4	Business coaching or mentoring services	4.3	6.3	12.3	9.4	9.1	9.4
6	Marketing/advertising services	4.1	4.7	7.1	8.6	11.8	14.5
7	Staff skills training	4.1	3.9	9.9	9.4	13.1	14.8
8	Complying with government regulations	2.1	3.5	5.1	6.3	9.9	8.2
9	Easier ways to bank - online or mobile	1.5	2.7	5.1	3.5	5.0	3.9
10	Reliable phone, electricity or water supply	3.4	2.3	6.0	5.9	8.2	5.5
11	Professional services, e.g. accounting, legal	1.2	0.8	3.8	5.1	4.4	7.4


Are basic statistic above sufficient?

- Raw numbers might fail to capture full significance of the differences by gender
- Next step: Use logistic regression to examine if:
 - ✓ majority female-owned SMEs face more barriers than their majority male-owned counterparts
 - ✓ majority female-owned SMEs face greater difficulty getting loan/finance than their majority male-owned...
 - ✓ majority female-owned SMEs prefer similar support measures to improve business as their majority male-owned counterparts

Effect of gender on perceived obstacles

Dependent Variable 	Marginal Effect (ME) of Gender Dummy (→)				
	ME × 100	z-Stat	Obs.	Log Likelihood	Pseudo R ²
Access to finance/loans/capital	-0.82	-0.15	1077	-671.60	0.08
Access to professional accountants, lawyers	9.21*	1.81	1077	-651.94	0.07
Remote location of business	-9.12*	-1.81	1083	-578.81	0.06
Difficulty transporting goods across PNG	4.58	0.81	1079	-684.49	0.09
Political instability	1.70	0.31	1078	-712.94	0.04
Government regulation	-4.04	-0.74	1084	-727.26	0.03
Difficulty leasing or buying land	-5.05	-0.95	1084	-719.56	0.03
Difficulty dealing with banks	4.83	0.87	1083	-693.51	0.06
Tax rates	9.13*	1.67	1075	-715.37	0.02
Government corruption	1.79	0.33	1078	-715.55	0.02
Customers not paying on time or at all	0.06	0.01	1080	-694.99	0.05
Unfair practices of competitors	-1.74	-0.32	1081	-728.91	0.03

Effect of gender on ease/difficulty getting credit

	Marginal Effect of Gender Dummy (→)				
Dependent Variable 	ME × 100	z-Stat	Obs.	Log Likelihood	Pseudo R^2
Ease of accessing credit	-1.174	-0.216	1039	-640.73	0.067

Notes:

- (1.) Respondent specific controls (education, age), firm specific controls (number of owners, type of ownership, firms technical level), Industry dummies and location dummies.
- (2.) Gender dummy takes a value of 1 if majority of owners are women.

Effect of gender on options to improve business

Dependent Variable $\hat{\epsilon}$	Marginal Effect (ME) of Gender Dummy			
	ME \times 100	z-Stat	Log Likelihood	Pseudo R^2
Affordable professional services, e.g. accounting and legal	0.07	0.02	-346.16	0.05
Better access to finance/loans/capital	4.95	0.94	-633.77	0.07
Better communications	-6.23	-1.43	-511.86	0.08
Business coaching or mentoring services	-3.46	-0.75	-574.61	0.07
Easier ways to bank, like online or mobile banking services	-2.08	-0.69	-360.18	0.05
Understanding and complying with govt. regulations	5.28	1.49	-479.25	0.03
Management and financial skills training	1.76	0.32	-689.53	0.08
Marketing/advertising services	7.10*	1.68	-583.55	0.03
Reliable phone, electricity or water supply	5.08	1.40	-469.36	0.06
Staff skills training	-4.39	-0.88	-610.56	0.04
Technology, including computers and reliable internet	-11.82**	-2.35	-558.62	0.06

Summary

Top five obstacles identified by women respondents	Top five obstacles which women believe they are disadvantaged
Tax rates	Tax rates
Difficulty buying/leasing land	Unfair practices of competitors
Government corruption	Government regulations
Difficulty dealing with banks	Political instability
Access to loans/capital/finance	Customers not paying on time or at all

Significant obstacles women feel more /less disadvantaged than men

More	Less
Tax rates	Access to professional services e.g. accountants and lawyers
-	Remote location of business

Summary...

Top five support items women say they need

Access to loans/capital/finance

Management and financial skills

ICT, Including computers and internet

Business communications

Business coaching and mentoring

Top five support items women feel they are disadvantaged

Management and financial skills

Business communications

Business coaching and mentoring

Marketing and advertising services

Complying with govt. regulations

Significant support items women feel more /less disadvantaged than men

More

Marketing and advertising services

Less

ICT, Including computers and internet

Conclusions

- ❑ Women SME owners need support to overcome obstacles
 - ❑ But significant gender differences are limited to only three obstacles:
 - ❑ Access to professional accounting and legal services
 - ❑ Tax rates
 - ❑ Remote location of business
- ❑ Women SME owners need support to improve their businesses
 - ❑ But significant gender differences are limited to only two support options:
 - ❑ Marketing and advertising services
 - ❑ ICT, including computers and reliable internet
- ❑ Even then, bias in the few cases is not always against women
 - ❑ Women appear to be disadvantaged in two obstacles and one support option:
 - ❑ Access to professional accounting and legal services
 - ❑ Tax rates
 - ❑ Marketing and advertising services
- ❑ So, policies to promote SMEs in PNG should not overly focus on gender issues
 - ❑ Should address obstacles to expansion, and develop initiatives to support SME expansion, more generally.



THE NATIONAL
RESEARCH INSTITUTE
PAPUA NEW GUINEA



The Papua New Guinea National Research Institute acknowledges and appreciates the support of the Australian government to its 2017 Research Program.

Thank You

Q & A