

The impact of INGOs and governmental assistance on women entrepreneurs' financial performance

Rahmatullah Pashtoon^{1,*}, Noorihsan Bin Mohamad², Zarinah Hamid³
International Islamic University Malaysia, Malaysia^{1,2,3}
Kandahar University, Afghanistan¹
Corresponding e-mail: rpashtoon@hotmail.com*

ABSTRACT

Purpose — *This study aims to explore and analyze the effects of International Non-Governmental Organizations (INGOs) and governmental assistance programs on the financial performance of women entrepreneurs. It assesses how different forms of support contribute to the economic empowerment and success of women-led businesses.*

Method — *The study utilized an exploratory and descriptive research methodology, incorporating primary data. It surveyed 308 autonomous female entrepreneurs in Kandahar, Afghanistan using a cross-sectional questionnaire. The study employs purposive sampling and an OLS statistical model using IBM SPSS V.27.*

Result — *The findings indicate that support programs from INGOs and government assistance positively and significantly influence the financial performance of women-run businesses in terms of profitability volume, average annual sales, return on investment, and inventory turnover.*

Practical implications — *The research emphasizes the crucial role of International Non-Governmental Organizations (INGOs) and government aid programs in enhancing the economic success of female entrepreneurs. Policymakers, INGOs, and local government organizations should concentrate on creating specialized support programs that provide financial assistance, training, and resources customized for women-led companies in socio-economically disadvantaged regions. These findings promote extending support programs to additional areas, highlighting the importance of ongoing and customized help to ensure the endurance and development of women's entrepreneurship. This approach aids in economic empowerment and promotes broader socio-economic progress by assisting women entrepreneurs in overcoming specific obstacles and benefiting their communities.*

Keywords: *financial performance, government, INGOs, women entrepreneurs*

INTRODUCTION

Efforts to bolster the capabilities and impact of women entrepreneurs are increasing, with assistance from governments, businesses, and civil society organizations. Prominent international organizations, including UN Women, the International Labour Organization, the World Bank, and the EU, are actively engaged. Furthermore, private sector non-governmental organizations (NGOs) such as Bpeace, Turquoise Mountain, and CARE substantially support women entrepreneurs (CWWA, 2009; Vossenber, 2013). The Ministry of Commerce and Industries (MOCI), the Afghanistan Chamber of Commerce and Industries (ACCI), and the Afghan Women Business Federation (AWBF) work together in Afghanistan to support the private sector, which includes businesses run by women (Sabri, 2015b; Zeidan & Bahrami, 2011). The Ministry of Women's Affairs (MOWA) also assists women-owned enterprises. However, overlapping memberships and fees can create complications, resulting in increased business expenses for these enterprises.

The National Priority Programme on Women's Economic Empowerment (WEE-NPP) aims to enhance the economic capabilities of marginalized women by offering them technical and



financial support, employment training, and financial education. This initiative aligns with broader national objectives (MoF, 2016). The protracted conflict and Taliban dictatorship in Afghanistan have severely impacted women's rights, depriving them of education, healthcare, and career prospects. The Women's Economic Empowerment Rural Development Project (WEERDP) and the Afghanistan Reconstruction Trust Fund (ARTF) have introduced savings and lending societies to assist women in launching enterprises, thereby fostering economic growth and reducing poverty (DAI, 2022; Ditmar, 2021). However, the Taliban's return in August 2021 has dramatically diminished the presence of women-owned firms despite efforts to support them (Wafeq, 2022).

Prior research has recognized female entrepreneurs' contributions to Afghanistan's economic development; however, it has primarily concentrated on their overall difficulties. More empirical research needs to be conducted to investigate the precise influence of international non-governmental organizations (INGOs) and government aid on the financial success of women-owned enterprises, specifically in Kandahar. While studies acknowledge common challenges such as socio-cultural barriers and restricted financial access, they do not adequately examine the impact of specific assistance on important economic indicators such as profitability, return on investment, average yearly sales, and inventory turnover. This study seeks to address this deficiency by examining the efficacy of different aid programs and recommending essential legislative and programmatic modifications to bolster women's economic empowerment in Afghanistan.

This study examines the influence of international non-governmental organizations (INGOs) and government aid on key financial metrics, such as profitability, return on investment (ROI), average yearly sales, and inventory turnover, for women-owned businesses. The purpose is to evaluate the effectiveness of humanitarian programs to identify necessary changes to enhance the economic empowerment of women entrepreneurs. The results will offer valuable insights for funders, INGOs, and government agencies in establishing a conducive climate for expanding women-led firms. The study seeks to provide a thorough understanding of how external support enhances the economic success of women entrepreneurs by analyzing the creation and functioning of micro-businesses at the municipal and provincial levels. It will inform policies and programs promoting sustainable entrepreneurship among women in similar settings.

METHOD

The primary data for this study was gathered through questionnaires (Hailu, 2017; Istanbuli, 2015; J. et al., 2021; Nsengimana, 2017; Syedda, 2018). Meticulous preparation was necessary to guarantee the questionnaire's reliability as the sole data collection tool (Shafie, 2013). Questionnaires are commonly employed in social science research (Hay, 2016; Kothari, 2004). They were selected for this study due to their compatibility with literate participants and their ability to eliminate the need for in-person interviews (Bairagi & Munot, 2019).

