

## To What Extent Micro Lending Institution's Policy Help to Improve Income and Employment Prospects of Women Startups: Case Study from Jordan

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### Abstract

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Our descriptive correlational study used Regression analysis to investigate the impact of microenterprises offered by lending institutions on the level of income and job creation of women startups in Jordan. Our independent variables will be policies practiced in lending institutions (lending, profitability, monitoring and following up and non-financial policy). The study used a mixed-method combining between quantitative and qualitative data through questionnaire survey, in-depth interview, published and unpublished reports. A sample of 385 women loan recipients was selected randomly from the leading microlending institutions in Jordan. Our findings indicate a positive impact for lending, monitoring and following up and non-financial policy on borrower's level of income. It has not been shown any effect of profitability policy on the level of income. We also find that profitability, monitoring and following up and non-financial policy have an impact on job creation. However, it has not been shown any effect of lending policy on job creation. Terms and conditions of loans contribute to providing income security to participants but do not contribute to creating employment opportunities. The current incentive for financial sustainability can trigger mission drift.

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**Keyword:** women's empowerment, microfinance policy, income, job creation, Jordan

JEL Classification: D63, L53, P36, J64, O53

### 1. Introduction

Jordan is an upper middle-income country with limited natural resources and high reliance on foreign assistance. Increasing investment, creating jobs and reducing poverty are among the most economic challenges that the government of Jordan has encountered (EU, 2015). Women make up half of Jordan's population; however, their contribution to national income is far below their potential. The potential gains from greater inclusion of women in the economy are significant: closing the gender gap in Jordan could boost GDP by about 45 % (IMF, 2017). Moreover, women in Jordan make up 70% of those living in poverty. They get lower wages than men, have little control over property, and often face the double burden of being a homemaker and the primary earner for their family (Matt, 2018). Unemployment rate between women is still high as it reached 24.1% in 2016, self-employed decreased from 2.5% in 2005 to 1.7% in 2015. In 2016, self-employment share increased by 0.1 percentage points. Business owners share decreased from 1.6% in 2005 to 1.3% in 2015. A trade-off between informality and self-employment is existed due to increasing the number of home-based business (Global Entrepreneurship Monitor, SME's Observatory Report, 2017)

Entrepreneurship can offer new opportunities for women of Jordan to support their families; especially women prefer independent work as opposed to employment in government sectors of the economy (Al-zoubi, 2014). However, Micro, Small and Medium-sized Enterprises (MSMEs) in Jordan were recognized as the future engine of economic growth and promoting equitable development. The significant advantage of the sector was its employment potential at low capital cost (UNDP, Jordan Poverty National Strategy, 2013).

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A study by (Schiff, Schmidt, and Troncoso, 2015) confirmed that microcredit in Jordan brings additional income for borrowers; over 90% of the respondents witnessed an increase of around 50% on their original income, after starting their businesses. However, returns may not be enough to maintain a liveable income, with which to support a family and help to repay the loan, eventually resulting in indebtedness and extensive poverty. Being in the low value-added categories implies that only marginal returns are realized from the enterprises. Even though successful enterprises generate a sustainable income, but it remains stagnant in terms of revenues generated, most of these enterprises fail to produce over JD 20 thousand in their annual income.

In the meantime, many low-income women in Jordan live on the income generated from businesses funded by microcredit (Seibel and Almeyda 2001). Women were the largest beneficiaries of these loans, as they made up 81% of employment opportunities generated through these micro-projects; however, microenterprises in Jordan are low contributors to employment opportunities (Ministry of Planning and International Cooperation, United Nations Development Programme, 2011).

Previous findings indicate that the effect of microfinance on female empowerment remains unclear. Especially studies in developing countries are limited (Menkhoff et al., 2011). This study will inform stakeholders and international agencies how far the Millennium Development Goals have been achieved (Buvinic et al., 2008). Also, understand progress toward women's empowerment through improving income and employment. Besides, the outcome of this study will help to complement information on decision-making in critical domains, including consumption, savings, investment, and production.

## 2. Background of Research

As we know unemployment and poverty is a global issue, Jeffrey Sachs identified three degrees of poverty: extreme poverty, moderate poverty, and relative poverty. Extreme poverty means that households cannot meet basic needs for survival, moderate poverty refers to conditions in which basic needs are met just barely, relative poverty is generally construed as a household income level below a given proportion of average national income. Millennium Development Goal 5 promote gender equality and women empowerment; Jeffrey Sachs believes that investment in human capital is a solution to end poverty, thereby enabling the poor to be more productive and putting them on the path to self-sustain growth instead of direct financial assistance (Easterly and Sachs, 2006)

In developing economies, women's role in alleviating poverty through enterprise has long been recognized (premchander, 2003). In the meantime microfinance is considered as a tool to foster economic growth, reduce poverty, and generate employment (Piot-Lepetit and Nzongang, 2014). The main dimensions of women empowerment are economic decision making, household decision making, freedom of movement, and ownership of property, political and social awareness (Mustafa and Ismailov, 2008; Rahman and Naoroze, 2007; Pitt et al., 2006; Hashemi et al., 1996). A critical route through which women's access to credit translated into empowerment was via their enhanced contribution to family income (Fletschner, 2008). A popular variable was used to measure the economic empowerment is the changes in income, levels, and patterns of expenditure and consumption (Barnes, 1996 as cited in Hulme and Arun, 2009).

United Nations has enlisted microfinance as one of the surest ways of meeting its MDGs if it is carefully implemented through sustainable institutions (Mutengezanwa et al., 201). However, microcredit is not appropriate for the destitute and hungry who have no reliable income or means of repayment (Mazher and Ross-Innerarity, 2010). What microfinance does is to allow low-income households to better cope with risk and to enjoy higher flexibility in how they earn and spend money on what is needed. Thus; microcredit is a useful financial tool but not a powerful anti-poverty (Srncac and Drašarová, 2016).

