

## **Sustainability of the women-led SMEs in the economic competition in Sri Lanka: Does financial literacy matter?**

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### **1. Introduction**

Small and Medium Enterprises (SMEs) are not just a supporting source for total value creation of economies, it is an important source of GDP. Similarly, they are recognized as a coping mechanism for many of the challenges that are faced by the economies of the developing nations such as poverty, inequality of income, unemployment, particularly among women and youth (Asare et al. 2015). Thus, the SME's sustainability is critical for economies to achieve sustainable growth. Main problem facing the SMEs is the low survival rate in the economic competition and situation is worst in the women-led SMEs (Prasanna et al. 2019). One of the critical determinants that affect the performance outcomes of the women-led SMEs is the level of financial literacy (Pandey & Gupta, 2018).

According to OECD (2013), effective financial decisions of SMEs depend upon several factors such as awareness, knowledge, skill, and attitude. The studies provide evidence that woman entrepreneurs are likely to adopt measures to make balance between the financial returns, specifically minimizing the risk, and firm sustainability (Gottschalk & Niefert, 2012). However, there are limited number of studies which attempted to study the relationship between gender and firm sustainability, specifically study the effects of financial literacy of women entrepreneurs. Thus, the subject – sustainability aspirations of women-led SMEs – are still remain in debate. Therefore, the objective of this study is to determine whether there a significant association of gender and gender-based financial literacy level on SEM performance by taking agro-based SMEs in Sri Lanka as a case.

### **2. Materials and Methods**

The study first narrowed down its survey focus to agro-based SMEs concerning the significance of agricultural sector economy. A field survey was conducted to collect the data of agro-based SMEs located in formal and informal settings by administering a pre-tested questionnaire during March to December 2020. The survey covered 462 SMEs located in the 30 DS divisions in the country. The study used growth in business/production scale as a proxy variable to business performance. The level of financial literacy of the SMEs was assessed using two variables – credit market accessibility and financial record keeping behavior. The reliability of the variables was tested by using the Cronbach's alpha test. In the analysis of data, cross tabulation and chi-square test was performed to test the study hypothesis and existing understandings in the field were used in extending the interpretations.

### **3. Results & Discussion**

First, the study separated the male and female entrepreneurs in the sample into high and low business performance categories in order to test the hypothesis (H1) – no effect of gender of entrepreneur on SME performance in the economic competition. As results presented in Table 1 (a), within the gender category, 85.7% of male and 99% of women reported the low business performance. It indicates that less business performance of the women-led SMEs compared to male-led SMEs. The chi-square test, which was performed to check whether there a statistically

significant relationship between gender and SME performance, confirmed association between gender and business performance ( $\chi^2 = 17.390, p = 0.000$ ) in low and high business performance categories. Thus, the study rejected hypothesis H1 indicating the existence of gender-based difference in business performance in the SME sector.

**Table 01. (a). Cross tabulation of business growth and gender of SME owner**

Business Growth	Gender of SME Owner		Total
	Male	Female	
Low Performance	289	124	413
High Performance	48	01	49
Total	337	125	462

**Table 01. (b). Pearson chi-square and likelihood ratio estimates**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	17.380	1	0.000		
Likelihood Ratio	24.941	1	0.000		
Fisher's exact test				0.000	0.000
Linear by linear Association	17.343	1	0.000		
No of valid case	462				

Second, the study performed the cross tabulation and Chi-Square test to test the hypothesis H2 – no effect of gender on business record keeping behavior - and H3 – no effect of gender on credit market accessibility. According to Table 2 (a), 76.8% of male and 84.8% of women entrepreneurs had been maintained the business records. It indicates women-led entrepreneurs are more likely to maintain business related records or with high book keeping attitude. The chi-square test confirmed an association between gender and business records keeping ( $\chi^2(1) = 3.470, p = 0.000$ ). In terms of financial risk-taking behavior which was assessed through variable credit market accessibility, Chi-square test confirmed no statistically significant association between gender and financial risk-taking behavior of the entrepreneurs in the SME sector, and thereby rejected the H3 hypothesis. The results of cross tabulation revealed that both groups are in the modest level of credit market accessibility indicating existing gap in credit market accessibility.

**Table 02. (a). Cross tabulation of records maintained and gender of SME owner**

Attribute	Category	Gender of SME Owner		Total
		Male	Female	
Business record keeping	Business records were not maintained	78	19	97
	Business records were maintained	259	106	365
	Total	337	125	462
Financial risk-taking behavior	Credit market were not accessed	139	52	191
	Credit market were accessed	198	73	271
	Total	337	125	462

**Table 02. (b). Pearson chi-square and likelihood ratio estimates**

Attribute	Statistics	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig (1-sided)
Business record keeping	Pearson Chi-Square	3.470	1	0.062		
	Likelihood Ratio	3.658	1	0.056		
	Fisher's exact test				0.072	0.039
	Linear by linear association	3.463	1	0.000		
Financial risk-taking behavior	Pearson Chi-Square	0.05	1	0.945		
	Likelihood Ratio	0.05	1	0.945		
	Fisher's exact test					
	Linear by linear association	0.05	1	0.945		

#### 4. Conclusions

The study, first, revealed the low business performance of women entrepreneurs-led SMEs compared to male entrepreneurs-led business model and effect of gender on SME performance. The study, second, revealed a relatively high rate of business record keeping by women entrepreneurs in the SME sector. Also, the statistically significant association between gender and business record keeping were reported. As record keeping is a key component of financial management of SMEs, it indicates that women entrepreneurs in the sector are with better financial management due to the risk-averse position of them. Third, the study revealed a no association between gender and financial risk-taking behavior of the entrepreneurs, but cross tabulation indicated the existing gap in accessing the financial markets for business growth in both categories.

#### 5. References

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