The study utilized a non-probabilistic, purposive sampling technique as described by Nsengimana (2017). The decision on the sample size was influenced by various factors such as cost and time limitations, population variability, desired accuracy level, and the capacity to generalize the findings (Bairagi & Munot, 2019; Johnson & Christensen, 2014). According to the Afghanistan Women's Chamber of Commerce and Industry (AWCCI) report from 2020, there were 71 officially registered and 651 unofficially registered enterprises operated by women in Kandahar (AWCCI, 2020). By applying Yaman's (1967) formula and setting a significance level of 0.10, it was determined that 308 samples were deemed valid (Roscoe, 1975).

The study employed Ordinary Least Squares (OLS) regression analysis to investigate the correlation between four dependent variables—financial performance indicators—and one independent variable, namely government and INGO support programs. The researchers used multiple regression analysis to determine the main factors accounting for most of the variation in financial performance. The studies by Constantine (2012), Cohen et al. (2002), Daoud (2017), and Keith (2019) were referenced for this purpose. This approach is well-suited for examining

intricate real-world problems, enabling the examination of the interplay between various variables (Pallant, 2016).

Hypotheses development

Support programs and profitability of the businesses

Government and INGO support programs play a crucial role in improving the profitability of women-led enterprises. Resource-based Theory states that organizations need diverse resources to gain a competitive edge and increase profits (Farida & Setiawan, 2022a; Jamil et al., 2023). These support programs offer essential financial aid, education, guidance, and market access, which women-led firms often lack due to socio-economic barriers and gender inequalities (USAID, 2023; WBG, 2023). Institutional Theory suggests that external support helps organizations navigate regulations, reduce risks, improve efficiency, and boost profits (Chowdhury, 2021; Farida & Setiawan, 2022b). Research shows that targeted assistance enables organizations to innovate, expand, and enhance their market presence, leading to higher profitability (Banerjee et al., 2015; Madhani, 2010). Thus, government and INGO assistance significantly impact the profitability of women-led enterprises by providing necessary resources and institutional support to overcome local challenges and foster growth.

H1: Support programs significantly impact the average profitability volume of women-run businesses

Support programs and return on investment of the businesses

Government and International Non-Governmental Organization (INGO) assistance initiatives have the potential to significantly improve the Return on Investment (ROI) of enterprises led by women. This may be achieved by offering crucial resources and creating a supportive atmosphere for entrepreneurial activities. Regarding the Resource-Based View (RBV) paradigm, having exclusive resources such as financial aid, training, and mentorship improves competitive advantage and financial prosperity (Barney, 1991). Institutional Theory posits that formal institutions provide assistance that helps to alleviate market failures and minimize operational risks by creating a stable and favorable business environment (North, 1990). Empirical research has shown that providing focused assistance to women entrepreneurs effectively overcomes obstacles particular to gender, improves their business abilities, and offers opportunities for networking. This ultimately leads to better results and a higher return on investment (Kabeer, 2015; Little, 2016). These initiatives aim to empower women entrepreneurs and promote sustainable company growth, particularly in the face of socio-economic obstacles and gender imbalances (Langevang et al., 2012). Thus, theoretical frameworks and empirical data substantiate the premise that assistance programs greatly influence the return on investment (ROI) of firms managed by women.

H2: Support programs significantly impact women-run businesses' average return on investment

Support programs and sales of the businesses

Government and INGO assistance programs, offering resources like financial aid, training, and market access, can significantly enhance the yearly sales of enterprises, especially women-led firms. The Resource-Based View (RBV) and Institutional Theory suggest that such resources and support can provide a competitive advantage, improve efficiency, and create a favorable business climate, promoting sales growth (Barney, 1991; Scott, 1995). Empirical research supports that these programs, by enhancing capacities and reducing barriers, substantially impact company performance in less developed areas (Aghion & Howitt, 2008; Kabeer, 2015).

H3: Support programs significantly impact the average annual sales of women-run businesses

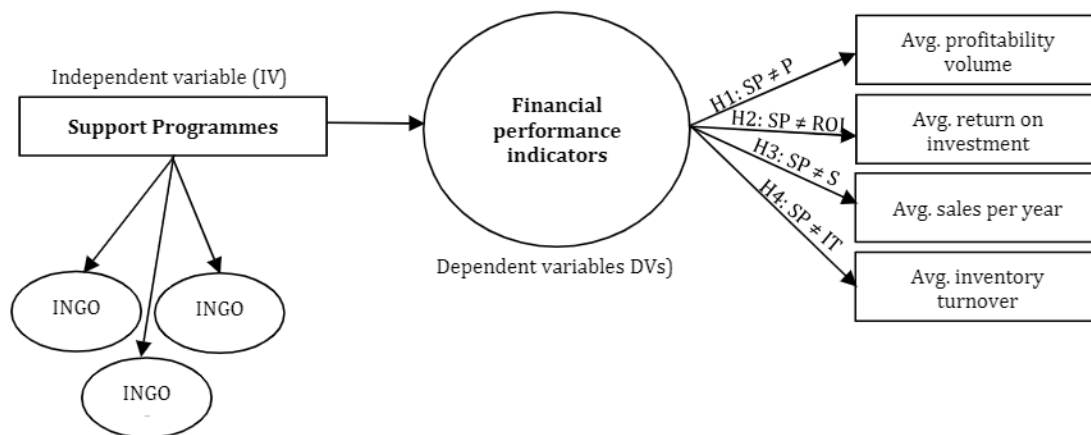
Support programs and inventory turnover of the businesses