While many microfinance programs seen as the most robust approach to bring the poor into the market economy, it failed to reach out to the very poor, defining the characteristics of the poorest of the poor include : a complete lack of assets or property ,no access to formal education ,limited skills ,poor health status and social exclusion at the community level ,the reason for why the poorest are excluded from the most development program can be found in the rigid design and institutionalized practices of many development programs which are based on strict repayment dates and rigorous savings scheme, additional barriers are related to microfinance staff and borrowers themselves ,staff discourage poor women from participation because of concern that they may not pay on time (Mair and Marti, 2009)

In the literature it was referred to the paradoxical results of the microfinance as the "impact-paradox" (Garikipat, 2008); some findings support the view that microfinance has an impact on poverty reduction while others claim that there is a negative impact. Many reasons can be analyzed to justify the paradoxes conclusion as following: the purpose of micro-entrepreneurial woman's business is not to grow, capitalize, or create employment. Instead, the small business allows the woman to invest her earning in other asset-building activities such as children's education, housing maintaining, better nutrition, dealing with emergencies (Hiatt and Woodworth, 2006), the other reason is related to income from microenterprise is often low because most poor entrepreneurs start with small working capital and enter sectors with low barriers (Bates, 1997). Finally, engaging women in small-scale, informal agricultural, manufacturing, service, and petty trade activities do not yield sufficient income to raise women out of poverty or to make a marginal improvement on productivity or revenue. Besides, earnings generated from establishing the enterprise were used to make the interest payments on the loan, rather than reinvested in the business (Berger, 1989)

An analysis for the microfinance program in India by (Swamy, 2014) reveals that there is a substantial impact on women in terms of income growth; the compound annual growth rate was 8.40 % for women, against 3.97% for men, and in case of the impact on living standard the change on income growth was 4.35% for women against 1.76% for men. According to (Van Rooyen et al., 2012) microfinance has been proved to have an impact on borrower's income, savings, expenditure, and accumulation of assets. Contradictory to Koubâa (2014) who claim that microfinance programs fail to reach the poorest, generally have a limited effect on income. Robinson (2002) as cited in Gangadhar (2015) indicates that microfinance helps poor people to increase, protect and diversify their income, as well as to accumulate assets, reducing their vulnerability to income and consumption shocks. Microfinance should be directed for investment purposes only, not for consumption smoothing to meet short term household expenditure on food; however, the main impact of microenterprise programs in both the first and third worlds is not to increase income but rather to smooth income in the face of shocks (Taub, 1998; Sherraden et al., 1998; Morduch 1998 as cited in Schreiner, 2011)

A study in Central America by (Hiatt and Woodworth, 2006) revealed that there is an increase for the daily earning for clients who participated in their village bank for more than a year. Participating in microfinance programs increases women's purchasing power of necessities (Shrestha, 1998 as cited in Addae, 2015). Further, studies in 6 countries (Mongolia, Mexico, Morocco, India, Tanzania, and Bosnia and Herzegovina) found that participation in microfinance program leads to increase in business investment, no substantial increase in income; individuals had more choice of the type of work (Augsburg et al. 2012).

Further, microenterprises account for 60–80% of jobs in the third world and 8-20% in the United States (Schreiner, 2001). Accessed to credit through microfinance leads to more flexibility for households in terms of occupational choice (wage labor versus working in a family business) and consumption choices (Odell, 2015). According to (Idrusa et al., 2013) the only way to incentivize women's self-employment is to widen access to business start-up, growth training, and advice. Hamilton (2000) found that self-employment earnings differential reflects entrepreneurs' willingness to sacrifice substantial earnings in exchange for the non-financial benefits of owning a business. From the other hand providing a networking opportunity for entrepreneurs can help them to grow the business and generate revenue (Dumas, 2001)

A study in Sri Lanka shows that mean returns to capital are zero among female-owned microenterprises, while returns to the capital for male-owned enterprises exceed 9% per month, these differences in gains attributed to women's agglomeration in low-return industries. However, jobs in high-value agriculture are often low paid, informal, and insecure and do not provide sufficient income for women to escape poverty.

A study in Uganda and Malawi found that providing networking opportunities, training in group leadership, conflict management, gender issues, and HIV/AIDS awareness lead to an increase in women's incomes (de Mel et al., 2007; Kaaria, Njuki, Abenakyo, Delve and Sanginga, 2008; Sourcebook, 2008 as cited in Quisumbing and Pandolfelli, 2010). In many agrarian societies, seasonality is inherent in people's way of life. Household incomes vary by season, often quite sharply. Household consumption levels also vary seasonally; during the pre-harvest period, rural households often lack adequate employment and income.

The farm sector, which is tied closely to farm activities, is not large enough to employ the rural unemployed, consisting mainly of agricultural laborers and marginal farmers (Chambers et al., 1981; Dercon and Krishnan, 2000; Paxson, 1993; Sahn, 1989 as cited in Haasn, 2016)

From the other hand (Mosly, 2001) found a positive impact of microfinance on income and asset of the household. A study in Bangladesh concluded that microcredit lifts 5% of borrowers out of poverty each year, while aggregate microfinance reduces the moderate poverty rate by one percentage point per year equivalent to 40% of the total decline in Bangladesh over the 1990s; extreme poverty is reduced by 1.3 percentage points per year (Khandar, 1998; Bateman, 2011 as cited in Mazumder and Wencong, 2015). Research by (Kevane and Wydick, 2001) states that microcredit program can generate employment and increase household income, it was found that the growth of job in informal sector created by younger men and older women, while the marginal improvement in the economic wellbeing reflected on children education and household welfare. Assuming a direct correlation between income level and the loan size demanded (Gobezie, 2005) findings suggest that larger loans increase income, but less innovative business practice might threaten such income. Loans provided by the MFIs in Bangladesh are expanding the scope for micro-entrepreneurs to increase revenue through replicating a similar business model, which is not conducive to sustainable business growth because evidence shows that related businesses in the same industry produce diminishing returns to income (Ferdousi, 2015).

