

# **THESES OF THE DOCTORAL (PhD) DISSERTATION**

## **THE ROLE OF SOCIAL ENTERPRISES IN DEVELOPING ECONOMIES, WITH CONSIDERATION OF MICROFINANCE INSTITUTIONS**

**Gafar Almhamad**

Supervisor:

DR. HABIL. VILMOS LAKATOS CSc

Associate Professor



**UNIVERSITY OF DEBRECEN**

**Doctoral School of Management and Business**

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# 1. INTRODUCTION OF THE TOPICS AND OBJECTIVES

## 1.1 Preface and Topic

The Sustainable Development Goals (SDGs) of the United Nations (SDGs 5 and 10, respectively) called for the use of a gender perspective fair treatment as part of sustainable development initiatives, while also emphasizing equality, reducing inequities, and avoiding prejudice. Consequently, a wide range of key players, such as governments, nonprofits, and academics, have a stake in encouraging the growth of entrepreneurial ecosystems (HERRINGTON AND KEW, 2017). In addition to being acknowledged as an accelerator for job creation and economic expansion, entrepreneurship additionally fosters innovation and skill development, which may provide nations with a significant edge over rivals (IQBAL, 2016). By emphasizing entrepreneurship as a catalyst for women's economic and social empowerment, it is also viewed as a sustainable development approach and a crucial component of the social context (HERRINGTON AND KEW, 2017). Women are still underrepresented in entrepreneurship despite a notable rise in their labour market participation (DELMAR AND HOLMQUIST, 2004). Women continue to face barriers that limit their ability to participate in society and be productive in many nations. Due to discriminatory laws and practices that limit their time and choices, they are unable to exercise their fundamental rights and freedoms and take use of any possibilities that are accessible to them (IQBAL, 2016).

Yet, in most emerging and industrialized nations, women's entrepreneurship has not grown as quickly as that of males. In order to encourage more women to engage in entrepreneurship, it is crucial to comprehend the obstacles that they may encounter in the future. In the 74 nations that are a member of the GEM platform, the most recent Global Women's Report (2018) reveals notable disparities in the gross Total Early-Age Entrepreneurial Activity (TEA) rates between men and women. This data shows that women had a TEA rate of 10.2%, which is over three-quarters that of males (CAPUTO ET AL., 2016). Consequently, the labour force participation rate of Arabic women fell to 20.9%, which is 3.5 times lower than that of males. This led to a reduction in the region's overall labour force rate to 49%, compared to the global average of 62% (CAPUTO ET AL., 2016). Depending on the nation, Arab women's workforce participation rates have raised the region's gross domestic product from 20% to 40% (MOMANI, 2017). Like other Arab nations, Syria has attempted to implement extensive changes to support and encourage women's initiatives, eliminate any barriers they may encounter, and seek to assist, fund, and encourage them—regardless of how small a proportion such reforms may be. The creation of several national organizations in support of it served as an evidence.

One tactic and method for empowering women in Syria on the social and economic fronts is entrepreneurship. The aforementioned was incorporated into the 2019 sustainable development plan for Syria, which placed a strong emphasis on the fifth aim of achieving gender equality and empowerment for all women by 2030 (GENERAL COMMISSION FOR FAMILY AFFAIRS AND HOUSING, 2020).

Women compose 20% of the working force in Syria and contribute between 12 and 13% of the country's economic activity; this is indicative of the country's progress as women are contributing to the workforce. The CENTRAL BUREAU OF STATISTICS (2019) reported that the proportion differed between economic sectors, with the commercial and service sectors experiencing considerable increases of 31 and 30 percent, respectively, while agriculture remained in third position with just 27 percent. Due to the nature of rural women, their characteristics, and their association with housewifery, women's employment opportunities are restricted in comparison to men's, particularly in the Arab world and particularly in rural regions.

Hence, women's economic empowerment is deemed to be greatly enhanced by modest enterprises, and this presents a fitting avenue for women to venture into the realm of entrepreneurship that was formerly exclusive to males (GENERAL FEDERATION OF TRADE UNIONS, 2003). Since any woman can start a project from her home without needing a large startup budget or a physical location, small projects offer an appropriate and proportionate environment that allows women to participate in the economy and effectively contribute to the development of the nation, all while maintaining their roles as housewives and family caregivers. The efficiency of those humble endeavors has been shown in the area of female entrepreneurship (DE BRUIN ET AL. 2007; PARDO-DEL-VAL, M. 2010).

Women's employment possibilities have been decaying and restricted upon comparing to men. Therefore, a new door should be open for them, perhaps entrepreneurship due to its flexible, accessibility and realistic results over time. The share of women who start their own businesses in Syria is still regarded as small because the majority of women's economic contributions are generated as employees in the private or public sectors. This demonstrates that women are not as financially independent as men are, and they are not as competitive in the male-dominated business market.

The general research problem is that women play a relatively small role in improving their income, obtaining productive resources, and financing services because they are not into pursuing entrepreneurship, have low educational attainment, and lack practical experience in addition to societal norms that restrict their employment. As a result, they are not taking advantage of their potential which would actively contribute to economic growth. In addition to their traditional role as housewives, women's struggles have increased recently, this is because of the local labour force's decline due to emigration and the high rate of male participation in the armed forces, as well as general economic instability pressures. These factors have all contribute to an increase in the contribution of women and men to jointly shoulder the family's financial responsibilities. For the family to survive, they had to work, earn, or establish other means of revenue.

Alongside Social Entrepreneurship's broader framework, microfinance has an effective role in promoting women entrepreneurship since embracing a genuine entrepreneurial initiative for females has always been a top priority for microfinance institutions stemming from their ability of fostering financial inclusion.

However, structural and societal challenges such as the lack of business knowledge, gender-based discriminations and family responsibilities- harm women from discovering their entrepreneurial potential. The research is addressing another important theme in microfinance, which can be seen among the disparity happening between the aimed purpose behind the loans provided by those institutions which is mainly focusing on entrepreneurship empowerment and social impact boosting, and their current form of usage which is clearly leaning more towards consumption. Nevertheless, loans usage patterns might highly be influenced by demographic elements such as marital status and education levels which can take a huge role. Microfinance's main strategy has always been to support social entrepreneurship and especially when it comes to women entrepreneurship, The data suggests that several elements such as employment, education level, income and marital status have a high impact on the utilization of the loan whether it will be entrepreneurial oriented or more towards consumption

The aim of this study is to navigate these influences, and suggest actionable and doable strategies aligning entrepreneurship objectives with their offered microfinance services for women.

## **1.2 Research Objectives**

There is a set of obstacles and challenges which limit Syrian women entrepreneurs from starting, developing their businesses and tie their abilities to succeed. These obstacles include education limitations, funding restricts, social assumptions all leading to competition difficulties versus men.

Traditional roles of women have been shifted by this issue, urging them into the business world not for the sake of opportunity, rather necessity in many cases.

Microfinance represents a creative tool to boost women entrepreneurship and give them opportunities to seek their own ventures and gain their financial freedom, but this can happen when those microfinance strategies are well designed and tailored according to their needs, match their qualifications, and meet their expectations.

Unfortunately, many microfinance initiatives are being misused, instead of leveraging those funds to start a small business, it is simply used in consumption, creating no added value to women or ideally short-term value represented in affording day to day needs in terms of nutrition, health and education.

Providing insights about Syrian women entrepreneur's business navigation supported by microfinance loans, discovering their usage strategies and finding out tailored entrepreneurship plans is the main aim of this study.

The primary objectives of this research are:

1. To explore microfinance general trends in Syria clearing differences among men and women, in addition to determining sectors in which women are engaged in added-value entrepreneurship.

2. To examine the influence of structural, societal, and demographic factors such as gender discrimination, marital status, educational level, lack of business knowledge and family responsibilities on the likelihood of loans being used.
3. To investigate whether offered microfinance products are being effectively promoting entrepreneurship among women and if social, demographic, and structural factors influence this promotion in order to assess the development and growth metrics for Syrian women-led businesses.
4. To explore the correlation between each social and demographic factor and the loan's amount and purpose.
5. To shape potential strategies or interventions which can be used by microfinance institutions to eliminate entrepreneurship barriers and boost women entrepreneurial loans taking into consideration the applicants' socio-demographic background and addressing their different needs to evaluate the prospects, difficulties, strengths, and weaknesses of these undertakings.

The research seeks to answer the following key questions:

1. What is the gender trend growth of microfinance in Syria and are microfinance products well adapted to the main crisis effects such as inflation?
2. Among several demographic groups, what is the most common usage of microfinance loans (consumption vs. entrepreneurship) and would gender, family or social responsibilities have an influence?
3. Would women's ability of leveraging microfinance for entrepreneurial purposes be affected by some social variables such as gender discrimination, wage inequality, societal norms, or family obligations?
4. To which extent does each social and demographic factor correlate with the loan's amount and purpose considering identified barriers such as the lack of education?
5. What impact does specific demographic or societal profiles (example: married women / high education) have on their loan's way of usage, and would this indicate any kind of motivation or limitation?
6. Which strategies or measures could MFIs adapt to identify, address barriers and better foster women entrepreneurship, tailoring those measures based on societal and demographic aspects?
7. What motivate women to participate in entrepreneurship and which industries appeal most to women seeking leadership positions in?
8. What barriers do women encounter in the spheres of business and leadership, and in comparison, to men, how competitive are the business ventures of women?

### 1.3 Hypothesis

Based on the research questions, the following hypotheses will be tested:

**H1:** Inflation is hindering Microfinance development in Syria.

**H2:** Gender differences have an influence on microfinance products in terms of amounts and number of issued loans.

**H2.a** The number of loans offered to women is lower compared to men on average.

**H2.b** Loan amounts issued to women are less compared to men on average.

**H3:** Women tend to apply more for non-income generating loans compared to men who tend to apply for income generating loans.

**H4:** Women's social and demographic variables has an effect on the loan's usage and loan's amount

**H4.a** Marital status has an effect of the loan's purpose/amount

**H4.b** Education level influences loan's purpose/amount

**H5:** Societal norms and cultural expectations hinder the pursuing, growth and visibility of women-led businesses

**H6:** Novel microfinance products are needed to shift Microfinance loan's usage from consumption to usage.

## 2. MATERIALS AND METHODS

### 2.1 Regression Models

#### 2.1.1 Methods

R version 4.2.3 was used to execute advanced and mixed data preparation, cleaning and cleansing processes. Data availability was limited to the period between the beginning of 2020 till September 2023 due to moving to new systems at the bank and the need to capture as much variables as possible, therefore this period was the only one which had complete data and high number of variables provided.

The following factors were considered by the analysis:

- **CPI (Consumer Price Index) and Hyperinflation states:**

Complex conflict, civil war, social issues and natural disasters are resulted in Syria's poor economic situation (SCPR, 2022, SCPR, 2023). A significant jump in inflation was the outcome. The Central Bureau of Statistics calculated CPI was available until December 2020 (basis = 2010). SCPR has recalculated the monthly CPI and is available from January 2022 until April 2023 with 2021 as a basis. Adjusting inflation throughout the entire sample period was done by using the (FAO, 2024) Consumer Price Indices (General Indices, Consumer Prices, 2015 = 100).