Government and INGO support programs significantly enhance the profitability and efficiency of women-run businesses in challenging environments. These programs provide essential resources such as funding, training, and market access, which improve business practices and operational efficiency. According to resource-based Theory, access to valuable, rare, and inimitable resources leads to a sustained competitive advantage (Barney, 1991), while social capital theory posits that networks and relationships facilitated by these programs enhance business performance (Kamau & Kagiri, 2015). Empirical studies show that supported businesses exhibit higher inventory turnover and profitability (Kamau & Kagiri, 2015).

H4: Support programs significantly impact women-run businesses' average inventory turnover ratio

The conceptual framework in Figure 1 highlights the relationship between support programs (independent variable) and financial performance indicators (dependent variables) for women entrepreneurs. It suggests that interventions by INGOs, NGOs, and governmental bodies significantly impact metrics such as average profitability, return on investment, annual sales, and inventory turnover. The framework rigorously analyzes these relationships, incorporating contemporary insights from Brush et al. (2018) and Yousafzai et al. (2019) to underscore the importance of supportive policies and targeted interventions for women-led businesses in conflict-affected areas.

Figure 1. Research framework



Source: Developed by the author (2024)

RESULT AND DISCUSSION

Data normality and inter-reliability analysis

To ensure reliable estimates, Cronbach's alpha measures internal consistency, with values ranging from 0 to 1 (Tavakol & Dennick, 2011). A Cronbach's alpha of at least 0.6 is considered dependable (Zia & Azam, 2013), though recent studies prefer a minimum of 0.7. This study aims to ensure high reliability in the final questionnaire. The Cronbach's alpha value for support programs is 0.640, above the 0.6 thresholds but slightly below the contemporary standard of 0.7. The data shows no significant outliers, with Z-scores ranging from -3.761 to 1.166, all within the acceptable range of ±5.0 (Hair et al., 2014). Skewness values (-0.446, -0.309, -0.286, -0.900) and kurtosis values (-0.733, -0.793, -0.721, 0.915) are within acceptable limits, indicating the data's normality. Thus, the data for the support programs are reliable and exhibit satisfactory normality, which is suitable for further analysis.

Table 1. Data normality and inter-item reliability analysis

Variables	Cronbach's Alpha	Skewness		Kurtosis		Z-Score		Result
		Statistics	Std. Error	Statistics	Std. Error	Minimum	Maximum	
Support Programmes	.640							The data is reliable
SP1		-.446	.139	-.733	.277	-2.004	1.0365	
SP2		-.309	.139	-.793	.277	-1.845	1.146	
SP3		-.286	.139	-.721	.277	-1.904	1.166	
SP4		-.900	.139	.915	.277	-3.761	1.080	

Source: Processed data (2024)

Descriptive statistics

Table 2 shows that most respondents are married, with 100 in the 36-45 age range and 84 in the 26-35 range, indicating a significant influence from middle and upper-middle socio-economic groups. Married individuals are notably engaged in business to meet family obligations. However, the Chi-Square test ($\chi^2=10.791$, sig.=0.547) indicates no statistically significant relationship between age and marital status, suggesting age does not predict marital status.

Table 2. Marital status and age cross-tabulation

Marital status * Age Cross-tabulation								
			Age					Total
			18 - 25	26 - 35	36 - 45	46 - 55	Above 55	
Marital Status	Single	Count	5	13	30	6	1	55
		% within Marital Status	9.1%	23.6%	54.5%	10.9%	1.8%	100.0%
		% within Age	17.9%	12.4%	20.5%	25.0%	20.0%	17.9%
	Married	Count	23	84	100	16	3	226
		% within Marital Status	10.2%	37.2%	44.2%	7.1%	1.3%	100.0%
		% within Age	82.1%	80.0%	68.5%	66.7%	60.0%	73.4%
	Divorced	Count	0	7	13	1	1	22
		% within Marital Status	0.0%	31.8%	59.1%	4.5%	4.5%	100.0%
		% within Age	0.0%	6.7%	8.9%	4.2%	20.0%	7.1%
	Other	Count	0	1	3	1	0	5
		% within Marital Status	0.0%	20.0%	60.0%	20.0%	0.0%	100.0%
		% within Age	0.0%	1.0%	2.1%	4.2%	0.0%	1.6%
Total		Count	28	105	146	24	5	308
		% within Marital Status	9.1%	34.1%	47.4%	7.8%	1.6%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Equals 10.79, sig. = 0.547)

Source: Processed data (2024)

Table 3 shows a progressive increase in the average profitability of businesses owned by female entrepreneurs in Kandahar, Afghanistan, from \$873.33 in 2020 to \$1,343.58 in 2022. The median profitability also rose from \$830.70 in 2020 to \$1,278.00 in 2022. Total profitability followed this upward trend, increasing from \$268,984.30 in 2020 to \$413,822.00 in 2022. These descriptive statistics suggest an overall enhancement in the financial performance of these businesses, with the measures of central tendency indicating a positive trend. Furthermore, there has been an increase in the standard deviation, variance, and range of profitability values over this period.