The success of microfinance depends on tailored loans directed to specific clients (Bhatt and Tang, 2001 as cited in Brue and Woller, 2004). From the other hand (Mokhtar et al., 2009) found a relation between loan repayment problems and individual borrower's characteristics, business type and lending system (grace periods, mode of repayment, repayment amount); weekly loan repayments and the two weeks grace period cause problems for borrowers in repaying their loans. Also (Field and Pande, 2008) states that frequent collection of loan instalments increases the efficiency of repayment. Theories of asymmetric information show that collateralization reduces ex-ante problems of adverse selection and moral hazard. Therefore, lenders can enforce collateral-free loans through third-party guarantees and relationship lending by introducing collateral substitutes such as lowering loan size or loan duration and increasing the interest rate, it's necessary to collateralized against credit risk because borrowers lack adequate assets to pledge as collateral, in addition to information asymmetry, moral hazard and weak enforcement in emerging loan markets (Menkhoff et al., 2011).

Often, interest rates in microfinance are higher than mainstream banking due to the nature of the financial product, with high operational costs associated with smaller loans. According to (Al-Azzam and Mimouna, 2017) microfinance seeking survival on account of the poor through imposing excessive interest rate. (Strøm et al., 2014) Claim that the little bargaining power of the poor and the evolution of commercialization movement contribute to undermining the social mission of microfinance. According to (Strøm et al.) in 2004 about 40 countries introduced ceilings on the interest rate to protect poor borrowers from exorbitant interest rates. MFIs impose new charges to cover their losses and to fund their operation (Zamor, 2017). When MFI's focus on making profits by serving better off clients at the expense of poorer customers to fulfill capital adequacy requirements a tradeoff exists between financial –sustainability and social mission of MFI's, we refer to this trade-off "mission drift" (Littlefield et al., 2003)

For-profit MFI's have a more massive incentive to make money; they often charge higher interest rates and can become stereotypical loan sharks. Loan sharks are microfinance institutions that go into impoverished areas and charge significantly higher interest rates because there are no other microfinance institutions in the area (Lippincott, 2016). In the meantime, a stronger for-profit orientation corresponds with higher effective interest rates for MFI clients. However, these effects do not lead to higher profitability and therefore sustainability because these variables are also associated with increases in the major elements of an MFI's costs (Robert, 2013). Further profits of MFI should not take precedence over sustainability, which is determined not by the amount of credit available to a woman, but by the resources, the women can leverage to improve her life (Estee, 2014, August 20)

Integration microfinance needs with other development service are assumed to have an impact on poverty and business growth (Gulli, 1998). The recent innovations in microfinance include loan package with other financial product such as life, health, and crop insurance (Geetha and Meyer, 2005). The bundle of products (financial education and health programs) which associated to credit can also help to protect borrowers from future shocks and foster investment in productive activities (Banerjee et al., 2013 as cited in Bauchet et al. 2018). More importantly, it can be an incentive for capital accumulation for households in less developed countries (McKernan, 2002).

Clients feel that they have little choice but to accept the loan conditions associated with each of the lender types. Consequently, the selection is made not based on the actual terms of the loan, but rather, the characteristics highlighted in the institutional characteristics factor (Webb, Kristiani and Olaru, 2009)

### 3. Methods

#### 3.1 Research Design

In our study, we used both quantitative and qualitative data collection methods through a questionnaire survey, in-depth interviews with selected managers and executives in the concerned institutions. According to (Easterby et al., 2004) a proper evaluation entails combining of both quantitative and qualitative approaches to data collection and analysis since the two methods complement each other. Mixing two approaches provides a quantified result of the microenterprise schemes impact and gives a rich explanation about the causality of intervention factors and its impact. The objective in triangulation is to assess potential biases in particular methods of data collection. For example, in the case of data method triangulation, estimates of household income obtained from direct questions may tend to underestimate income either because respondents do not wish to admit illegal sources of income, or because the respondent may forget to report individual sources. Some variables which will impact the program outcomes are not directly measurable. It is necessary to identify methods whether qualitative or quantitative that will facilitate the estimation of a proxy variable to capture these effects (Ezemenari et al., 1999). John Maynard Keynes offered new thinking on income and employment theory with the publication of *General Theory of Employment, Interest, and Money* (1936). Building on his approach, Keynesians have stressed the relationship between income, output, and expenditure. Since transactions are two-sided—in that one person's income is another person's expenditure (Encyclopaedia Britannica editors (1998, July 209)

#### 3.2 Study Setting and Sample Characteristics

We conducted the field research in three regions of Jordan (north, central, and south). Participants were chosen from the 46962 women loan recipient from the leading financial service providers in Jordan (Development and Employment Fund, Agricultural Credit Organization and Micro Fund for Women), we choose those institutions because they are among the oldest lending institutions in Jordan and due to the significant role they played compare with other actors in the market in terms of their client base and market share. A sample of 385 participants was taken either married or unmarried, with age groups from 18-65 years from all educational level (illiterate, preparatory, primary, secondary, diploma, higher education), across regions of Jordan during the period (2015-2016). We choose this time frame because the length of time relates directly to the outcome measures, according to (Karlan and Goldberg, 2011) an intermediate outcome is observed within six months to one year whereas the working capital or fixed assets in the business may be observable in a shorter time. While profits and employment may take longer and require one to two years, or more, businesses can grow sufficiently to observe such impacts. We requested data for a loans ceiling up to 20000 JOD<sup>2</sup> regardless, the sector of the enterprise.

#### 3.3 Sampling Procedure

Secondary data were requested by conducting a personal visit to the concerned institutions and ask them to access their internal data source, program records, and documents. The program personnel compiles some data, these records kept in their management information system (MIS) and some on paper-based records. Data identify the number and characteristics of women's client served, the type of loan product they received (development, startup, retired), loan size, project type (home-based, licensed, unlicensed), number of clients served according to the area (Amman, Zara, Mafraq, Irbid, Madaba, Jerash, Ma'an, Madaba, Ajloun, Aqaba, Ramtha, Karak, Tafelah, Gour), sector of activity (Industrial, commercial, service, agricultural), starting date of establishing the enterprise, address of the enterprise, address of the borrower and mobile number. We contacted participants to fill out the questionnaire in their homes, enterprise location and sometimes in the branch location.