Uncertainty related to the calculations might be introduced due to observations of extreme inflation intervals/periods states.

CPI was used to adjust loan amounts and Nominal wages throughout the following formula:

$$loan\ amount_{real} = \frac{loan\ amount_{nominal}}{CPI} * 100$$

- **The effect of Exchange rate:**

World Bank's non-qualified wage inflation and unofficial exchange rate (year to year changes in exchange rates and wages) were used to determine the exchange rate effect (WORLD BANK, 2024).

- **Loan's unique Consideration:**

Two main types of loans were distinguished among the dataset based on income generating.

(Income Generating Loans / Not-Income Generating Loans), these two categories refer to specific purposes where these loans were granted based one.

The final number of observations after elimination was 42,079, further year-based restriction would be further explained in the analysis. Table 1. describing in detail the given variables.

**Table 1. The variables used in the model**

<b>Variable</b>	<b>Note</b>
<b>Dependent variable</b>	
<b>natural logarithm of the loan amount in real terms</b>	The loan amount issued in Syrian pounds, adjusted for inflation based on the monthly CPI at the time of loan issuance.
<b>Explanatory variables</b>	
<b>Gender</b>	Levels: male (reference category) or female.
<b>Age</b>	Age of the applicant in years, restricted to be greater than or equal to 18 years old.
<b>Education level*</b>	Levels: illiterate/primary school (reference category), high school, preparatory school, vocational school, university /postgraduate.
<b>Marital status</b>	Levels: single (reference category), married, divorced, and widow.
<b>Log real monthly income*</b>	Monthly income in Syrian pound, adjusted by monthly CPI (basis = 2015) by FAO (2024) for inflation according to the loan issue date.
<b>Loan purpose</b>	The purpose for which the loan was intended to be used. The loans were mostly differentiated as personal (not income-generating) and business-oriented (income-generating) loans.
<b>Duration of repayment</b>	A numerical variable that indicates the length of time, in months, for repaying the loan.
<b>Interest rates</b>	Interest rates of the issued loan
<b>Employment*</b>	For businesses, the number of employees is taken into account. In the case of employee loans, employment is always considered as zero. In 2023, employment was excluded from the calculation due to a high number of missing data.
<b>Company age or work contract duration*</b>	This variable indicates either the start of the business for which the loan was applied or the start of the applicant's working contract in the case of personal loans.
<b>Region-based on primary address</b>	The geographical location of the loan applicants, with the reference region of Damascus.
<b>Exchange rate inflation (unofficial)</b>	Yearly log differences calculated as $\log(x_t) - \log(x_{t-12})$ . Estimate by World Bank (2024) for the unofficial exchange rate by the WorldBank matched by year and month.
<b>Non-qualified labor wage inflation</b>	Yearly log differences calculated as $\log(x_t) - \log(x_{t-12})$ . Estimate by World Bank (2024) for the wage of the non-qualified labor matched by year and month.

*Note: Missing data were imputed.*

*Source: Own collection (2024)*

### 2.1.2 *Missing Data Imputation*

MissForest a Non-parametric missing value imputation method of Stekhoven and Bühlmann (2011), was implemented to preserve the sample size and to improve the results of the estimation. This method is imputed iteratively based on a random forest which is adapting to mixed type and complex data sets in which it doesn't make any parametric assumptions. Non-linear relations and complex interactions can be handled by 'missForest' as proved in simulations further, it is available freely in R package 'missForest' (STEKHOVEN, 2013). Further and additional technical details are available in Stekhoven and Bühlmann (2011). 'Tidyverse' package in R was exclusively used in preparation, data cleaning and cleansing (WICKHAM ET AL., 2019).

### 2.1.3 *Model*

Ordinary Least Squares (OLS) linear regression method was estimated in addition to cluster robust standard errors, matrix format is written below:

$$Y = X\beta + \varepsilon$$

$Y$  is an  $(n \times 1)$  column vector,  $X$  is an  $(n \times k)$  matrix of explanatory variables, and  $k$  is the number of variables on the right-hand side. The matrix  $\beta$  contains the estimated parameters  $(k \times 1)$ , and  $\varepsilon$  is an  $(n \times 1)$  vector of errors. Details can be found in Wooldridge (2010). Clustered robust standard errors were calculated in all cases, where the economic purposes of the loans were used as the cluster units. We assumed that similar purposes (agriculture or manufacturing) were affected by similar loan restrictions and social and economic developments. Cluster robust standard errors allowed for any form of correlation within clusters. The standard "HC1" form was calculated (WHITE, 1980), which resulted in clusters = loan purpose, `se_type = "stata"` for the `lm_robust()` function from the estimator package (BLAIR et al., 2024). To improve estimation results and preserve the sample size, we used the non-parametric missing value imputation method of Stekhoven & Bühlmann (2011), called 'missForest'. This iterative imputation method is based on a random forest suitable for mixed-type datasets and makes no parametric assumptions. The method can handle complex interactions and non-linear relations, as simulations show. It is freely available in the R package 'missForest' (STEKHOVEN, 2013). All technical details are available in Stekhoven & Bühlmann (2011). Data cleaning and preparation were performed using 'Tidyverse' (WICKHAM ET AL., 2019).

## 2.2 Interviews and Survey

### 2.2.1 Sampling and Participant Selection

A mixed-methods-design (using interviews and a questionnaire) was employed in this study, qualitative and descriptive research approaches were combined investigating the factors which affect women entrepreneurs in Syria. Capturing their motivation, own experiences and challenges were the goals of the qualitative approach, meanwhile facilitating a wider understanding of the social and economic contexts in which women entrepreneurs would operate was facilitated by the descriptive approach. Chosen participants were partially or fully engaged in entrepreneurship activities, that was ensured using the purposive method in the selection process. Intentionally allowing the researcher to choose and select individuals who would participate and are most likely to provide relevancy and insightfulness to the research is the main key point of the purposive sampling approach (ARY ET AL., 2010).

- **Interviews:**

Latakian Chamber of Commerce and Industry was the source of the participants for the interviews, the number of registered female entrepreneurs was 374 out of a total 51,828 registered where we can notice that the vast majority was men, another example from a Syrian commercial organization where women representation is quite rare. Due to personal matters, only 63 have agreed to participate in this research, therefore the sample size was already determined based on the theoretical saturation, where additional interviews won't emerge new insights or themes after the point of the selection (DEERING AND WILLIAMS, 2024). Even though many registered female entrepreneurs declined to participate, the sample size was able to capture relevantly to the range of experiences the research's goals, especially when focusing on the in-depth interviews (Table 2 and 3).

**Table 2. Classifying the female entrepreneurs participating in the research according to the type of the business activity\***

Code	Number of Participants	Business Activity
A <sub>1</sub>	14	Trading clothes and footwear
A <sub>2</sub>	18	Educational Institutions
A <sub>3</sub>	9	Cosmetic service activities (hairdresser and skin care)
A <sub>4</sub>	14	Food industries (confectionery processing)
A <sub>5</sub>	2	Powder and cosmetic industries
A <sub>6</sub>	6	Engineering and legal advisory institutions

Source: own calculation, 2024

**Table 3. Degrees of obtaining inheritance by women in the study sample**

Inheritance	Number	Percentage
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Completely inherited	9	15%
Partially inherited	18	25%
Did not inherit	24	40%
Forced to give up their inheritance shares	12	20%

Source: own calculation, 2024

- **Questionnaire:**

The Questionnaire was designed to explore the internal and external factors affecting women’s access to microfinance and their entrepreneurial activities in Syria. It consisted of structured questions aimed at capturing both quantitative and qualitative data. A Likert scale format was used for most questions to allow respondents to express the degree of agreement or disagreement with specific statements, ensuring consistency and comparability across responses (LIKERT, 1932).

The target population for the questionnaire comprised 110 women who have engaged with AlWatanyiah microfinance bank or expressed interest in entrepreneurial activities with them (chosen to balance feasibility and diversity while capturing sufficient insights for meaningful analysis). A purposive sampling method was employed to ensure that participants were individuals with relevant experiences, as recommended for exploratory studies in developing economies (ETIKAN ET AL., 2016).

### 2.2.2 Data Collection

In-depth, semi structured interviews was used in this study as a primary methods of data collection.

- Interviews: In-person semi-structured interviews were conducted mostly in the business location of the participants or their residences to ensure fostering a more comfortable environment to discuss openly. Allowing flexibility is the main benefit of this method, where the researcher can discuss and probe deeper into the research’s areas of interest while keeping focus on the previously determined group of topics. Between 45-60 mins each interview lasted. To ensure data accuracy, interviews were recorded (with all participants acceptance) and was transcribed verbatim.
- Survey: was conducted using online methods, ensuring accessibility for participants with varying levels of technological literacy. Respondents were assured of anonymity to encourage honest and uninhibited responses, a practice widely advocated in social research (DILLMAN ET AL., 2014).

### 2.2.3 Analysis

The thematic analysis method was applied to analyze the qualitative data gathered from the interviews (BRAUN AND CLARKE, 2006).

### **3. MAIN FINDINGS OF THE DISSERTATION**

#### **3.1 Socio-demographic characteristics of the sample**

The overall amount of loans has increased compared to 2019 by 6.7 times in 2020, and by 3.5 times further compared to 2021. In terms of loans amount, the year 2022 was 1.19 times higher, and 0.73 times higher in 2023.

In a similar trend, looking at the real loan's amount which has also increased by 2.8 times in 2020 in comparison to 2019, another increase happened in 2021 by 2.07.

Surprisingly, starting from 2022 onwards, we can notice a decrease in the total real loan's amount where in 2022 it was higher by only 0.84 times and 0.58 times higher in 2023.

A significant inflationary effect is illustrated while comparing between 2023 and 2019. The 2023 loan's amount in nominal terms was higher by 20 times compared to 2019 but comparing to real terms it was only 2.9 times higher. However, comparing 2023 with 2020 has yielded respectively 3.08 and 1.00 only.

Generally, more male's presence (61-78%) was forming the sample compared to female's (22-39%) on yearly basis.

Education wise, the most frequent categories of the beneficiaries/borrowers were high school and elementary school (16-49% and 20-40%). Between 2019 and 2023 only (9.8 – 22%) of the sample were with postgraduate degree or a university in terms of education. It can be noticed that Elementary & Illiterate showed a huge share percentage in 202 with (49%) maintaining it over 2021 and 2022, afterwards it showed a sharp decrease to reach (16%) only.

The married respondents were forming (57-70%) of the sample with (26-40%) for singles, meanwhile 42 years old was the average age of the sample.

Damascus, Latakia and Tartous were the focus cities with the majority of the respondents, it is worth to mention that those branches were opening on different time zones, for example Damascus was the first to open followed by Latakia and then they were expanding among key Syrian cities, therefore we can see the high number of loans given in Damascus which is the capital and then Latakia.

In terms of loan's types, a categorization has been implemented to differentiate between taken loans which are used to generate income and taken loans which is used for consumption purposes. Income generating (IG) and Non-Income Generating (NIG) represent the two categories, and all loan's types were identified based on this.