Table 3. Descriptive statistics of profitability per year (in USD)

		Statistics		
		2020	2021	2022
N	Valid	308	308	308
	Missing	0	0	0
Mean		873.3256	1142.0412	1343.5779
Std. Error of Mean		22.57163	29.51675	34.72558
Median		830.7000	1086.3000	1278.0000
Mode		502.45a	657.05a	773.00a
Std. Deviation		396.13050	518.01681	609.43154
Variance		156919.375	268341.417	371406.805
Skewness		.205	.205	.205
Std. Error of Skewness		.139	.139	.139
Kurtosis		-.966	-.966	-.966
Std. Error of Kurtosis		.277	.277	.277
Range		1618.50	2116.50	2490.00
Minimum		202.15	264.35	311.00
Maximum		1820.65	2380.85	2801.00
Sum		268984.30	351748.70	413822.00

a. Multiple modes exist. The smallest value is shown

Source: Processed data (2024)

Table 4 depicts that the average Return on Investment (ROI) in 2020 was 53.0987%, which declined to 47.3413% in 2021 and then rose to 55.9046% in 2022. Indications point to the fact that the average return on investment for female entrepreneurs in Kandahar, Afghanistan, has been varying over time, with a marginal rise observed in 2022. The total ROI values in 2020 amounted to 16354.40%, which then declined to 14581.12% in 2021 and then rose to 17218.63% in 2022. Indications point to the fact that the overall return on investment for female entrepreneurs in Kandahar, Afghanistan, has been varying over time, with a marginal upturn in 2022.

Table 4. Descriptive statistics of Return on Investment (ROI) per year

		Statistics		
		2020	2021	2022
N	Valid	308	308	308
	Missing	0	0	0
Mean		53.0987	47.3413	55.9046
Std. Error of Mean		.43568	.33410	.43452
Median		58.4900	48.1350	59.1800
Mode		58.51	39.88a	62.09
Std. Deviation		7.64624	5.86345	7.62576
Variance		58.465	34.380	58.152
Skewness		-.724	-.269	-.672
Std. Error of Skewness		.139	.139	.139
Kurtosis		-.702	-.519	-.604
Std. Error of Kurtosis		.277	.277	.277
Range		33.42	28.99	27.63
Minimum		35.31	32.10	37.49
Maximum		68.73	61.09	65.12
Sum		16354.40	14581.12	17218.63

Source: Processed data (2024)

Table 5 illustrates a consistent upward trend in the average annual sales of businesses owned by Afghan women, starting from 2020 and continuing until 2022. The average yearly sales in 2020 amounted to \$1,611. The amount rose to \$1,915 in 2021 and climbed to \$2,335 in 2022. Indications point to a rising trend of Afghan women-owned businesses achieving notable success. The data indicates that businesses run by Afghan women constitute an expanding and vibrant segment of the economy. The upward trend in average yearly sales suggests that these

businesses are experiencing more profitability and long-term viability. This trend is advantageous for the overall Afghan economy since it indicates that women assume a progressively significant part in the country's economic progress.

Table 5. Descriptive statistics of average annual sales

		Statistics		
		2020	2021	2022
N	Valid	308	308	308
	Missing	0	0	0
Mean		1610.9797	1914.4977	2334.7532
Std. Error of Mean		39.53335	46.98167	57.29471
Median		1677.3900	1993.4200	2431.0000
Mode		2139.00	2542.00	3100.00
Std. Deviation		693.80753	824.52489	1005.51815
Variance		481368.884	679841.289	1011066.760
Skewness		-.186	-.186	-.186
Std. Error of Skewness		.139	.139	.139
Kurtosis		-.922	-.922	-.922
Std. Error of Kurtosis		.277	.277	.277
Range		2833.83	3367.74	4107.00
Minimum		286.35	340.30	415.00
Maximum		3120.18	3708.04	4522.00
Sum		496181.76	589665.28	719104.00

Source: Processed data (2024)

Table 6 shows a consistent increase in the inventory turnover ratio of Afghan women-owned businesses from 2020 to 2022, reflecting enhanced management and operational efficiency. This upward trend indicates effective stock management, with the inventory turnover ratios commonly ranging between 5.0 and 6.0. Consistent year-on-year growth and median, mean, and range values point to minimal variation in these ratios. The standard deviation and variance further support this stability, while skewness and kurtosis readings reveal a slight right skewness and a mildly leptokurtic distribution.