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<sup>2</sup>The currency of Jordan, on 12 May 2019 (1 JOD = 1.41044 USD). According to the Central bank of Jordan, a loan up to 20000 JOD is considered a microloan (Central Bank of Jordan, 2018)

We aggregate the number of loan recipients according to three regions (north, central, and south). According to Uma Sekeran, Roger Bougie (2010), the survey system ignores the population size when it is "large" or unknown. Population size is only likely to be a factor when we work with a relatively small and known group of people (e.g., members of the association). A simple random sampling procedure was used to select 385 participants across three regions of Jordan as follows: 110 from the north region, 168 from the central region and 107 from the south region.

The total number of valid questionnaires that we received is 257 distributed according to the region as follows: 98 from the central region, 79 from the north region and 80 from the south region. Our sample is over-representative in the central region while the sample is under-representative in the north and south regions considering the following reasons: 1) We exclude incomplete questionnaires with missing values from our analysis, 2) We also exclude consuming loan recipients because our study is addressed participants who involved in productive activities, 3) We considered the demographic differences across different regions of Jordan, hence population density and enterprises agglomeration is higher in the central region than north and south region respectively.

### 3.4 Data Collection Methods

Data were collected using the following methods: 1) Consultation of the program documents and registries, Annual reports, reports from international organizations and different documents issued by the government of Jordan related to microfinance sector were reviewed and analyzed, 2) Key informants interviews with 257 borrowers, in their respective house or enterprise location using closed-ended questions, female's borrowers graded answers to questions on their involvement in various family decisions and economic situation. 3) A number of 10 in-depth interviews conducted with microcredit experts (executive managers, branch managers, and program staff).

#### 3.4.1 Hypotheses:

In our study, we test two hypotheses relating to women start-ups wellbeing as a result of their participation in the credit program. Assuming that policies practiced by the micro-lending institutions contribute to an increasing level of income and job creation of participants as following:

**H<sub>1</sub>:** There is a statistically significant impact of the policies (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in the level of income of women entrepreneurs

**H<sub>2</sub>:** There is a statistically significant impact of the policies (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in job creation for women entrepreneurs

#### 3.4.2 Research Instrument

##### 3.4.3 Instrument

The data were collected through a well-structured questionnaire and an unstructured interview. The questionnaire has been formulated from reviewing and analyzing the literature to measure the impact of lending under the microfinance program on participants level of income and job creation. All the questions were closed-ended based on Likert five points scale (1=Disagree strongly, 2= Disagree, 3= Neutral, 4=Agree, and 5= Agree strongly) which will measure the high and low dimension of our dependent and independent variables. The questionnaire consists of the following criteria:

**1. Demographic and socio-economic information about female borrower's:** respondents were asked closed-ended questions about (age, marital status, level of income, number of households members, place of residence, other sources of income they have to separate it from the one they get from microcredit related activities,...etc.).

**2. Microlending institution's policy:** This dimension consist of the following variables:

**2.1 Lending policy:** This criterion consists of 10 items. Respondents ranked their responses based on a Likert scale, they were asked if loans provided on diversified sectors, different age groups, customize loan size, and whether lending policies are gender-biased, focus on alleviating poverty and unemployment, also they were asked whether lending is based on economic and social studies with flexible grace periods and whether the staff involved in the lending process are qualified and received the appropriate training.

**2.2 Profitability policy:** This criterion consists of 10 items. Respondents were asked if interest rate incurred on delivered loans is high, or collaterals are required, and if loans can be rescheduled in case of defaults, they were also asked if the institution uses efficient collection methods with focus on installment payment rather than tracking

enterprise success , and whether it focuses on accessing different regions to ensure profitability , if the institution invest revenues in profitable aspects, and if the client's property can be confiscated in case of inability to repay the loan .

**2.3 Monitoring and Following- up policy:** This criterion consists of 8 items. Respondents ranked their responses on questions like if the institution follow up project's progress with a focus on profit yield, the institution conduct field visit to make sure that the enterprise exists, the institution consider the challenges faced by clients during implementation of the business, the institution provides consulting services in case of low enterprise` s revenue, the client can renew the loan in case of enterprise success, there is a team responsible for the monitoring and tracking the enterprise on a regular basis , the institution facilitate networking opportunities between entrepreneur women and stakeholders and whether the institutions have accountability policy in case the client disbursed the loan for purposes other than those prescribed in the loan agreement.

**2.4 Non –Credit Product policy:** This criterion consists of 8 items. Respondents ranked their responses on questions such as whether the institution enhancing entrepreneurial spirit and self-reliance, whether it helps to facilitate connecting them to marketing channels through organizing exhibitions and whether it helps them to prepare feasibility studies when the business is established, also they were asked if the institution provides consultancy service to choose the suitable project and if it provides a quality assurance certificate for entrepreneurial projects, if the institution offers insurance on clients life or their business in case of unexpected shocks. In addition to questions related to awareness increasing and providing business training. Finally, they were asked if the institution offers educational grants to clients and their families to help understand if the institution supports clients and their households socially

**3. Economic Criteria (dependent variable):** included improvement of income and job creation. We used legitimate poverty indicators that have been established by global institutions such as the United Nations Development program. It was found that the poor usually do not know precisely how much they earn, but they do know how much they spend in a day, a week, or a month (United Nation Population Fund, 2002). Expenditure per day was used to reflect how much money the poor earn; the impact will be captured by examining the effect on improving the income using a set of indicators: creating revenue through the project, increasing expenditure, achieving financial self-sufficiency, increasing investment and support the family financially. The second outcome variable is employability; we examined the employability potential of microenterprise schemes, especially in remote areas. Respondents ranked their responses whether the enterprises contributed to increasing the number of employees based on the success of the enterprise, if they hired some staff to promote their products and if they focus on hiring employees who are university degree holders and whether they recruit employees from the remote area.