Profession or Crafts (IG) in 2019 were the most frequent loan's type with (58%) share compared to the rest of the types in the sample followed by national type (IG) with (48%). However, Personal loans (NIG) has considerably gained more popularity since 2020 with (50-60%) increase in their share. Equal dividends of shares related to the remaining categories among other applicants, except for National loans (IG) which had a slightly higher share with (14-17%) which has gained its popularity due to their quick application

process and their immediate usage possibility especially for consumption purposes, shifting them to be a popular option comparing to all other types.

In terms of Agriculture loans (IG), it had a low share in 2020 with (1.6%) raising up almost 4 times to (7.6%) in 2021, with a decay again to (5.4%) in 2022 after that it showed a better increase reaching the highest peak (12%).

Regarding Educational/Health/Social loans (NIG), it started with a fairly good share percentage of (5.9%) in 2020 maintaining this share over 2021 with (5.2%) followed up with a sharp decay to (<0.1%) for 2022 and 2023 (refer to Table 4 and 5).

**Table 4. Socio-demographics characteristics of the sample**

	<b>2020</b> <b>N = 3,451</b>	<b>2021</b> <b>N = 16,473</b>	<b>2022</b> <b>N = 15,006</b>	<b>2023</b> <b>N = 6,366</b>
<b>Monthly income (thousand SYP)</b>	393.73 (1,379.64)	287.99 (744.84)	425.38 (1,412.66)	662.26 (1,013.09)
Missing	493	1,079	748	197
<b>Real monthly income (thousand SYP)</b>	85.51 (314.47)	33.58 (86.71)	35.09 (112.84)	43.56 (66.52)
<b>Loan amount (thousand SYP)</b>	2,017.46 (1,504.18)	1,498.50 (1,421.18)	1,956.98 (2,025.69)	3,378.94 (2,959.12)
<b>Real loan amount (thousand SYP)</b>	405.78 (287.54)	175.60 (167.53)	162.72 (169.19)	221.69 (190.70)
<b>Gender</b>				
Male	2,689 (78%)	10,049 (61%)	9,171 (61%)	4,062 (64%)
Female	762 (22%)	6,424 (39%)	5,835 (39%)	2,304 (36%)
<b>Age</b>	42.98 (9.72)	43.09 (9.28)	42.34 (9.40)	40.42 (9.82)
<b>Educational level</b>				
Elementary & Illiterate	1,701 (49%)	7,951 (48%)	5,673 (38%)	946 (16%)
High School	750 (22%)	3,281 (20%)	3,751 (25%)	2,394 (40%)
Intermediate/Vocational	213 (6.2%)	1,494 (9.1%)	1,512 (10%)	585 (9.7%)
Preparatory school	449 (13%)	1,876 (11%)	1,736 (12%)	732 (12%)
University & Postgraduate	338 (9.8%)	1,871 (11%)	2,240 (15%)	1,351 (22%)
Missing	0	0	94	358
<b>Marital status</b>				
Single	1,390 (40%)	6,103 (37%)	4,832 (32%)	1,673 (26%)
Divorced	32 (0.9%)	186 (1.1%)	180 (1.2%)	130 (2.0%)
Married	1,967 (57%)	9,876 (60%)	9,669 (64%)	4,430 (70%)
Widow	62 (1.8%)	305 (1.9%)	317 (2.1%)	119 (1.9%)
Missing	0	3	8	14
<b>Number of employees</b>	1.49 (1.49)	0.92 (0.93)	0.95 (1.01)	1.19 (1.04)
Missing	102	480	1,453	3,709
<b>Region</b>				
Damascus	409 (12%)	2,214 (13%)	1,813 (12%)	468 (7.4%)
Aleppo	287 (8.3%)	1,447 (8.8%)	1,158 (7.7%)	459 (7.2%)
Damascus Countryside	3 (<0.1%)	38 (0.2%)	143 (1.0%)	525 (8.2%)
Hama	3 (<0.1%)	677 (4.1%)	959 (6.4%)	375 (5.9%)
Homs	0 (0%)	907 (5.5%)	804 (5.4%)	449 (7.1%)
Latakia	1,532 (44%)	5,247 (32%)	4,679 (31%)	1,505 (24%)

Suwayda	305 (8.8%)	2,147 (13%)	1,523 (10%)	368 (5.8%)
Tartous	912 (26%)	3,796 (23%)	3,927 (26%)	2,217 (35%)
<b>Loan Type</b>				
Personal loans (NIN)	41 (1.2%)	9,871 (60%)	9,184 (61%)	3,159 (50%)
Agricultural loans (IG)	55 (1.6%)	1,251 (7.6%)	805 (5.4%)	733 (12%)
Profession/Crafts type loans (IG)	1,127 (33%)	1,524 (9.3%)	1,608 (11%)	905 (14%)
National type loans (IG)	1,619 (47%)	2,577 (16%)	2,095 (14%)	1,096 (17%)
Special (Business) loan (IG)	405 (12%)	393 (2.4%)	1,310 (8.7%)	468 (7.4%)
Educational/Health/Social loans (NIN)	204 (5.9%)	857 (5.2%)	4 (<0.1%)	5 (<0.1%)

*Note: Descriptive statistics for the original, non-imputed dataset. Mean and standard deviation for continuous variables. IG = Income-generating, NIG = Not-income-generating.*

*Source: Own calculation (2024)*

**Table 5. Imputation errors for missForest**

	2020	2021	2022	2023
<b>NRMSE</b>	0.230	0.223	0.432	0.222
<b>PFC</b>	0.000	0.046	0.122	0.191

*Seed was set to "123".*

*Source: Own calculation (2024)*

Taking a deeper look into Socio-demographic characteristics of the sample but this time based on gender and with a yearly view we can notice that in terms of the share of applicants with higher education, women have always been showing higher ratios (12,34% - 18,07% - 30,93% - 32,54%) compared to men with and upward trend among the years 2020-2021-2022

Showing that in all cases and among all years, women who applied for loans had higher education compared to men who applied at the same periods, sometimes the ratio was even double. This shed a light on the fact that if this education can be combined with income generating ideas, women might have higher potential in the business life.

In terms of application shares according to NIG loans, women's ratio was always significantly higher than men, meaning that the majority of the loans provided to women are being used in consumption and false income generating where it is not sustainable and it won't let women to reach any financial freedom or having the ability to build a financial stream on the future, rather putting more pressure on their shoulders regarding the payments in order to close those loans on monthly basis. On the other hand, when looking at the female's ration in the application shares according to IG income generating loans, we notice that it is always significantly lower compared to men, 2020 was the only year where we can see a small gap between female's ratio 83,20% compared to men 95,65, meanwhile all other years show a significant higher gap showcasing that all loans applied by male's are being used in income generating, which would help them

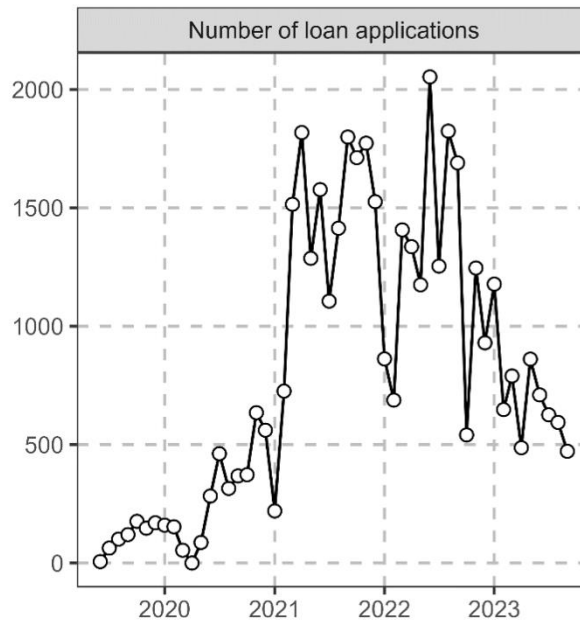
expand their work, networks, cover back their loan's monthly payments and have profits in return (refer to Table 6).

**Table 6. Socio-demographics characteristics of the sample by year and gender**

2020		2021		2022		2023	
Male, N = 2,689	Female, N = 762	Male, N = 10,049	Female, N = 6,424	Male, N = 9,171	Female, N = 5,835	Male, N = 4,062	Female, N = 2,304
<b>Average monthly income ratio in real terms</b>							
0,983		0,452		0,503		0,652	
<b>Average loan ratio in real terms</b>							
0,762		0,545		0,556		0,676	
<b>Gender ratio</b>							
0,283		0,639		0,636		0,567	
<b>Age ratio</b>							
1,033		0,995		0,964		0,959	
<b>Share of applicants with higher education</b>							
9,07%	12,34%	9,03%	18,07%	10,99%	30,93%	16,63%	32,54%
<b>Share of single applicants</b>							
39,83%	41,86%	36,24%	38,34%	30,22%	35,36%	25,69%	27,48%
<b>Average number of employees</b>							
1,530	1,340	1,000	0,790	1,030	0,830	1,200	1,160
<b>Application shares according to not-income-generating (upper) and income generating loans (lower)</b>							
4,35%	16,80%	54,59%	81,60%	49,09%	80,31%	39,44%	67,80%
95,65%	83,20%	45,41%	18,40%	50,91%	19,69%	60,56%	32,20%

Source: Own calculation (2024)

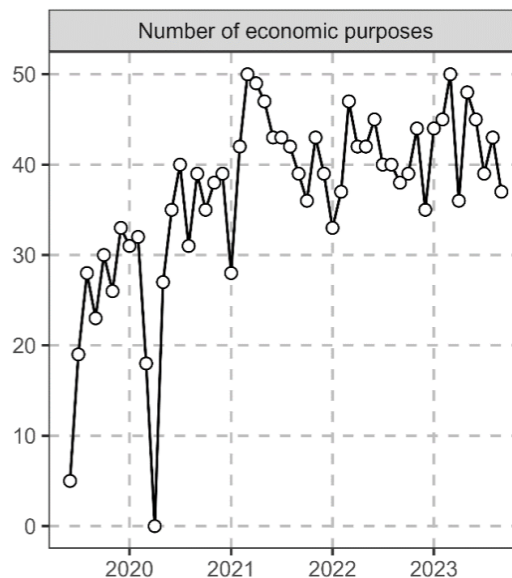
The number of loans has shown a significant increase starting from 2019, from the institution's perspective where the number of loans remained under 500 between late 2019 and mid 2020 where a jump over 500 was shown followed by a decay by beginning of 2021 moving up significantly to reach more than 1500 issued loans for the first time, and reaching more than 2000 loans in June 2022, from there a significant decrease happened from the 2000 peak decaying to 500 loans again by the end of the studied time period September 2023 (Figure 1).



**Figure 1. The number of loan applications applied for**

*Source: Own calculation (2024)*

The number of economic purposes has shown a jump towards 23-43 on yearly basis average. Starting from under 10 loan's purposes moving up to more than 30 only in 2020, with fluctuation and reformation where it effected as a decrease later in the beginning of 2020 to be followed by a stable increase from the end of 2021 until end of 2023 reaching 50 as a peak in two occasions. Several reasons have attributed to this such as the economic improvement done by certain Syrian institutions which made significant financial stability leading to rebuild the broader economy especially after 2019, favorable and certain credit conditions have been implemented and expanded to meet the public needs for credit (*Figure 2*).