Table 6. Descriptive statistics of inventory turnover per year

		Statistics		
		2020	2021	2022
N	Valid	308	308	308
	Missing	0	0	0
Mean		5.2045	6.4026	7.4253
Std. Error of Mean		.08176	.10417	.08996
Median		5.0000	6.0000	8.0000
Mode		5.00	5.00	8.00
Std. Deviation		1.43492	1.82819	1.57885
Variance		2.059	3.342	2.493
Skewness		.815	.128	-.299
Std. Error of Skewness		.139	.139	.139
Kurtosis		.143	-.957	-.821
Std. Error of Kurtosis		.277	.277	.277
Range		6.00	7.00	6.00
Minimum		3.00	3.00	4.00
Maximum		9.00	10.00	10.00

Source: Processed data (2024)

Hypotheses testing

Hypothesis one

$$YP = \beta_0 + \beta_{1_{SP}} + \epsilon'_i \dots \dots \dots (1)$$

In equation one, the dependent variable (i.e., YP) represents profitability. β_0 is the intercept value, while $\beta_{1_{SP}}$ is the coefficient associated with the independent variable (i.e., support programs by INGOs and the Government).

Table 7. Result of hypothesis one testing

Hypothesized path	Unstandardized coefficient	t-value	p-value*	Model summary		ANOVA		Multicollinearity diagnostics		Pearson correlation
				R-Squared	Std. error of the estimates	F	Sig.	Tolerance	VIF	
H1	368.35	22.270	<.001	.618	314.22	495.96	<.001	1.00	1.00	.786

Source: Processed data (2024)

Table 7 presents a regression analysis investigating the significant correlation between aid programs provided by international non-governmental organizations (INGOs) and the government and the financial success of 308 female entrepreneurs in Kandahar, Afghanistan. The analysis demonstrates a substantial, favorable, resilient correlation between the independent and dependent variables. The correlation is statistically significant at the 95% confidence level, as indicated by a p-value of less than 0.001. The findings suggest that the likelihood of observing the reported outcomes under the null hypothesis is extremely low. Therefore, we may reject the null hypothesis that no significant association exists between support programs and profitability. The coefficient of determination (R-squared) is 0.618, suggesting that the assistance programs can account for around 61.8% of the profitability variation.

Moreover, the correlation coefficient (R) of 0.786 signifies a robust positive linear association between the variables. The coefficient of 368.35 and the t-value of 22.270 provide additional evidence for a positive association. The findings indicate that for every additional unit of assistance programs, profitability increases by 368.35 units, assuming all other factors remain constant. The model summary indicates an R-squared value of 0.618, confirming that about 61.8% of the variation in profitability can be explained by the assistance programs and other factors considered in the model. The F-value of 495.96, with a significance threshold of less than 0.001, validates the statistical significance of the whole model.

Hypothesis two

$$YRI = \beta_0 + \beta_{1_{SP}} + \epsilon'_i \dots \dots \dots (2)$$

In equation two, the dependent variable (i.e., YRI) represents the Return on Investment. β_0 is the intercept value, while $\beta_{1_{SP}}$ is the coefficient associated with the independent variable (i.e., support programs by INGOs and Government).

Table 8. Result of hypothesis two testing

Hypothesized path	Unstandardized coefficient	t-value	p-value*	Model summary		ANOVA		Multicollinearity diagnostics		Pearson correlation
				R-Squared	Std. error of the estimates	F	Sig.	Tolerance	VIF	
H2	2.041	7.562	<.001	.157	5.127	57.19	<.001	1.00	1.00	.397

Source: Processed data (2024)

Table 8 presents a regression analysis showing a significant positive correlation between Return on Investment (ROI) and support programs for government and international non-governmental organizations (INGOs). The p-value is less than 0.001, indicating strong evidence at a 95% confidence level, allowing us to reject the null hypothesis of no significant link. The R-squared value of 0.157 suggests that these programs explain approximately 15.7% of the variation in ROI. The correlation coefficient (R) of 0.397 signifies a positive linear association, and a coefficient of 2.041 with a t-value of 7.562 indicates that ROI increases by 2.041 units for each additional support unit. The F-value of 57.19 confirms the model's statistical significance, highlighting the positive impact of support programs on female entrepreneurs' ROI.

Hypothesis three

$$YS = \beta_0 + \beta_{1SP} + \epsilon'_i \dots \dots \dots (3)$$

In equation three, the dependent variable (i.e., YS) represents the average sales. β_0 is the intercept value, while β_{1SP} is the coefficient associated with the independent variable (i.e., support programs).

Table 9. Result of hypothesis three testing

Hypothesized path	Unstandardized coefficient	t-value	p-value*	Model summary		ANOVA		Multicollinearity diagnostics		Pearson correlation
				R-Squared	Std. error of the estimates	F	Sig.	Tolerance	VIF	
H3	609.197	22.1765	<.001	.616	521.88	491.75	<.001	1.00	1.00	.785

Source: Processed data (2024)

The findings of a regression analysis conducted to examine the relationship between average sales of women-owned businesses in Kandahar, Afghanistan, and government and international non-governmental organization support programs appear in Table 9. The results show a low p-value ($p < 0.001$) and a high correlation coefficient ($R = 0.785$) between the two variables, indicating a strong positive link. With an unstandardized regression coefficient of 609.197, every unit increase in assistance programs correlates with an average sale of 609.197 units. The t-value is 22.1765, much higher than the critical t-value of 1.96, suggesting that the relationship may be statistically significant. Since the p-value is less than 0.001, which indicates that there is minimal possibility of finding such a relationship by coincidence, we may reject the null hypothesis, which claims that there is no meaningful association between average sales and support programs. The model summary indicates that the R-squared value is 0.616, meaning that approximately 61.6% of the variance in average sales can be attributed to assistance programs. With a standard error

of 521.88, the estimations are reliable and not unduly sensitive to small changes in the data. The ANOVA analysis yields an F-value of 491.75, which suggests a significant difference ($p < 0.001$) from zero. This result supports the hypothesis that assistance programs considerably impact average sales.