### Validity and Reliability

To test the questionnaire for clarity and to provide a coherent research questionnaire, a macro review that covers all the research constructs was accurately performed by academic reviewers from experts and academician in Management, Sociology and Economy, the questionnaire was submitted to several reviewers, to take their opinions, to verify the sincerity of its paragraphs, re-wording of some paragraph, and make the required modifications between the content of resolution in paragraph. The reliability coefficient for a pilot study of the beneficiaries (n=40) ranged between (0.70-0.86), and reliability coefficient for a sample of the survey (n=257) ranged between (0.760 - 891) as shown in Table (1).

**Table (1): Cronbach’s alpha for the study fields**

<i>Variables</i>	<i>Statements</i>	<i>Cronbach Alpha n=40</i>	<i>Cronbach Alpha n=257</i>
Lending policy	1-10	0.70	0.811
Profitability policy	1-10	0.72	0.755
Monitoring and following up policy	1-9	0.78	0.828
Non-financial products policy	1-9	0.83	0.845
Improving income	1-6	0.80	0.854
Job creation	1-5	0.70	0.855

The questions of the in-depth interview were designed to reflect the themes of the research; these questions focus on the impact of microenterprise schemes on poverty alleviation and mitigate unemployment, and to what extent microenterprise schemes contribute to empowering women economically and socially, if there are gender-based policies, impact of credit terms offered by institutions on women empowerment, if the institution's profitability has adverse effect on outreach and social mission, and level of success of the program.

**4. Analysis and Measurement**

We used descriptive analysis and Regression analysis to analyze the data. We transformed Likert scale data into normally distributed data. As respondents had given their responses to each statement on a five-point scale. Each participant responds on every item on the ordinal measure with varying degree of intensity. We code each response category using an integer number often by using the scale 1-5; this indicates the minimum degree of agreement and 100% the maximum degree (Gil and González-Rodríguez, 2012). The interview transcript was also reviewed and coded then codes developed to themes. Finally, all the themes represented in a thematic chart to reflect underlying themes, organizing themes, and global themes. Qualitative responses were aggregated and presented in quantitative data. The research type scale included five Likert scales as follows:

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Relative importance, assigned due to:

$$\text{Class Interval} = \frac{5 - 1}{3} = \frac{4}{3} = 1.33$$

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- The Low level from 1.00 – 2.33
- The Medium level from 2.34 – 3.67
- The High level from 3.68 – 5.00

**5. Result and Discussion**

In this section, we demonstrate the research results including the descriptive statistics, Regression analysis of the impact of policies practiced by microlending institutions on increasing income and job creation of women start-ups.

**5.1. Descriptive analysis of our survey**

We used the arithmetic mean, standard deviation, item importance and importance level for the independent variables as follows:

**5.1.1 Level of lending policy**

As shown in Table (2) the mean of this dimension (Lending policy), ranged between (4.09 – 3.62), where the whole dimension earned a total mean of (3.86), which is a level of high. Paragraph (8) (having qualified and well-trained staff) earned the highest mean reaching (4.09), with standard deviation (0.93), which is a level of high. Paragraph (10) (gender-based policies) came in the last place. It earned a mean of (3.62), and a standard deviation (1.01), which is a level of Medium. That mean lending policy was a high level in the microfinance institutions from beneficiaries perspective.

**Table (2) Arithmetic Mean, SD, Item Importance and the Importance level of lending policy from beneficiaries' perspectives in descending order.**

No	Statements	Mean	Std. Deviation	Item Importance	Importance Level
8	Having qualified and well-trained staff	4.09	0.93	1	High
2	Focus on alleviating poverty and unemployment	4.05	0.74	2	High
3	Quicker disbursed time process	3.95	0.92	3	High
4	More customized loan size	3.93	0.84	4	High
1	loans are provided on diversified sectors	3.90	0.84	5	High
9	Priority for lagging areas	3.78	0.96	6	High
5	Innovation and product diversification	3.77	0.93	7	High
7	Lending based on feasibility studies	3.74	0.92	8	High
6	Flexible grace periods	3.70	1.03	9	High
10	Gender-based polices	3.62	1.01	10	Medium
<b>Total</b>		<b>3.86</b>	<b>0.56</b>		<b>High</b>

### 5.1.2 Level of profitability policy

As shown in Table (3) the mean of this dimension (profitability policy), ranged between (3.67 – 2.93), where the whole dimension earned a total mean of (3.39), which is a level of Medium. Paragraph (9) (the client accountable legally in case of default) earned the highest mean reaching (3.67), with standard deviation (1.02), which is a level of Medium. Paragraph (1) (High-interest rate) came in the last place. It earned a mean of (2.93), and a standard deviation (1.18), which is a level of Medium. That means profitability policy was Medium level in the microfinance institutions from the beneficiaries' perspective.

**Table (3) Arithmetic Mean, SD, Item Importance and the Importance level of Profitability policy from beneficiaries' perspectives in descending order.**

No	Statements	Mean	Std. Deviation	Item Importance	Importance Level
9	The client accountable legally in case of default	3.67	1.02	1	Medium
8	Capital is recycled to the next wave of poor	3.53	1.01	2	Medium
4	Efficient collection methods	3.50	1.10	3	Medium
5	Collaterals are required	3.50	1.15	3	Medium
6	Expanding outreach for profitability purpose	3.49	1.05	5	Medium
10	Focus on payment of installment than enterprise sustainability	3.48	1.11	6	Medium
7	The institution invest revenues in profitable projects	3.33	1.01	7	Medium
3	Priority on projects with high yielding to ensure loan repayment	3.30	1.07	8	Medium
2	Rescheduling loans in case of loan default	3.12	1.10	9	Medium
1	High-interest rate	2.93	1.18	10	Medium
<b>Total</b>		3.39	0.60		Medium

### 5.1.3 Level of monitoring and following up policy

As shown in Table (4) the mean of this dimension (monitoring and following up policy), ranged between (3.82 – 3.12), where the whole dimension earned a total mean of (3.38), which is a level of Medium. Paragraph (5) (the client can renew the loan in case of enterprise's success) earned the highest mean reaching (3.82), with standard deviation (0.94), which is a level of high. Paragraph (8) (the institution facilitates marketing micro enterprises products) came in the last place.