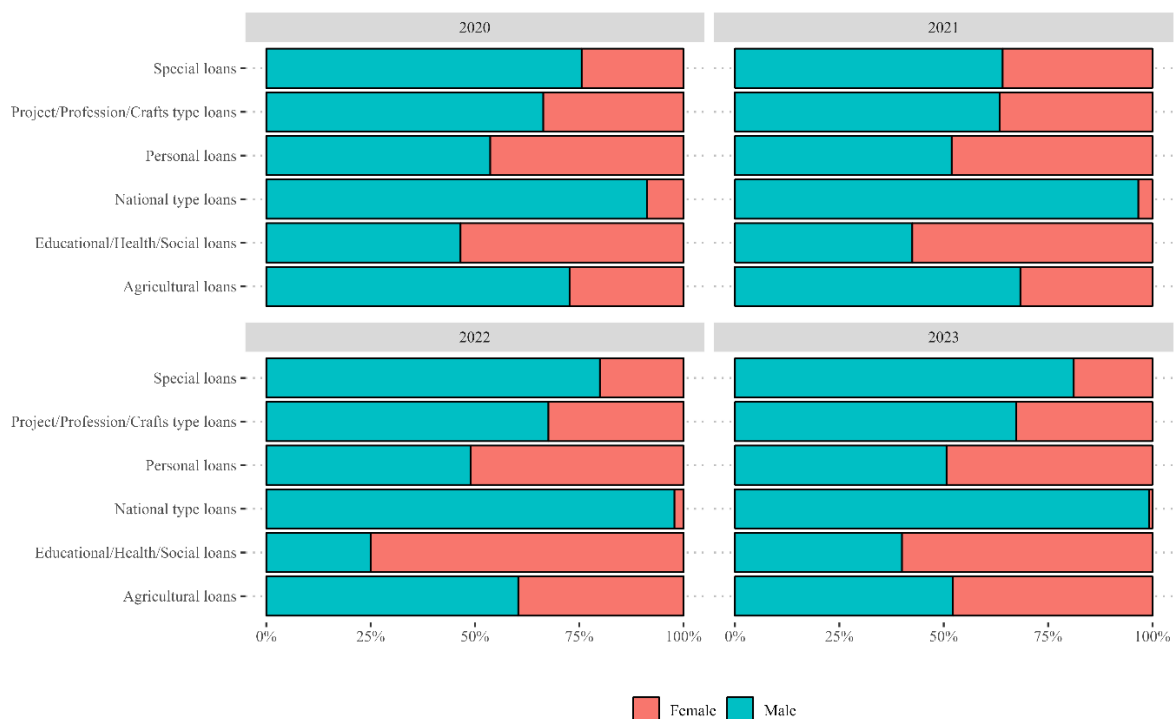


**Figure 2. The number of Economic purposes applied for**

*Source: Own calculation (2024)*

In most of the categories above, female’s applicants were underrepresented. As mentioned above regarding the Educational/Health/Social (EHS) loans which were classified as NIG loans aiming for consumption purposed mainly related to education or health such as tuition fees, laptops for students or medical treatment expenses), this category showed a huge percentage of female participation reaching (50-75%), an indicator of high female presence in the NIG loans meanwhile male’s participation was significantly higher in the IG categories demonstrating greater male dominance on business related activities. The amount of issued loans is highly dependent on the applicant’ current income before applying for the loan, the higher their income is, the more loan’s amount they can ask for, another key factor is the collateral or the guarantees that can be provided in the loan’s application, the more guarantees they provided (mainly salary splits for applicant’s themselves or their relatives/friends) the more money they can seek, the majority of the loans provided were packed and supported by salaries splits as a guarantee, meaning that in case of payment deficiency, the institution is eligible to cut their loan’s monthly payment from the salary of the person who has provided his salary certificate as a guarantee. Based on the above, it is clear on why we see significant high proportion of males in income generating categories and why they were capable to obtain higher loan’s amount which is based on their base higher income.

National type’s of loans were designed mainly to ex-army members or their families, resulting in a significantly higher proportion of male participation and domination over this type with no alternative or a special-tailored female compensation loan type (*Figure 3*).

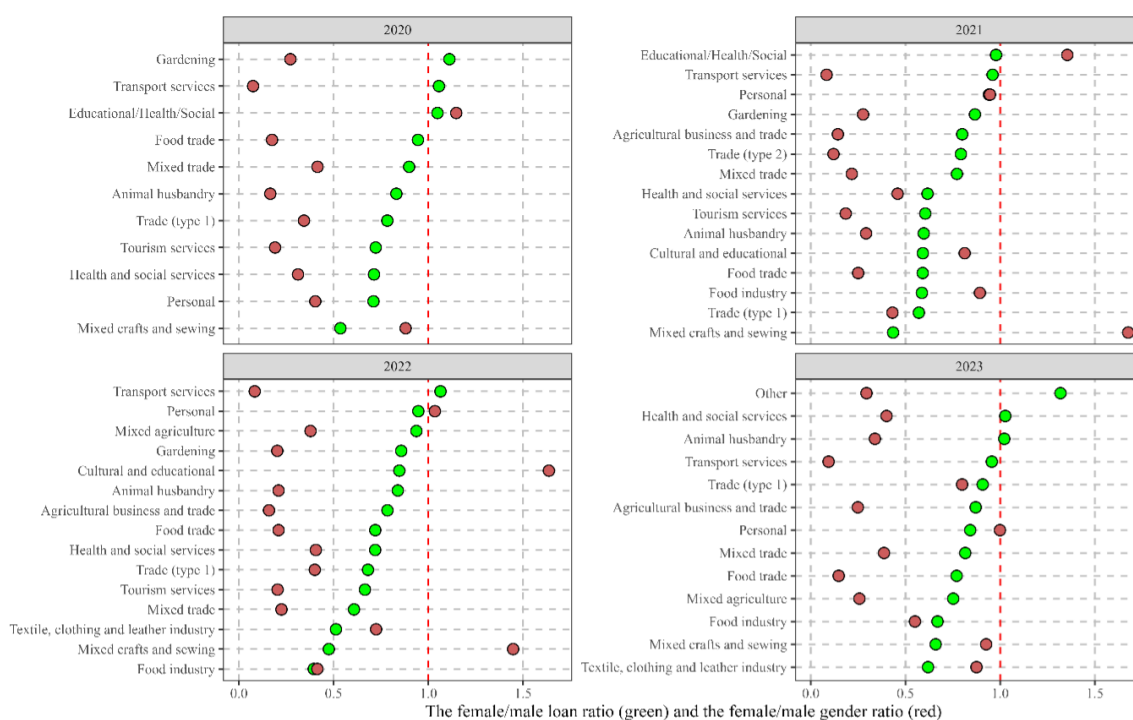


**Figure 3. The share of loan applications among males and females**

Source: Own calculation (2024)

Interestingly, the loan's amount for different loan's purposes is varying on average in terms of gender. Every year of the studied period, the observation related to gender shares and loan shares are showing a distinct V shape. In all cases for the four studied years, the female/male average loan amount ratio was higher than 0.5 demonstrating the fact that males were able to obtain higher amount of loans compared to females, where it can reach double the amount in some observations, it's still worth mentioning that in few cases the ratio has crossed the line which represent the threshold of 1.

The presence of a V shape can be related to the fact that the loan purposes related with higher proportion of females were always associated with lower average amounts for them, where these loan's purposes has the main focus on 'Mixed crafts and sewing', 'Textile – Clothing – Leather', 'Food Sector'. Those categories always showed a female dominant since it always offers opportunities for policy intervention still the number of female applicants for this types of businesses is seen low (*Figure 4*).



**Figure 4. The ratio of the female/male average loan amounts and the gender shares within economic purpose categories (2020 - 2023)**

*Notes: Only categories with more than 10 participants were involved. Figures were sorted by the female/male loan ratios. Trade (type 1) and Trade (type 2) are grouped purposes, where type 1 was mostly associated with consumer-oriented items (for example rug trade), and type 2 with business-oriented items (for example timber trade).*

*Source: Own calculation (2024)*

### 3.2 Regression estimates for all loan types

In this section the results of the OLS regression analysis will be presented among the studied period based on the dependent variable (the logarithm of real loan's amount).

Two regression models were run. The first model (Table 7) included all loan types, both income and non-income generating. The second model (Table 8) only included business-oriented loans. After adjusting for socio-demographic, loan, and market-related factors.

Gender, Income, Age, Education, Martial Status, and other factors have an influence which is highlighted as follows.

A consistent disadvantage for females' participants was prevalent among all four years, this negative effect was slightly weakening but obstinate resulting in females receiving 5.5% smaller loan amounts compared to males. The coefficient for women across all years was negative and statistically significant ( $P < 0.001$  in 2020,  $P < 0.1$  in 2021,  $P < 0.01$  in 2022 and  $P < 0.05$  in 2023).

The log Real Monthly Income shows that the importance of income is significantly growing over time and is playing a critical role, where a higher income is positively related with higher loan amounts starting from 2020 with  $\beta = 0.206$ , moving to a strengthening of this positive effect  $\beta = 0.240$  in 2021, a further increase in 2022 with  $\beta = 0.245$  reaching a most pronounced effect in 2023 with  $\beta = 0.383$ , where  $P < 0.001$  for all years.

Age among all studied years with a coefficient close to zero, did not show any significant effect on loan's amounts, leading us to a fact that the lending institution did not put into consideration age as a determinant factor.

A significant and consistent impact on loan's amount was indicated by Inflation, repayment duration, education and income, while persistent fluctuations and economic shifts were reflected by loan types, marital status and gender. Over the studied period, the changing dynamics of the lending processes were highlighted by the increasing significance of exchange rate inflation and interest rates. However,  $R^2$  is not always an adequate measure of model fit (Hagquist and Stenbeck, 1998, King, 1986), and may not be reliable in all cases (*Table 7*).