Hypothesis four

$$YIT = \beta_0 + \beta_{1SP} + \epsilon'_i \dots \dots \dots (4)$$

In equation four, the dependent variable (i.e., YIT) represents the average inventory turnover. β_0 is the intercept value, while β_{1SP} is the coefficient associated with the independent variable (i.e., support programs).

Table 10. Result of hypothesis four testing

Hypothesized path	Unstandardized coefficient	t-value	p-value*	Model summary		ANOVA		Multicollinearity diagnostics		Pearson correlation
				R-Squared	Std. error of the estimates	F	Sig.	Tolerance	VIF	
H4	.753	17.725	<.001	.507	.80652	314.18	<.001	1.00	1.00	.712

Source: Processed data (2024)

Table 10 provides a regression analysis that examines the correlation between International Non-Governmental Organizations (INGOs) and government support programs and the average rate at which inventory is turned over by enterprises managed by women. The results demonstrate a strong and statistically significant association, where each additional unit of International Non-Governmental Organizations (INGOs) and government aid programs is linked to a 0.753 unit increase in average inventory turnover (unstandardized regression coefficient). The p-value is less than 0.001, and the t-value of 17.725 shows a statistically significant link, which allows us to reject the hypothesis that there is no considerable connection between these support programs and inventory turnover. The model summary indicates an R-squared value of 0.507, indicating that INGOs and government support programs can account for 50.7% of the variability in average inventory turnover. The predicted standard error of 0.80652 highlights the model's precision and dependability. In addition, the ANOVA analysis demonstrates a remarkably significant F-value of 314.184 ($p < 0.001$), further confirming the substantial influence of International Non-Governmental Organizations (INGOs) and government aid on the average turnover of inventory. The Pearson correlation value (R) of 0.712 indicates a robust positive linear association between INGOs, government support programs, and average inventory turnover. Compared to the R-squared value, a more significant correlation coefficient suggests the potential impact of additional factors.

Discussion

The results of our study highlight the substantial and beneficial influence of assistance programs provided by NGOs, INGOs, and the government on the financial performance of women-owned enterprises. These programs align with resource-based theory and institutional theory, which state that having access to a wide range of resources and receiving help from institutions are essential for gaining a competitive edge and attaining better financial results. The findings showed that these strategies significantly improve critical financial indicators, including profitability, return on investment (ROI), yearly sales, and inventory turnover. The findings

support previous research suggesting that providing specific support helps companies overcome local obstacles, innovate, and grow their market share, leading to improved financial performance (Farida & Setiawan, 2022b; Jamil et al., 2023).

The beneficial influence of assistance programs is apparent in the substantial correlations established between these programs and the financial performance measures examined. The results of our research indicate that the provision of external help leads to considerable improvements in profitability, return on investment (ROI), yearly sales, and inventory turnover. This aligns with theories and empirical data indicating that such assistance aids organizations in navigating regulatory obstacles, reducing risks, and improving operational effectiveness (Banerjee et al., 2015; Madhani, 2010). Furthermore, the study emphasizes the crucial need for continuous and customized assistance programs in fostering the long-term viability and expansion of businesses managed by women in socio-economically disadvantaged areas. Integrating financial aid with more extensive socio-economic changes is crucial for overcoming women entrepreneurs' obstacles and promoting sustainable economic empowerment (Adom et al., 2018; Ahmed-Ghosh, 2003).

The substantial correlations between these programs and the financial performance metrics examined demonstrate the beneficial influence of assistance programs. The results of this study indicate that the provision of external help leads to considerable improvements in profitability, return on investment (ROI), yearly sales, and inventory turnover. This aligns with theories and empirical data indicating that such assistance aids organizations in navigating regulatory obstacles, reducing risks, and improving operational effectiveness (Banerjee et al., 2015; Madhani, 2010). Furthermore, the study emphasizes the crucial need for continuous and customized assistance programs in fostering the long-term viability and expansion of businesses managed by women in socio-economically tricky areas. A crucial strategy for overcoming women entrepreneurs' obstacles and promoting long-term economic empowerment is combining a vital alignment with Resource-Based Theory and Institutional Theory that promotes sustainable economic empowerment.