**Table (4) Arithmetic Mean, SD, Item Importance and the Importance level of Monitoring and following up policy from beneficiaries' perspectives in descending order.**

No	Statements	Mean	Std. Deviation	Item Importance	Importance Level
5	the client can renew the loan in case of an enterprise's success	3.82	0.94	1	High
6	There is a team responsible for monitoring the enterprise's success regularly	3.61	1.12	2	Medium
3	the institution conduct field visit to make sure that the project is exist	3.50	1.07	3	Medium
7	The institution facilitates networking business owners with stakeholders to participate in local and global exhibitions	3.37	1.13	4	Medium
4	The institution provides guidance and counseling service	3.36	1.09	5	Medium
2	The institution considers the challenges clients faced while implementing the project	3.33	1.12	6	Medium
1	The Institution follows up enterprise's success with a focus on profit yield	3.19	1.17	7	Medium
9	There would be accountability policy if the client disbursed the loan for purposes other than those in the agreement	3.15	1.17	8	Medium
8	The institution facilitates the marketing of microenterprises products.	3.12	1.21	9	Medium
<b>Total</b>		3.38	0.72		Medium

It earned a mean of (3.12), and a standard deviation (1.21), which is a level of Medium. That means monitoring and following up policy was Medium level in the microfinance institutions from the beneficiaries' perspective.

#### 5.1.4 Level of Non-financial products policy

As shown in the table (5) the mean of this dimension (Non-financial products policy), ranged between (3.99 – 2.80), where the whole dimension earned a total mean of (3.23), which is a level of Medium. Paragraph (2) (enhancing females ability for investment to increase income) earned the highest mean reaching (3.99), with standard deviation (0.85), which is a level of high. Paragraph (8) (providing motivational awards (educational grants) came in the last place. It earned a mean of (2.80), and a standard deviation (1.18), which is a level of Medium. That mean Non-financial products policy was Medium level in the microfinance institutions from the beneficiaries' perspective.

**Table (5) Arithmetic Mean, SD, Item Importance and the Importance level of Non-financial products policy from beneficiaries' perspectives in descending order.**

No	Statements	Mean	Std. Deviation	Item Importance	Importance Level
2	Enhancing female's ability for investment to increase income	3.99	0.85	1	High
1	The institution enhance the entrepreneurial spirit and self-reliance of the client	3.94	1.02	2	High
3	Institutions experience to lead the clients to choose the type of enterprises	3.70	1.04	3	High
5	Providing training courses and awareness workshops	3.03	1.15	4	Medium
4	The institution offers quality assurance certificates for entrepreneurial projects (ISO, HACCP, Global GAP)	3.02	1.09	5	Medium
7	Providing life and Health Insurance	2.93	1.19	6	Medium
9	Advertising of microenterprises products	2.83	1.21	7	Medium
6	Providing insurance service on client's enterprises	2.81	1.19	8	Medium
8	Presenting motivational awards(educational grants )	2.80	1.18	9	Medium
<b>Total</b>		<b>3.23</b>	<b>0.74</b>		<b>Medium</b>

Table (6) show the level of all policies practiced at microfinance institutions in descending order from the beneficiaries' perspective. The mean of this dimensions (policies practiced at microfinance institutions), ranged between (3.86 – 3.23), where the whole policies earned a total mean of (3.46), which is a level of Medium. (Lending policy) Came in the first place and it's earned the highest mean reaching (3.86), with standard deviation (0.56), which is a level of high, the second was (Profitability policy), and it's earned mean of (3.39) and with standard deviation of (0.60), and it was in the Medium level, third policy was (monitoring and following up) and it's mean of (3.38) and standard deviation of (0.72) so it was in the Medium level, the last policy was (Non-financial products), it has mean of (3.23) and standard deviation of (0.74) and it was in the medium level. That mean the policies practiced at microfinance institutions was in the Medium level from the beneficiaries' perspective.

**Table (6) Arithmetic Mean, SD, Item Importance and the Importance level of policies at microfinance institutions in descending order.**

No	Dimension	Mean	Std. Deviation	Item Importance	Importance Level
1	Lending policy	3.86	0.56	1	High
2	Profitability policy	3.39	0.60	2	Medium
3	Monitoring and following up policy	3.38	0.72	3	Medium
4	Non-financial products policy	3.23	0.74	4	Medium
<b>Total</b>		<b>3.46</b>	<b>0.49</b>		<b>Medium</b>

We used the arithmetic mean, standard deviation, item importance and importance level for the independent variables as follows:

### 5.1.5 Level of improving income

As shown in the table (7) the mean of this dimension (improving income), ranged between (4.04 – 3.01), where the whole dimension earned a total mean of (3.63), which is a level of Medium. Paragraph (1) (the project contributes to creating income) received the highest mean reaching (4.04), with standard deviation (0.94), which is a level of high. That means improving income was at a Medium level from the beneficiaries perspective according to their access to microenterprise loans.

**Table (7) Arithmetic Mean, SD, Item Importance and the Importance level of improving income from beneficiaries' perspectives in descending order.**

<i>No</i>	<i>Statements</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Item Importance</i>	<i>Importance Level</i>
1	The project contributed to creating income	4.04	0.94	1	High
2	The project contributed to financial self-sufficiency	4.02	0.92	2	High
3	The borrower can buy what she needs without financial aid	3.96	0.94	3	High
5	The woman borrower can invest the revenue in expanding the enterprises	3.43	1.19	4	Medium
4	The borrower can support her family or friends financially	3.32	1.13	5	Medium
6	The borrower can spend the income in profitable projects	3.01	1.29	6	Medium
<b>Total</b>		3.63	0.82		<b>Medium</b>

### 5.1.6 Level of job creation

As shown in Table (8) the mean of this dimension (level of Job creation), ranged between (3.49 – 2.67), where the whole dimension earned a total mean of (3.00), which is a level of Medium. Paragraph (1) (the project contributed to the creation of employment opportunities) earned the highest mean reaching (3.49), with standard deviation (1.23), which is a level of Medium. Paragraph (5) (employment opportunities created by the projects is confined to university degree holders) came in the last place. It earned a mean of (2.67), and a standard deviation (1.23), which is a level of Medium. That mean job creation was in a Medium level from the beneficiaries perspective according to their access to microenterprise loans.