**Table 7. Regression estimates for all loan types**

<b>Dependent variable: Log real loan amount</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Gender (Female)</b>	<b>-0.055***</b> (0.015)	<b>-0.042+</b> (0.023)	<b>-0.047+</b> (0.026)	<b>-0.047*</b> (0.019)
<b>Log real monthly income</b>	<b>0.206***</b> (0.014)	<b>0.240***</b> (0.010)	<b>0.245***</b> (0.019)	<b>0.383***</b> (0.044)
<b>Age</b>	<b>-0.001</b> (0.001)	<b>0.000</b> (0.001)	<b>0.000</b> (0.001)	<b>0.001</b> (0.001)
<b>Comp. age/Work contract</b>	<b>0.003***</b> (0.001)	<b>0.003*</b> (0.002)	<b>0.001</b> (0.002)	<b>-0.002</b> (0.002)
<b>Education (High School)</b>	<b>0.080*</b> (0.038)	<b>-0.035*</b> (0.016)	<b>-0.033**</b> (0.013)	<b>0.046*</b> (0.021)
<b>Education (Intermediate/Vocational)</b>	<b>0.078*</b> (0.037)	<b>-0.001</b> (0.027)	<b>-0.005</b> (0.016)	<b>0.057**</b> (0.021)
<b>Education (Preparatory school)</b>	<b>0.016</b> (0.037)	<b>-0.069**</b> (0.027)	<b>-0.071***</b> (0.016)	<b>0.025*</b> (0.010)
<b>Education (University &amp; Postgraduate)</b>	<b>0.168***</b> (0.042)	<b>0.065**</b> (0.022)	<b>0.021+</b> (0.013)	<b>0.082***</b> (0.021)
<b>Marital status (Divorced)</b>	<b>-0.058</b> (0.074)	<b>0.001</b> (0.022)	<b>-0.033*</b> (0.016)	<b>0.011</b> (0.023)
<b>Marital status (Married)</b>	<b>-0.062**</b> (0.020)	<b>-0.016</b> (0.015)	<b>-0.025*</b> (0.012)	<b>-0.019</b> (0.013)
<b>Marital status (Widow)</b>	<b>-0.005</b> (0.072)	<b>-0.066**</b> (0.025)	<b>-0.047***</b> (0.014)	<b>-0.107**</b> (0.041)
<b>Number of employees</b>	<b>0.056***</b> (0.010)	<b>0.072***</b> (0.011)	<b>0.072***</b> (0.009)	
<b>Repayment duration</b>	<b>0.024***</b> (0.002)	<b>0.016***</b> (0.002)	<b>0.015***</b> (0.001)	<b>0.018***</b> (0.002)
<b>Interest rates</b>	<b>0.033</b> (0.026)	<b>-0.034***</b> (0.003)	<b>-0.011***</b> (0.002)	<b>-0.023***</b> (0.005)
<b>Exchange rate inflation (unofficial)</b>	<b>0.107</b> (0.124)	<b>0.210***</b> (0.025)	<b>0.165*</b> (0.074)	<b>0.532***</b> (0.042)
<b>Non-qualified labor wage (unofficial)</b>	<b>-1.446***</b> (0.178)	<b>-0.887***</b> (0.093)	<b>0.201</b> (0.178)	<b>-0.366+</b> (0.191)
<b>“Plus” loans</b>	<b>-0.281</b>	<b>0.370***</b>	<b>0.179***</b>	<b>0.046</b>

<b>Dependent variable: Log real loan amount</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
	(0.244)	(0.039)	(0.027)	(0.033)
<b>Special loans</b>	0.445	0.123+	0.010	-0.140**
	(0.322)	(0.071)	(0.033)	(0.051)
<b>National loans</b>	0.462*	0.197***	0.080**	0.190+
	(0.212)	(0.036)	(0.030)	(0.103)
<b>Number of observation</b>	3197	16307	14854	6302
<b>R<sup>2</sup></b>	0.589	0.758	0.792	0.783
<b>Adjusted R<sup>2</sup></b>	0.583	0.758	0.791	0.782
<b>AIC</b>	176292.2	455422.6	414648.0	176290.2
<b>BIC</b>	176413.6	455576.6	414800.1	176418.4
<b>Std. Errors</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>

Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Heteroskedasticity (STATA type) cluster robust standard errors in parentheses, clustered by economic purposes. Economic purposes and region dummies were included as fixed effects and projected out from the model. Number of employees were excluded in 2023 and due to the high number of missing data, it was not imputed. Region observations in Damascus Countryside, Hama and Homs were eliminated in 2020 due to the low sample size (0-3 persons). To improve the consistency of the results, the annual upper and lower 0.5% of the samples were excluded (hence the difference between the descriptive statistics and the regression sample size).

Source: Own calculation (2024)

### 3.3 Estimation of the restricted model for income-generating loans

A restricted model for income-generating loans across years is presented in this section, where it estimates the determinants of loan amounts. The logarithm of real loan's amount represents the dependent variable, economic factors, education, income and gender represent significant predictors highlighted by the analysis.

In terms of Gender and similarly to the previous regression analysis, females continued to receive less loan amounts compared to males with 6.5% smaller in 2020 ( $P < 0.001$  and  $\beta = -0.065$ ), This disparity has increased in 2021 ( $P < 0.001$  and  $\beta = 0.143$ ), in 2022 females received 16.7% even smaller amounts ( $P < 0.001$  and  $\beta = -0.167$ ) while this negative impact slightly decayed ( $P < 0.01$  and  $\beta = -0.101$ ). It's becoming clearer that this gender disparity in provided loan's amounts is growing and consistent in 2021 and 2022, despite the slight decay in 2023, females on constant basis are receiving less loan amounts than males, demonstrating a systemic loan's allocation basis.

A constant strong determinant for loan's amount is the income, accessing higher amount is quite related to having financial stability, microfinance institutions MFIs always prioritize applicants with high income. In 2020, higher income predicts higher loan's amounts ( $P < 0.001$  and  $\beta = 0.195$ ), strengthening this effect over

2021( $P < 0.001$  and  $\beta = 0.225$ ), reaching its' peak in 2023 ( $P < 0.001$  and  $\beta = 0.260$ ), landing in 2023 with significant effect but with a slight decline for this year ( $P < 0.001$  and  $\beta = 0.227$ ).

Similarly, to previous results for considering all loan types, Age remained with limited influence, between 2020-2023 it did not show any significant impact with loan's amounts, demonstrating that it is not even a major determinant for MFIs, still a slight negative impact has been shown in 2023 ( $P < 0.05$  and  $\beta = -0.002$ ) which might reflect that risk perceptions has been changed when considering old applicants.

Gender differences were more pronounced (0.065 – 0.167) in case of non-income-generating loans, even when adjusting for socio-demographic and loan-specific factors. Increasing education was mostly associated with higher loan amounts on average, while the comparisons according to marital status were similar to the full model. The coefficients of the remaining control variables were similar in terms of sign, but different in magnitude. The national type of loans did not show any significant differences in this model due to the missing categories of not-income-generating loans. Although the model estimation signs were consistent with the full model, the larger gender-related differences implied that there was an even greater gap in the case of income-generating loans (*Table 8*).

Once again, loans allocations based on marital status and gender revealed consistent disparities, meanwhile repayment duration, education and income have been always influencing loan amounts, keeping in mind that special economic determinants have an increasing importance in later years such as interest rates and inflation

**Table 8. Estimation of the restricted model for income-generating loans**

<b>Dependent variable: Log real loan amount for income-generating loans</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Gender (Female)</b>	<b>-0.065***</b> (0.020)	<b>-0.143***</b> (0.017)	<b>-0.167***</b> (0.026)	<b>-0.101**</b> (0.031)
<b>Log real monthly income</b>	0.195*** (0.013)	0.225*** (0.015)	0.260*** (0.018)	0.227*** (0.018)
<b>Age</b>	-0.001 (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.002* (0.001)
<b>Comp. age/Work contract</b>	0.002** (0.001)	0.005*** (0.001)	0.004* (0.002)	0.000 (0.001)
<b>Education (High School)</b>	0.090* (0.038)	0.015 (0.026)	0.008 (0.016)	0.044 (0.028)

**Dependent variable: Log real loan amount for income-generating loans**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Education</b> <b>(Intermediate/Vocational)</b>	0.094*	0.057+	0.049*	0.043
	(0.039)	(0.033)	(0.022)	(0.046)
<b>Education (Preparatory school)</b>	0.028	-0.019	-0.051**	0.028
	(0.038)	(0.032)	(0.017)	(0.022)
<b>Education (University &amp; Postgraduate)</b>	0.181***	0.089*	0.065*	0.072
	(0.045)	(0.040)	(0.033)	(0.050)
<b>Marital status (Divorced)</b>	-0.090	-0.127*	0.018	0.002
	(0.121)	(0.062)	(0.084)	(0.046)
<b>Marital status (Married)</b>	-0.070***	-0.043*	-0.047***	0.004
	(0.019)	(0.018)	(0.013)	(0.012)
<b>Marital status (Widow)</b>	-0.082	-0.125*	-0.095+	-0.005
	(0.088)	(0.062)	(0.049)	(0.092)
<b>Number of employees</b>	0.052***	0.089***	0.062***	
	(0.012)	(0.010)	(0.010)	
<b>Repayment duration</b>	0.026***	0.019***	0.009***	0.004*
	(0.002)	(0.002)	(0.001)	(0.002)
<b>Interest rates</b>	-0.010	-0.013***	-0.005**	-0.022***
	(0.010)	(0.003)	(0.002)	(0.006)
<b>Exchange rate inflation (unofficial)</b>	-0.014	0.141***	0.405***	0.215**
	(0.085)	(0.028)	(0.109)	(0.076)
<b>Non-qualified labor wage (unofficial)</b>	-1.378***	0.442	0.788*	-0.199
	(0.167)	(0.313)	(0.307)	(0.249)
<b>“Plus” loans</b>	0.122	0.237***	0.113***	0.152*
	(0.089)	(0.017)	(0.025)	(0.077)
<b>National loans</b>	0.100	0.047+	0.031	0.023
	(0.073)	(0.026)	(0.028)	(0.051)
<b>Number of observation</b>	2776	5272	4448	2692
<b>R<sup>2</sup></b>	0.405	0.451	0.402	0.292
<b>Adjusted R<sup>2</sup></b>	0.397	0.447	0.396	0.280
<b>AIC</b>	78715.1	149493.2	126012.7	76345.3
<b>BIC</b>	78827.7	149618.1	126134.3	76451.5
<b>Std. Errors</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>	<b>by: loan purpose</b>

*Notes: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Not income-generating (educational, social, health, personal and special) loans were excluded. Heteroskedasticity (STATA type) cluster robust standard errors in parentheses, clustered by economic purposes. Economic purposes and region dummies*

were included as fixed effects and projected out from the model. Number of employees were excluded in 2023 and due to the high number of missing data, it was not imputed. To improve the consistency of the results, the upper and lower 0.5% of the samples were eliminated annually (hence the difference between the descriptive statistics and the regression sample size).

Source: Own calculation (2024)

According to the estimates, women applied for fewer loans in most of the categories, possibly due to their lower income. Traditionally, men were regarded as the head of the household and the main source of income, which limited the possibility for women to start and own businesses. Personal loans were dominant among women because mostly public employees, who happened to be women frequently, applied for these loan types. We have identified areas where policy interventions could boost women's entrepreneurship and livelihoods. Supporting small craft businesses, particularly those that can be carried out part-time or from home, could successfully improve women's entrepreneurship. These areas include mixed crafts, sewing, and the textile, leather, and clothing industries.

### **3.4 Models Results Discussion**

Valuable insights into the loan's amounts influencing factors were provided by the results of OLS regression of both models for unrestricted loan types (*Table 7*) and the restricted model for income-generating loans (*Table 8*). Potential interpretations, key findings and their implications will be discussed in the following section.