CONCLUSION

This study examines the influence of International Non-Governmental Organizations (INGOs) and government aid on the financial success of female entrepreneurs. The research objective was to evaluate the impact of these support programs on profitability, return on investment (ROI), average yearly sales, and inventory turnover of 308 enterprises run by women. The results indicate that these aid programs substantially and favorably impact all quantified financial indicators, emphasizing their contribution to economic empowerment. The findings suggest that focused support programs can significantly improve the financial results of female entrepreneurs, thereby contributing to broader socio-economic progress. Policymakers and support organizations should prioritize establishing and enlarging such projects to tackle the unique obstacles women encounter in these locations effectively. Subsequent investigations should delve into the enduring effects of these programs and consider supplementary factors that could affect the correlation between external assistance and financial performance.

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REFERENCES

1. Adom, K., Asare-Yeboah, I. T., Quaye, D. M., & Ampomah, A. O. (2018). A critical assessment of work and family life of female entrepreneurs in Sub-Saharan Africa: Some fresh evidence from Ghana. *Journal of Small Business and Enterprise Development*, 25(3), 405–427. <https://doi.org/10.1108/JSBED-02-2017-0063>
2. Aghion, P., & Howitt, P. W. (2008). *The Economics of Growth*. The MIT Press. <https://mitpress.mit.edu/9780262012638/the-economics-of-growth/>
3. Ahmed-Ghosh, H. (2003). A history of women in Afghanistan: Lessons learnt for the future or yesterdays and tomorrow: Women in Afghanistan. *Journal of International Women's Studies*, 4(3), 1–14. <https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1577&context=jiws>
4. AWCCI, A. W. C. of C. and I. (2020). *Provincial Statistics of Afghan Women Entrepreneurship*.
5. Bairagi, N., & Munot, M. V. (2019). *Research Methodology: A Practical and Scientific Approach*. CRC Press: Taylor & Francis Group.
6. Banerjee, A., Esther Duflo, Rachel Glennerster, & Cynthia, K. (2015). The Miracle of Microfinance? Evidence from a Randomized Evaluation. *American Economic Journal: Applied Economics*, 7(1), 22–53.
7. Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
8. Brush, C., Greene, P., Balachandra, L., & Davis, A. (2018). The gender gap in venture capital- progress, problems, and perspectives. *Venture Capital*, 20(2), 115–136. <https://doi.org/10.1080/13691066.2017.1349266>
9. Chowdhury, D. (2021). *Institutional Theory*.
10. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2002). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (3rd edition).
11. Constantine, N. A. (2012). Regression Analysis and Causal Inference: Cause for Concern? *JUNE*, 44(2), 134–137.
12. CWWA, C. W. for W. in A. (2009). *Women's entrepreneurship and fair trade in Afghanistan*.
13. DAI. (2022). *DAI Projects for Afghanistan*. DAI Global LLC. <https://www.dai.com/our-work/the-projects>
14. Daoud, J. I. (2017). Multicollinearity and Regression Analysis. *Journal of Physics: Conference Series*, 949, 012009. <https://doi.org/10.1088/1742-6596/949/1/012009>
15. Ditmar, J. (2021). *Creating Female Entrepreneurs in Afghanistan*. The Borgen Project. <https://borgenproject.org/female-entrepreneurs-in-afghanistan/>
16. Farida, I., & Setiawan, D. (2022a). Business Strategies and Competitive Advantage: The Role of Performance and Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163. <https://doi.org/10.3390/joitmc8030163>
17. Farida, I., & Setiawan, D. (2022b). Business Strategies and Competitive Advantage: The Role of Performance and Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163. <https://doi.org/10.3390/joitmc8030163>
18. Hailu, A. (2017). *Challenges and prospects of women entrepreneurship in micro and small enterprises the case of Asella town*. Arsi University College of Business and Economics.
19. Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>