**Table (8) Arithmetic Mean, SD, Item Importance and the Importance level of job creation from beneficiaries' perspectives in descending order.**

<i>No</i>	<i>Statements</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Item Importance</i>	<i>Importance Level</i>
1	The project contributed to the creation of employment opportunities.	3.49	1.23	1	Medium
	The borrower needs an increase in the number of employees based on the success of the enterprise.	3.21	1.17	2	Medium
3	The woman borrower can recruit some staff for marketing her enterprise's products	2.91	1.16	3	Medium
4	I focus on hiring employees from remote areas.	2.74	1.23	4	Medium
5	Employment opportunities created by the project is confined to university degree holders	2.67	1.23	5	Medium
<b>Total</b>		3.00	0.96		<b>Medium</b>

## 5.2 Hypotheses test:

**H<sub>1</sub>:** There is a statistically significant impact of the policies (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in the level of income of women entrepreneurs'

To test this hypothesis we use the Stepwise Multiple Regression analysis to ensure the impact of (lending, financial, monitoring and following up, non-financial) of institutions providing microenterprise schemes in the level of income. As shown in table (9) the variables (lending, monitoring and following up and non-financial) have an impact on the level of income, reaching values (t) calculated (2.868, 2.840, 2.160), respectively, these values are significant at the level of significance ( $\alpha \leq 0.05$ ). It has not been shown any effect of (profitability policy) on the level of income, the value of (t) (0.052) and it is not significant at a level of significance ( $\alpha \leq 0.05$ ).

Table (9) Multiple Regression

<i>Policies</i>	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>T Calculated</i>	<i>Sig</i>
<b>Lending</b>	0.264	0.092	0.18	2.868	0.004
<b>Profitability</b>	0.004	0.078	0.003	0.052	0.959
<b>Monitoring and following up</b>	0.258	0.091	0.228	2.84	0.005
<b>Non-financial</b>	0.225	0.086	0.203	2.61	0.01

\*: Significant at the level of (0.05)

We use Stepwise Multiple Regression to determine the importance of each independent variable separately in contributing to the mathematical model that represents the impact of the (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in level of income, table (10) shows the order of entry of independent variables in the regression equation the variable monitoring and following up has occupied the first place with amount ( $R^2$ ) = (20.8%) with positive relationship and positive impact in level of income, while lending policy with monitoring and following up was positive impact ( $R^2$ ) = (24.1%) in level of income and non-financial products policy has positive effects with previous variables ( $R^2$ ) = (0.26.1), (VIF= 2.154, 1.297, 2.072)

And it's less than (10.00), and to Tolerance of (0.464, 0.771, 0.483) and it's more than (0.05), and this assures the acceptance of the hypothesis for these variables, and the rejection of hypothesis for profitability being insignificant variable.

Table (10) Stepwise Multiple Regression tests

<i>Order of entry of independent elements in the equation to predict</i>	<i>R</i>	<i>R<sup>2</sup></i>	<i>(F) Value</i>	<i>T Calculated</i>	<i>Sig</i>	<i>Multicollinearity</i>	
						<i>Tolerance</i>	<i>VIF</i>
<b>Monitoring and following up</b>	0.456	0.208	66.917	2.882	0.00*	.464	2.154
<b>Lending policy</b>	0.491	0.241	40.368	2.931	0.00*	.771	1.297
<b>Non-financial products policy</b>	0.511	0.261	29.810	2.615	0.00*	.483	2.072

We can explain this result that credit terms and the lending system, screening strategies, business training and insurance service provided by microlending institutions help to create new sources of income for women loan recipient. However; we do not know the level of increase in income, but we can provide evidence that the microenterprise schemes help beneficiaries not to fall into the trap of poverty and to achieve financial self – sufficiency. Our result supports the opinions reported through the in-depth interview by Ghada Al Fayez, Hamed Al Hawamdeh, Hassan Al Shawabkeh, Lama Zawati, Tareq Melham, Yaser Eid and Eyad Nino while contradicted with the findings by Bates, 1997; Banerjee et al., 2009. Our results also show that profitability incentives of the microlending institutions did not contribute to increasing the level of income, earning generated from establishing the business were used to make the interest payment and fees rather than reinvested in the industry. These results agree with (Berger, 1998). The focus on repayment performance of borrowers by using a strict collection policy is a priority for the microlending institution rather than focusing on screening loans. In addition to brutal and uncompromising in dealing with clients. Even though those institutions are registered as Non for profit making but their existing incentives and

practices inclined to make the profit to ensure sustainability, their profitability practices didn't contribute to increasing the income of participants, meaning that this situation is a Pareto optimal<sup>3</sup>.

**H<sub>2</sub>**: There is a statistically significant impact of the policies (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in job creation women entrepreneurs.

We use Stepwise Multiple Regression analysis to ensure the impact of (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in job creation. As shown in table (11) the variables (profitability, monitoring and following up and non-financial) have an impact on job creation, reaching values (t) calculated (-2.744, 4.313, 2.112), respectively, which is significant at the level of significance ( $\alpha \leq 0.05$ ), it has not been shown any effect of (lending policy) on job creation, amounted (t) (0.971) and it's not significant at level of significance ( $\alpha \leq 0.05$ ).