Gender inequalities in provided loans: Significant and consistent gender-based disparities in loan allocation amounts were revealed by both models, across all years, females receive smaller amounts compared to males, we can notice it in (*Table 7*) in the case of the restricted model, a large negative coefficient was shown particularly in 2021 ( $P < 0.001$  and  $\beta = -0.143$ ) and ( $P < 0.001$  and  $\beta = -0.167$ ) in 2022. This indicates a systemic tendentious against females, can be related to the risk approach and perception of the MFIs and their gendered lending strategies since they trust lending men in general for high amounts of money. Despite some improvements in 2023, the critical factor of determining the loan size remained gender, demonstrating continuous disparities and inequalities where only inclusive financial policies can help with addressing this issue.

Income's Role: The most significant and consistent factor of predicting loan amounts in both models is Log real monthly income, a notable growing influence between 2020 and 2022, followed by a decline in 2023. In the restricted model the strongest effect was in 2022 ( $P < 0.001$  and  $\beta = 0.260$ ) and in the unrestricted model, the strongest impact was ( $P < 0.001$  and  $\beta = 0.383$ ), underlying the importance of financial stability in securing a loan, demonstrating MFIs prioritization for applicants with high income.

Education and its diverse effects: varying degrees of significance among all years across both models were demonstrated by education, postgraduate qualifications and university representing higher education were correlating in a consistent way with higher loan amounts, as shown in Table 7 ( $P < 0.001$  and  $\beta = 0.168$ ), and table 4 ( $P < 0.001$  and  $\beta = 0.181$ ) in 2020.

On the other hand, inconsistent impact was shown by preparatory and intermediate education alongside negative coefficients in later years, especially in the restricted model. An advantage of high education levels is indicated likely related to their abilities of perceiving a financial literacy and their capacities of repaying the loans.

Marital Status: a nuanced role in loan providing is played by marital status, smaller amounts of loans were consistently related to Married applicants as shown by the significant negative coefficient in both models ( $P < 0.01$  and  $\beta = 0.062$ ) in Table 7 and ( $P < 0.001$  and  $\beta = -0.070$ ) in Table 8 for the year 2020. Disadvantages were experienced by Divorced and Widowed applicants though the impacts were less consistent. These findings might reflect single income risk profiles or MFIs concerns about the financial stability of households, leading to have a well-tailored financial product (loans) for these groups.

Inflation and Interest rates as economic indicators: an increasing significance was shown by exchange rate inflation and interest rates in the later years, particular evidence from 2023 showing the negative impact of the rise in interest rates with both models showcasing significant suppression of loan amounts ( $P < 0.001$  and  $\beta = -0.022$  in Table 9). On the other hand, Inflation correlates positively with loan amount, particularly in 2022 ( $P < 0.001$  and  $\beta = 0.405$  in Table 8). That is likely happened due to some adjustments made on nominal loan amounts in order to adapt to the prevailed economic circumstances. These trends showcase potential challenges for applicants during inflationary times and highlight the sensitivity of lending conditions to macroeconomic factors.

Repayment Duration and Loan Types: a positive correlation is linking repayment duration with loan amount in both models with a decline influence over later years. Loan types show several impacts across models and years, in Table 8, Plus loans showed a significant positive impact on loans amounts ( $P < 0.001$  and  $\beta = 0.237$ ) with weaker effects related to National loans for the same year. Flexible repayment conditions in addition to tailored loan products are able to boost applicants' accessibility for higher loan amounts based on the previous findings, especially in economically volatile periods.

Several broader trends were revealed by the analysis. First, the continuous gender and marital status inequalities shed the light on the need for well-designed targeted policies to target these marginalized groups and boost equity in financial accesses. Second, the increase in the significance of macroeconomic indicators, education and income suggests that MFIs are becoming more risk averse, and they prioritize

economic resilience and financial stability over being equal in gender terms. Finally, the dynamic nature of lending was underscored by the models, social and broader economic changes were reflected by the shift in the determinants. Those changes must be adapted by financial institutions and policymakers to ensure inclusivity and responsiveness to applicant's needs.

### 3.5 Supported results related to the essentials of WE in Syria

The findings of this study shed light on the realities, motivations, challenges, and opportunities for women entrepreneurs in Syria. It was revealed among the interviews results that majority of women entrepreneurs in Syria are motivated by economic survival and necessity circumstances rather than available opportunities. Their lack to solid collateral which can back their loans in addition to high interest rates are the main financial barriers encountering them. Skepticism accompanying their projects represents the main social expectation alongside cultural and family duties. The prominent role has always been gender discrimination where women faced obstacles finding mentors and accessing networks specifically male centered ones. Education has also played a role in boosting women entrepreneurship where only high graduates showed more confidence in pursuing their own businesses (Table 9)

**Table 9. Factors affecting women entrepreneurship based on interviews results**

<b>Theme</b>	<b>Findings</b>
<b>Drivers</b>	60% driven by survival economic circumstances (necessity factors) 15% driven by market opportunities and microfinance offerings (opportunity factors)
<b>Financial Barriers</b>	60% suffered with financial accessing due to high interest rates and the lack of collateral to be able to apply for loans. Informal funds from family members were another way financing.
<b>Societal Norms &amp; Cultural Expectations</b>	75% were faced by social resistance especially from family, relatives, and surrounding society members. Women's entrepreneurship efforts were limited because it was always faced by social skepticism.
<b>Network's Access</b>	75% struggled to access business networks since it's men-dominated 60% demanded female-centered networks and leveraged online platforms and applications to enhance networking.
<b>Skills &amp; Education</b>	Higher confidence was noticed among university graduates Prior work experience and vocational trainings were critical for many.
<b>Gender Inequalities</b>	Accessing financial resources and funds were the most recurring element when it comes to gender discrimination.
<b>Internal Challenges</b>	50% stated that low self-confidence and fear of failing were hindering their own entrepreneurial growth.

Source: Own calculation (2024)

The survey revealed similar obstacles facing female entrepreneurs in Syria. Mainly driven by their need to help their families and supporting them alongside high interest rates when applying for credit, cultural norms, family duties and social expectations all played a role in hindering their entrepreneurial growth. Their low-self-esteem and fear of failure are also highlighted as internal factors hindering their growth. Concise and in-depth key findings are provided by the following summaries (Table 10).

**Table 10. Factors affecting women entrepreneurship based on survey results**

<b>Theme</b>	<b>Findings</b>
<b>Drivers</b>	<ul style="list-style-type: none"> <li>- 60% supporting their families was their primary engagement reason.</li> <li>- 35% market opportunities and aspirations</li> </ul>
<b>Financial Barriers</b>	<ul style="list-style-type: none"> <li>- 75% cited that financial access is the main obstacle</li> <li>- 60% Prioritized loans from families and friends.</li> <li>- 50% suffered with high interest rates.</li> </ul>
<b>Societal Norms &amp; Cultural Expectations</b>	<ul style="list-style-type: none"> <li>- 100% cited societal norms affecting entrepreneurship.</li> <li>- 60% agreed that obligations and duties towards their families limited their abilities to focus on entrepreneurship in their life's</li> </ul>
<b>Network's Access</b>	<ul style="list-style-type: none"> <li>- 50% missed formal and mentorship networks</li> <li>- 60% cited the lack of women-centered business communities</li> </ul>
<b>Skills &amp; Education</b>	<ul style="list-style-type: none"> <li>- 70% cited the need for managerial and financial literacy trainings</li> <li>- 65% stressed the lack of training/education as an obstacle.</li> </ul>
<b>Gender Inequalities</b>	<ul style="list-style-type: none"> <li>- 75% cited that gender discrimination hindered their entrepreneurial efforts</li> </ul>
<b>Internal Challenges</b>	<ul style="list-style-type: none"> <li>- 50% stated that they were hindered by their low self-esteem and haven't had enough confidence.</li> </ul>

*Source: Own calculation (2024)*

The survey results are revealing and demonstrating critical insights into the obstacles, barriers and motivations which shape a woman's entrepreneurship journey in case of Syria. Restricted access to business communities, limited educational attainment, strict and old-fashioned social norms, financial constraints and finally necessity are all significant challenges facing women in Syria's entrepreneurship landscape.

## 4. NEW AND NOVEL RESULTS OF THE DISSERTATION

### 4.1 Hypothesis discussion

Complementary insights into the effects of the inflation were offered from regression analysis supported by the survey analysis as well. From Table 7 and Table 8, loans' amounts were positively correlated with exchange inflation rate in 2021 and 2022, more likely to reflect nominal adjustments over real growth in microfinance loans access. On the other hand, it was not mentioned explicitly by the survey respondents that inflation was representing a barrier, rather indicated its effects in another systematic ways like the reduction in the purchasing power of loans or the increasing risk mainly the operational one for Microfinance institutions. This is supportive to **(H1: Inflation in hindering Microfinance development in Syria)** through demonstrating that inflation is indirectly disrupting and damaging microfinance development strategies which is basically only an inflated increase not accompanied with any purchasing power therefore it won't add any value to the loan's applicant neither on long nor short terms. The dissertation demonstrates inflation as the primary obstacle to microfinance sustainability and functionality mainly in Syria. It hinders the purchasing power of the loans provided by MFIs and alongside increase the prices of all necessary services and goods. Difficulties arise for borrowers who tend to invest their loans in income-generating projects since loan's amount are not able to meet the increase in the overall prices of services and goods or even to start their own entrepreneurial initiative. Alongside the instability in the Syrian currency which is clearly suffering from high fluctuations hindering MFIs abilities to be effective in such a volatile circumstance. H1 is supported by literature which highlights the effect of inflation in undermining the effectiveness of microfinance in conflicted areas by decreasing the real amount of loans and raising challenges from repayments. Despite the seen nominal boost in loan amounts, inflation is presenting both borrower-level and systemic challenges to microfinance development in Syria, **H1** is accepted.

Evidence from Table 7 and 8 strongly supports and revealed a consistent significant gender inequality in loan amounts ( $\beta = -0.065$  to  $-0.167$  for females). In addition, 75% of the survey's respondents highlighted that one of the main significant barriers was gender-based as well as societal norms and cultural expectations which both reinforce traditional gender roles. Evidences from both sources lead us to a conclusion that women were having smaller amounts compared to men, but worse than this is that the majority of their loan's usage was directed towards consumption rather than investment or income-generating, this issue is the priority to be tackled away, results from (Figure 4) that females' dominance presence in was mainly in traditional female-centric-sections such as (textile, social services and health) while males' dominance presence was (trade and transportation), indicating that gender inequalities are hindering women's participation in divers sectors and influencing significantly their entrepreneurial initiatives. Females' microfinance access and entrepreneurial initiatives are shaped based on gender basis.

**(H2.a: The number of loans offered to women is lower compared to men on average)** highlighted by the regression results that female showed lower representation in income-generating loans, in addition, 60% of the respondents agreeing that their families' responsibilities were limiting them from accessing loans. Figure 4 as well indicated less opportunities compared to men in male-dominated sectors, which indicates fewer women opportunities in those areas.

**(H2.b: : Loan amounts issued to women are less compared to men on average)** strongly highlighted by both regression tables where we saw that women were receiving consistently smaller loans, it's also interesting to see from Figure 4 that lower female-to-male loan ratios in high income sectors such as business and trade. Hence **(H2: Gender differences have an influence on microfinance products in terms of amounts and number of issued loans)**, H2.a and H2.b are accepted.