20. Hay, M. C. (2016). *Methods That Matter: Integrating Mixed Methods for More Effective Social Science Research*. The University of Chicago Press.
<https://doi.org/10.7208/chicago/9780226328836.001.0001>
21. Istanbuli, A. D. (2015). *The Role of Palestinian Women Entrepreneurs in Business Development*. University of Granada.
22. Jamil, S., Zaman, S. I., Kayikci, Y., & Khan, S. A. (2023). The Role of Green Recruitment on Organizational Sustainability Performance: A Study within the Context of Green Human Resource Management. *Sustainability*, 15(21), 15567.
<https://doi.org/10.3390/su152115567>
23. Johnson, R. B., & Christensen, L. (2014). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (5th editio). The SAGE Publications.
24. Jones, J. E. (2021). *Strategies of Women Small Business Owners to Overcome Entrepreneurship Barriers*. Walden University.
25. Kabeer, N. (2015). Empowerment, Citizenship and Gender Justice: A Contribution to Locally Grounded Theories of Change in Women's Lives. In *Gender Justice and Development: Local and Global* (1st ed., pp. 1-17). Routledge.
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781315723419-6/empowerment-citizenship-gender-justice-contribution-locally-grounded-theories-change-women-lives-naila-kabeer>
26. Kamau, L. W., & Kagiri, A. W. (2015). Influence of inventory management practices on organizational competitiveness: A case of Safaricom Kenya Ltd. *International Academic Journal of Procurement and Supply Chain Management*, 1(5), 72-98.
https://www.iajournals.org/articles/iajpscm_v1_i5_72_98.pdf
27. Keith, T. Z. (2019). *Multiple Regression and Beyond* (3rd edition). Taylor and Francis Group.
28. Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd edition). New Age International Publishers.
29. Langevang, T., Namatovu, R., & Dawa, S. (2012). Beyond necessity and opportunity entrepreneurship: motivations and aspirations of young entrepreneurs in Uganda. *International Development Planning Review*, 34(4), 439-460.
<https://doi.org/10.3828/idpr.2012.26>
30. Little, J. (2016). Gender and Entrepreneurship. In *Routledge International Handbook of Rural Studies* (1st ed., pp. 1-10). Routledge.
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781315753041-35/gender-entrepreneurship-jo-little>
31. Madhani, P. (2010). Resource Based View (RBV) of Competitive Advantage An Overview. In *Resource Based Theory: Concepts and Practices* (pp. 3-21). The Icfai University Press.
https://www.researchgate.net/profile/Dr-Pankaj-Madhani/publication/45072518_Resource_Based_View_RBV_of_Competitive_Advantage_An_Overview/links/02e7e532fb03bf063f000000/Resource-Based-View-RBV-of-Competitive-Advantage-An-Overview.pdf
32. MoF. (2016). Women's Economic Empowerment National Priority Programme. In *Ministry of Finance*. <http://policymof.gov.af/home/wp-content/uploads/2016/07/Women's-Economic-Empowerment-Program.pdf>
33. North, D. C. (1990). *Institutions, institutional change and economic performance* (1st ed.). Cambridge university press.
<https://books.google.com/books?hl=en&lr=&id=oFnWbTqgNPYC&oi=fnd&pg=PA10&dq=North,+D.+C.+<1990>.+Institutions,+institutional+change,+and+economic+performance>

- .+Cambridge+University+Press.&ots=s-ivN8FmOa&sig=1iDWHh-BoXnpTG1ZETpuTGTd9uQ
34. Nsengimana, S. (2017). *Challenges to Women Entrepreneurship in Kigali, Rwanda* (Issue September). Cape Peninsula University of Technology.
 35. Okafor, C., & Mordi, C. (2010). Women Entrepreneurship Development in Nigeria: the Effect of Environmental Factors. *BULETINUL Universitatii Petrol- Gaze Din Ploie~ti*, 62(4), 43–52.
 36. Pallant, J. (2016). *SPSS Survival Manual* (6th editio). McGraw Hill Education.
 37. Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* (2nd Editio). Holt, Rinehart and Winston.
 38. Sabri, N. (2015). From Invisiblity to Visibility: Female Entrepreneurship in Afghanistan [MA, University of Oregon]. In ProQuest LLC. <https://www.jstor.org/stable/41857625>
 39. Scott, W. Richard. (1995). *Institutions and organizations: Ideas, Interests, and Identities* (1st ed.). SAGE publications. <https://us.sagepub.com/en-us/nam/institutions-and-organizations/book237665>
 40. Shafie, M. Z. (2013). *Financing Preferences and Capital Structure Among Successful Malaysian SMEs*. University of Plymouth.
 41. Syedda, M. S. (2018). *Exploring the Strategies and Challenges to Empower Female Entrepreneurship Via Business Support and ICT in the UK - A Resource-based Theory Perspective*. Cardiff Metropolitan University.
 42. Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
 43. USAID. (2023). *Gender Equality and Women's Empowerment Policy*. https://usaid.gov/sites/default/files/2023-03/2023_Gender%20Policy_508.pdf
 44. Vossengberg, S. (2013). Women Entrepreneurship Promotion in Developing Countries: What explains the gender gap in entrepreneurship and how to close it? In *Academia.Edu* (2013/08 Women).
 45. Wafeq, M. (2022). *Afghan Women Entrepreneurs Battle to Retain Economic Freedom*. Just Security. <https://www.justsecurity.org/82788/afghan-women-entrepreneurs-battle-to-retain-economic-freedom/>
 46. WBG, W. B. G. (2023). *World Bank Group Gender Strategy 2024 – 2030: Accelerate Equality and Empowerment for All*. <https://www.worldbank.org/en/topic/gender/brief/gender-strategy-update-2024-30-accelerating-equality-and-empowerment-for-all>
 47. Yamane, T. (1967). *Statistics, an introductory analysis, Determining sample size*. University of Florida.
 48. Yousafzai, S., Fayolle, A., Saeed, S., Henry, C., & Lindgreen, A. (2019). The contextual embeddedness of women's entrepreneurship: towards a more informed research agenda. *Entrepreneurship & Regional Development*, 31(3–4), 167–177. <https://doi.org/10.1080/08985626.2018.1551786>
 49. Zeidan, S., & Bahrami, S. (2011). Women Entrepreneurship in GCC: a framework to Address Challenges and Promote Participation in a Regional Context. *International Journal of Business and Social Science*, 2(14), 100–107. http://www.ijbssnet.com/journals/Vol._2_No._14;_July_2011/12.pdf
 50. Zia, A., & Azam, K. M. (2013). Unorganized Retail Shopping Experience in India : An Empirical Investigation. *Pacific Business Review International*, 5(7), 7–16.