**Table (11) Stepwise Multiple Regression Test**

<i>Policies</i>	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>T Calculated</i>	<i>Sig</i>
<b>Lending</b>	.106	.109	.062	.971	.333
<b>Profitability</b>	-.254	.093	-.160	-2.744	.007*
<b>Monitoring and following up</b>	.464	.108	.351	4.313	.000*
<b>Non-financial</b>	.216	.102	.167	2.112	.036*

\*: Significant at the level of (0.05)

Stepwise Multiple Regression results showed the importance of each independent variable separately in contributing to the mathematical model that represents the impact of the (lending, profitability, monitoring and following up, non-financial) of institutions providing microenterprise schemes in job creation, table (12) shows that the order of entry of independent variables in the regression equation, the variable monitoring and following up has occupied the first place with amount ( $R^2$ ) =(20.3%) with positive relationship and positive impact in job creation, while profitability with monitoring and following up impact ( $R^2$ ) =(22.3%) in job creation and this variable has a negative relationship with job creation, non-financial have positive effects with previous variables ( $R^2$ ) = (23.9), (VIF= 2.097, 1.094, 2.024) and it's less than (10.00), and to Tolerance of (0.477, 0.914, 0.494) and it's more than (0.05), that assures the acceptance of hypothesis for these variables, and the rejection of hypothesis for lending policy being insignificant variable. That is mean the screening strategies, profitability practices and non-financial product policy such as business training and insurance service contribute to creating employment opportunities for women loan recipients. In this situation Non-zero game exist<sup>4</sup>; the employability potential of women entrepreneurs may result from the cross and multi borrowing which enable the entrepreneurs to sustain their business and to hire one or more employees. Also, willingness to sacrifice substantial earnings in exchange for the non-financial benefits of owning a business, this results agreeing with (Barton, 2000; Ministry of Planning and International Cooperation, United Nations Development Programme, 2011).

<sup>3</sup>Game theory Pareto optimal is a state of allocation of resources from which it is impossible to reallocate so as to make any one individual or preference criterion better off without making at least one individual or preference criterion worse off (Chinchuluun, A., Pardalos, P., Enkhbat, R., & Tseveendorj, I. (2010). Optimization and Optimal Control. New York, NY: Springer Science and Business Media, LLC.

<sup>4</sup>s Non zero game exist in situations in which one decision maker's gain (or loss) does not necessarily result in the other decision maker's loss (or gain); the winnings and losses of all players do not add up to Zero, and everyone can win (Osborne, Martin J. and Ariel Rubenstein (1994): A course in Game theory, Cambridge; MIT Press)

**Table (12): Stepwise Multiple Regression tests**

<i>Order of entry of independent elements in the equation to predict</i>	<i>R</i>	<i>R</i> <sup>2</sup>	<i>(F) Value</i>	<i>T Calculated</i>	<i>Sig</i>	<i>Multicollinearity</i>	
						<i>Tolerance</i>	<i>VIF</i>
<b>Monitoring and following up</b>	0.451	0.203	65.149	4.631	0.00*	0.477	2.097
<b>Profitability</b>	0.472	0.223	36.438	-2.613	0.00*	0.914	1.094
<b>Non-financial</b>	0.489	0.239	26.440	2.287	0.00*	0.494	2.024

\*: Significant at the level of (0.05)

Our results indicate that credit terms and the lending system did not contribute to creating employment opportunities, small loan size designed for small scale enterprises in the informal sector, did not help women entrepreneurs to be upscale their entrepreneurial activities in order to create employment. Besides, the earning generated from establishing the enterprise were not enough to hire more employees. Our results agreeing with opinions reported through the in-depth interview by Tareq Melham and contradicted with Ghada Al Fayez, Hamed Al Hawamdeh, Hassan Al Shawabkeh, Lama Zawati, Tareq Melham, Yaser Eid and Eyad Nino and Mahmoud Al Jarboua.

#### **Limitation of the study:**

Our evaluation questions were subjective since we could not access the exact income of beneficiaries because respondents did not tell about their income. We found difficulty in collecting the secondary data due to the lack of digitized data. In addition to resistance by Micro Fund for Women staff and lack of cooperation which extended the time required for data collection. Also, we face difficult to reach a lagging area, dealing with women entrepreneurs from conservative cultures. It was expensive and time-consuming to collect the required data.

#### **Conclusion**

This paper provides insight into microfinance intervention and policy change from one hand, and it has an important implication on women empowerment from the other side. The outcome of this paper come as a response for OECD recommendations that governments must seek more detailed data for better policy making and monitoring of progress to assess the impact of policies that support female employment and entrepreneurship – both at the national and international level (OECD, 2012). We accept the first hypothesis for the variables (lending, monitoring, non-financial) which have an impact on the level of income and reject the hypothesis for profitability variable which does not affect the level of income. We also accept the second hypothesis for the variables (monitoring, profitability, non-financial), which have an impact on job creation and reject the hypothesis for profitability variable.

Findings and analysis revealed the reasons behind the impact paradox of microcredit on women's entrepreneurs in Jordan. In the meantime, we could not say that there is mission drift since lending to women has helped them and their households to diversify their livelihoods and to reduce their vulnerability to shocks through creating new sources of income to be economically active. However, profitability practices of lending institutions should be reconsidered, current incentives toward financial sustainability through earning gained did not contribute to improve borrower's level of income but help to mitigate unemployment in Jordan. Financial sustainability of lending institution either MFI's or subsidized credit providers is determined not only by providing credit but by the extent to which women can make a change towards a better life. Thus, profitability should not be limited to the economic dimension; financial and social returns should be complementary to each other. Moreover, the lending system (loan size, repayment period, grace period, collaterals) help to increase the level of income of women loan recipient but it was not efficient enough to create employability, enterprises must be selected based on the extent to which women can thrive and upscale their activities to develop new economic opportunities.

Lending institutions should guide borrowers to choose the most suitable method of payment, and it must base on the borrower's revenue cycle. Governments should spur women's entrepreneurship by encouraging women farmers and entrepreneurs to enter high-return sectors through policies that support better access to finance and prohibit discrimination based on gender. Existing screening strategies and non-financial product offered by lending institutions enhance women's economic position. Thus, microloans must associate with proper business skills, financial education, and providing insurance product along with the financial products, besides, to the creation of the guarantee mechanisms to ensure the effective utilization of loan capital.

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