The income-generating type of loans highlighted in the restricted model (Table 7) demonstrated low number of females presences compared to males, supporting **(H3: Women tend to apply for non-income generating loans compared to men who tend to apply for income generating loans)** indirectly. H3 identifies the misalignment between the actual way of usage for microfinance loans and their current purpose. Immediate consumption needs (Education, Food, Health) were the main usage for microfinance loans by most women rather than entrepreneurial usage. The crisis driven financial responsibilities is the primary reason behind this shift in socio-economic pressures alongside with the lack of a customized loans fitting the actual needs. Family responsibilities and cultural norms often steer women and affect them disproportionately towards non-income generating opportunities based on the survey findings. Figure 4 showed higher tendency for women to be in sectors such as education, social services, and health, which are quite often related to non-income generating activities. **H3** is accepted since women were more likely to apply for non-income generating loans. The above findings indicate the impact of microfinance loans is misaligned and are diluted from their primary goal which is empowering women financially especially with the seen high potential for women based on the literature review.

**(H4: Women's social and demographic variables have an effect on the loan's usage and amount)**, is separated in two items, H4.a focuses on the marital status while H4.b focuses on the education level as a demographic variable. (Table 7 and 8) confirmed that the marital status influences the loan amount, in case of married applicants they were receiving smaller amounts on constant levels, it can be noticed that in their case they might prioritize the loan's to be allocated to cover their family's needs due to their roles as financial contributors and caregivers. The survey findings cleared that societal expectations and family responsibilities accompanied to marital roles influence females' entrepreneurial decisions. Similar findings from Figure 4 are consistent in showing that lower women representation in male-dominated areas were likely tied by their marital responsibilities. Hence **(H4.a: Marital status has an effect on the loan's purpose/amount)** is accepted since marital status is significantly influencing loans amounts and purposes.

A strong support shown from both regression (Tables 7-8) for **(H4.b: Education level influences loan purpose/amount)**. Since higher education levels were correlating with higher loan amounts. Women with higher education are in a better position due to their abilities to use their loans for economic purposes since their financial literacy and confidence set them apart. It can be also seen from the survey findings that one of the significant barriers was the lack of proper education and tailored trainings programs. Figure 4 indicated a lower female to male ratio in sectors where higher technical skills are needed suggesting that women's' limitations to access higher loan amounts is due to their educational inequalities compared to men. **H4.b** is accepted. As stated above, marital status and education are main predictors for loan usage which is primarily aligned with global trends.

Identifying cultural expectations and societal norms as a primary obstacle to women's entrepreneurship was cleared by the dissertation. Syrian women roles were set traditionally to be responsibilities focused which hinder their entrepreneurial and creative senses, where these norms helped not only in discouraging their initiatives but also in limiting their potential. Robust support was provided by the survey's findings for **(H5: Societal norms and cultural expectations hinder the growth of women-led businesses)** where most of the respondents agreed that social norms and values hinder their entrepreneurial skills. 75% and 65% agreements among respondents for gender discrimination and perceived societal hostility respectively further support these barriers. Figure 4 demonstrate women's tendency towards traditionally female-centric sectors due to cultural expectations. All in all, the restrictions in women's entrepreneurial growth were underscored by cultural expectations and societal norms. Therefore, **H5** is accepted.

The research has been demonstrating the urgent need for well-structured innovative microfinance loans directed to women's' needs. Social-cultural obstacles, limited access to markets and networks and the most importantly the lack of financial literacy should be the main focus addressed by the innovative microfinance products to be designed in short term. Based on the restricted model results in (Table 8), it was indicated that women's accessed loans were not directed towards income-generating activities, all used loans by high percentage of women were mostly a consumption nature of loans, which are used to instant consuming rather than investing or building a business. Gaps in financial literacy and managerial skills can be a supporting reason for this case where it was shown in the survey results with 85% agreement alongside the poor female participation in high growth sectors which was indicated in (Figure 4). All this is supporting the fact that innovative products are needed for microfinance institutions to shift the loans usage towards investments rather than consumption. Still a more precise and accurate conclusions can shape better products Therefore, **(H6: Novel microfinance products are needed to shift loan usage from consumption to investment)** is partially accepted.

## 4.2 The Findings of the research

A major player in providing support to female entrepreneurs as well as funds and capital is social enterprises, which emerged particularly in areas where the governmental role is missing, and the private sector role has also fallen short. These social enterprises have helped fostering a resilience community, promoting social inclusiveness, and helped boosting jobs.

The findings of this study underscore the unique challenges facing women entrepreneurs in Syria. Financial barriers, restrictive societal norms, and limited access to education and business networks all contributed to the constrained growth of women-led businesses. These results reflect broader trends observed in developing and conflict-affected countries, where women's entrepreneurship is often shaped by necessity and hindered by structural inequalities. Conflict-affected areas are placing more burdens on female entrepreneurs compared to peaceful areas, in addition to the general obstacles that women generally face, women in these areas are facing unique challenges such as the lack of proper supportive infrastructure. (Electricity and Technology) in addition to mobility restrictions and the scarce of the business expansion opportunities.

(DELMAR AND HOLMQUIST, 2004; IQBAL, 2016). Efforts to address these barriers, including improved access to finance, legal reforms to promote gender equality, and greater support for women's education and networking opportunities, are crucial to fostering a more inclusive entrepreneurial ecosystem in Syria.

Currency devaluation and primarily inflation have negatively affected the effectiveness of microfinance institutions in meaningfully provide real financial support, the issued loans' decaying power of purchase have hindered and misaligned the suage process of the loans from investing towards consumption leading to limitations in economic effect.

Demographic disparities (Education level-Marital status) were cleared among loans' utilization where women who has high education degrees are more likely to leverage loans for entrepreneurial purposes, alongside women who are married which demonstrated a larger tendency to use the loans for consumption purposes, which reflects their responsibilities as breadwinners and caregivers, both points suggest that education and financial literacy are primary elements for the effectiveness of the loan's utilization.

Traditional roles based on gender were shifted because of the Syrian crisis, forcing women to handle more financial responsibilities, this caused a rise in entrepreneurship which is driven by necessity over opportunity, in order to support and shoulder their families, these women have to start their own business projects.

Syrian women in sectors such as services, agriculture and small-scale manufacturing have proven to be predominantly active, these sectors usually provide easy levels of entry but still missing the availability to scale up due to the scarcity of technical and financial support.

It was founded that the role of female entrepreneurs in Syria began to grow and develop because of the Syrian crisis. It seems that this growth and increase were often driven by pressure and discomfort rather than opportunities, especially with the increasing economic dissatisfaction on Syrian families as well as the decrease in the paid employment opportunities. However, the field of female entrepreneurship in Syria is currently facing many obstacles, especially those which are related to the business environment alongside the deterioration in business performance indicators. Whether for males or females, the diminishment of suitable conditions for investments pushes women's entrepreneurial projects towards the small or micro-enterprise sector, within traditional fields. This goes back to the relation with the basic needs of the Syrian society.

The official or governmental interest in the field of female entrepreneurship does not exceed the general interest in the entrepreneurial environment. It often considers female entrepreneurship as a form of self-employment for the purpose of creating self-employment opportunities and combating poverty, meanwhile this interest lacks a mechanism that supports and attracts female entrepreneurs whether through financing, regulating, or educating. Parallely to many previous studies such as (ILO, 2018), (SOW, 2012), (GIWPS, 2017) and (BMC, 2020), it seems that the Syrian crisis, despite its negative impact in general, has contributed through dissatisfaction factors in improving women's entrepreneurship, by increasing the number of these projects at home and abroad, and as a result of the weak organizing and regulating, many of these projects operate in an unorganized and an informal structure.

Remarkable resilience and high adaptability have been demonstrated by women in Syria despite the encountered challenges, during periods of uncertainty and economic instability they managed to sustain and start their own businesses. If this highlights one thing, it is then their potential as key players in social transformation and economic recovery.

## 5. MAIN CONCLUSIONS AND NOVEL FINDINGS OF THE DISSERTATION

In this thesis, microfinance and its characteristics were analyzed as a way to fight poverty, primarily based on microloans disbursed in Syria in 2019-2023.

With the help of previously published studies on the topic, the general characteristics of microfinance were explored at the international and national levels, which are closely related to the economic and social problems of poverty. In developing countries, microcredit not only has its advantages, but, like indebtedness in general, it also has disadvantages, which are more extreme in a less developed economic environment. Bureaucracy, corruption, and repayment problems are examples of this, i.e., to a certain extent, they lead to further social problems, can further increase impoverishment and, in the most hopeless cases, resort to suicide (GREEN, 2023).

Own analyses were performed on a database cleaned for 42,079 unique cases where the descriptive statistical was the used method to present the average values of the explanatory variables, and then revealed correlations between the natural logarithmic values of the disbursed loan amounts as dependent variables and the explanatory variables using regression analysis. The novel findings of the dissertation can be summarized as follows:

1. To the best of the author's knowledge, this is the first study to use individual level, large sample data on microfinance and access to loans in Syria. In the case of microloans disbursed in our analysis, the most striking difference was between the gender, which is supported by previous literature based on the traditionally disadvantaged social position of women (BOLTON, 2020).
2. The breakdown of loans disbursed into two categories - income-generating and non-income-generating - shows that women were the main beneficiaries of education/health/social (EHS) loans, while men benefited from the larger amount of income-generating loans. For men, military history was a preference for the amount of loans. The loan amounts are also related to the monthly income of the claimants-beneficiaries, which again showed a lower value in the case of women and thus a lower disbursed loan. For both loan categories (income-earning/non-income-earning), a longer repayment period was associated with a higher loan amount, while a higher interest rate was associated with a lower loan amount.
3. Microfinance institutions in Syria are keener towards supporting consumption purposes rather than boosting entrepreneurial initiatives for women. A misalignment which highlights the need for well-designed financial products offered by MFIs.
4. Social responsibilities, education levels and marital status are the main demographic factors which influence the effectiveness and purpose of microfinance loans, again stating the need for personalized and designed financial solutions.
5. Despite their few number, female-led business initiatives significantly can contribute to boosting Syria's economic cycle, mainly in fields like services, health and agriculture. A multiplier effect was seen by Syrian women entrepreneurs through community cohesion, economic recovery and promoting social stability.

6. Socio-economic challenges accompanying the Syrian conflict have compelled Syrian women to seek for entrepreneurial activities to shoulder their families, a case where gender roles are redefined. This case has demonstrated how a crisis can play a role as a catalyst for boosting a social change. Although, exceptional abilities of adaptability through establishing small and micro businesses in hardship circumstances were shown by Syrian women entrepreneurs, highlighting their potential under challenging circumstances for entrepreneurship.

Overall, the analysis confirmed the difference in perceptions of microcredit between men and women, as shown in the literature too. This is in spite of the fact that the Syrian economy and society currently has to rely more and more on women's economic value creation, due to the decline in the number of men in the labor force (war and emigration).

## 6. Recommendations

The thesis is providing several valuable recommendations for policy and practice, valuable to enhance the situation of women entrepreneurs in Syria mainly and this experience can be generalised over other developing countries in the area, where all other circumstances are relatively similar

1.Improving Access to Financial streams: Financial organisations should focus on providing a better fit and designed financial products which can meet the needs of females' entrepreneurs, mainly those who are functioning in small, micro and informal sectors. Overcoming current obstacles and limitations can only happen by giving more access to capital and offering more financial literacy initiatives.

2.Training and Educational Programs: Successfully sustainable businesses launched by women are fundamental and needed, it can be only empowered through offering a wide range of trainings, entrepreneurial education especially for women in rural areas. Business managements trainings alongside technical and technological trainings in expansive-growth industries should be on top of the list when it comes to choosing those educational programs, giving women a chance to tap into high demand businesses and leverage their possibilities and potentials.

3.Upholding Regulatory and Legal Framework: Governments and policy makers are the key players in supporting entrepreneurship in general and women entrepreneurship explicitly, gender-sensitive policies should be implemented where it lower and eliminate if possible bureaucratic barriers to entrepreneurship where business registration processes are ensured to be simplified and guaranteeing equal and unbiased capital access for men and women, alongside providing same salaries to the public employees regardless of gender since we noticed that this had allowed men to seek for higher loans since their salaries ranges were relatively higher and able to support their collateral.

4.Cultural and Social Support: Networks supporting the connection between women entrepreneurs should be fostered, mentorship programs must be implemented with the help of educated and experienced successful women in several industries to offer a wide range and variety for all women in need for that mentorship relationship in addition to promoting successful women as role models. All the above mentioned are crucial and considerable efforts needed to change and alternate the societal norms and attitudes towards women entrepreneurs.

## 7. Limitations

The sample was affected by various selection problems. Firstly, we did not observe those who left the country, the majority of whom were women. Secondly, those who applied for a loan were either restricted in their movement or had previous business experience, which provided a basis for some economic activity. Additionally, since the institution carries out microfinancing activities, loan applications are not as strict as those of commercial banks. Lastly, we do not have data related to repayment. Due to these circumstances, our results are only indicative.

In some cases, data was either unavailable or incomplete. This was particularly true for market-related data, income, and interest rates, which were significantly impacted by economic activities and subject to high uncertainty levels. Personal incomes were primarily affected by inflation, while interest rates were continuously adjusted to the market environment. Different loan purposes and types can restrict the maximum achievable loan amount, its use, and income-generating ability. The loan purpose, the address-level fixed effects, and the clustered standard errors partly captured these different characteristics. Finally, the differentiation between income-generating and not-income-generating loans was based on the type of loans defined by the institution. However, the distinction cannot be made clear in all cases.

Another key limitation of the study was the difficulty in accessing a larger sample size. Several women declined to participate, citing concerns over privacy or disinterest in discussing their business activities. Additionally, conducting interviews in-person posed logistical challenges due to the unstable economic and political situation in Syria. However, the depth of data gathered from the 63 participants provided sufficient insights into the factors affecting women entrepreneurs, and the theoretical saturation principle was met.

## 8. Implications

The following section would be including suggested implications for Policy makers, MFIs, Women Entrepreneurs and International organization, implications if applied can help addressing many of the challenges highlighted in this dissertation.

### 1. Suggested Implications for Policy makers:

**Designed Policies for Female Entrepreneurs:** International organizations and Governments should take gender-sensitive policies more into consideration, which can serve in addressing the faced challenges by women entrepreneurs summarized in societal barriers overcoming, household responsibilities balancing and finance accessing.

**Regulated Framework for Microfinance Institutions:** In order to ensure an effective utilization for loans provided directed to entrepreneurship rather than consumption, a strong regulatory oversight should be implemented by MFIs. This includes monitoring process over the usage, regulating interest rates and loans distributing guidelines setting.

**Educational and Training promotions:** Entrepreneurial education and financial literacy should be emphasized more by policies, mainly for women in gender-mixed related issues, this will help women to effectively boost their ability to leverage microfinance loans and get the best out of the loans.

### 2. Suggested implications for Microfinance Institutions:

Flexible issued loans designed to better fit the needs of females' entrepreneurs should be created by MFIs such as combined products which include a loan and a training accompanied or higher amounts with less collateral or even longer repayment periods. MFIs should also focus on initiating trainings which is able to reach capacity building initiatives, to ensure the availability of the needed skills to grow and manage their businesses.

Ensuring resilience against currency fluctuations and inflation should be reached by adopting strategies where MFIs must prioritize especially in conflicted areas like Syria. For example, offering loans in foreign stable currencies or fixing the amounts at least in comparison to other foreign currencies ensuring not losing the value of the money.

### 3. Suggested Implications for Social Enterprises:

There is a room for other social enterprises to be an intermediary between women entrepreneurs and MFIs, helping to fill this gap in a form of institutional support helping them to find mentorship, enhance their networks and access better markets

The effectiveness of social enterprises is increasing when ensuring that their services provided are socially and culturally appropriate to the targeted population they are serving, and this can happen by empowering these local communities. Social enterprises in conflict-affected areas like Syria's case should consider the prioritization of social cohesion and economic recovery initiatives, which will lead to helping female entrepreneurs building again their communities and lives.

### 4. Suggested Implication for Gender Equality and Women Empowerment:

Current gender norms should be transformed, gender-based discriminations must be reduced and perceptions towards women have to change, since those challenges were the main cause of hardship for women to seek entrepreneurship and be more independent. This can be achievable through educational programs and advocacy campaigns. Women should be encouraged to view entrepreneurship as an achievable path to be financially independent, therefore a transformation will be noticed on their roles within their communities and families due to social empowerment.

### 5. Suggested Implications for Economic Uplift in Syria:

Diversified economic strategies empowering women in small-scale manufacturing sectors as well as service and agriculture with the help of the most recent technologies can help in reducing the dependency of the Syrian economy on traditional industries. There is a high potential of reducing poverty mainly in conflicted and rural areas in Syria if the barriers facing women were addressed properly by giving access to designed microfinance loans which prioritize achieving a social aim over collecting high interest rates.

### 6. Suggested Implications for International Organizations:

Addressing unique challenges and needs of women entrepreneurs especially in conflict-affected areas can be done by creating well-designed interventions summarized from this dissertation's findings. Mobile banking and digital platforms are key players when we talk about the future of microfinance and the freedom of capital access, underserved and remote areas would be the highest beneficiaries since the microfinance products would be more efficient and accessible, basically their whole experience would be enhanced.

By performing these implications, not only those challenges faced by female entrepreneurs would be highlighted but also a sustainable and inclusive development in Syria would be fostered by actioning those solutions.

## SUMMARY

Women in Syria are facing obstacles finding their own financial independency, planning their own future and reaching higher levels of self-confidence. Starting from handling family and social responsibility, reaching lower education possibilities, reaching higher salary at workplaces compared to men which can affect their life ways of livings and their loan seeking abilities when applying to any financial capital.

A last resort when addressing needs, tackling them, and creating a solution to benefit out of them during current circumstances can be entrepreneurship. However, being an entrepreneur can't happen without having basic needs as business skills, networks and most importantly capital.

Microfinance Institutions represent the provider for this financial capital, as their primary goal as a social enterprise is to serve a social benefit such as fighting poverty and address inequalities. Funding women should be a priority for those institutions. Unfortunately, the current practices applied by microfinance institutions and the provided products don't represent a solution for women since it is not well-tailored and structured towards their needs.

In this thesis, the needs and essentials for women entrepreneurship were clarified and explained listing their motivations such as necessity rather than opportunity, which should be put into consideration when dealing with women related policies in the future.

Loans provided by MFIs are not adjusted to the current inflation rate in Syria, representing an increase in the offered loans' amounts meanwhile the real amounts did not increase over the studied period and that uptick was nothing more than a bubble.

Additionally, the offered loans showed higher amounts for men compared to women, due to the low base salary of women, their inability to seek new industries, lack of education in some cases and their marital status which can hinder in case of married women.

Unfortunately provided loans to women were mostly used in terms of consumption and filling their day-to-day needs. They did not get involved in general-income activities as men showed a higher participation in, giving them the opportunity to start, maintain or even further build a better businesses compared to women who only consumed the loans and had hardships paying back the loans.

Syrian women have a high potential to be financially independent, a realistic point of view which can be achieved by providing more capital access opportunities, well-structured entrepreneurial or managerial trainings and creating more inclusive environment for women sch as supporting women empowerment institutions which can take provide mentorship and designed trainings to leverage their potential.

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Registry number: DEENK/156/2025.PL  
Subject: PhD Publication List

Candidate: Almhamad Gafar  
Doctoral School: Doctoral School of Management and Business  
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### List of publications related to the dissertation

#### Articles, studies (5)

1. **Gafar, A.**, Lakatos, V.: An overview of non-profit organizations across Hungary.  
*Controller Info. "Accepted by Publisher"* (1), 1-22, 2025. ISSN: 2063-9309.
2. **Gafar, A.**: The factors affecting women entrepreneurship in developing countries. How far are we from supporting women entrepreneurship?  
*Acta Academiae Beregsasiensis. Economics.* 4, 591-604, 2023. ISSN: 2786-6734.  
DOI: <http://dx.doi.org/10.58423/2786-6742/2023-4-591-604>
3. **Gafar, A.**, Lakatos, V.: The role of female entrepreneurship in developing countries (syrian women entrepreneurship as a lifestyle).  
*Analele Universitatii din Oradea. Stiinte economice = Annals of University of Oradea. Economic science.* 32 (1), 417-429, 2023. ISSN: 1222-569X.  
DOI: [http://dx.doi.org/10.47535/1991AUOES32\(1\)031](http://dx.doi.org/10.47535/1991AUOES32(1)031)
4. **Gafar, A.**, Lakatos, V., Alkerdi, A., Alkhatib, L.: Social Entrepreneurship Research In The Middle East: Systematic Review.  
*CrossCultural Management Journal.* 24 (1), 7-15, 2022. ISSN: 2286-0452.
5. **Gafar, A.**: The role of entrepreneurship in achieving sustainable development goals (an example from Eastern European Countries).  
*The Annals of the University of Oradea. Economic Sciences.* 31 (1), 291-300, 2022. ISSN: 1222-569X.  
DOI: [http://dx.doi.org/10.47535/1991AUOES31\(1\)028](http://dx.doi.org/10.47535/1991AUOES31(1)028)





### List of other publications

Articles, studies (1)

6. Harsányi, E., Bashir, B., **Gafar, A.**, Hijazi, O., Maze, M., Elbeltagi, A., Alsalman, A., Enaruvbe, G. O., Mohammed, S., Szabó, S.: GHGs Emission from the Agricultural Sector within EU-28: A Multivariate Analysis Approach.  
*Energies*. 14 (20), 1-18, 2021. ISSN: 1996-1073.  
DOI: <http://dx.doi.org/10.3390/en14206495>  
IF: 3.252

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The Candidate's publication data submitted to the Tudóstér have been validated by DEENK on the basis of the Journal Citation Report (Impact Factor) database.

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