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DISCRIMINATORY PRACTICE IN MICROFINANCE: GENDER AND GLASS CEILING ON LOAN SIZE (CASE STUDY FROM JORDAN)

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Abstract

This paper uses One-way ANOVA test and descriptive statistics on database comprising 88 055 loan applications from a Micro Fund for Women (MFW) in Jordan for the period (2011-2017). We detect if borrowers with different characteristics e.g. years of formal education, gender, nationality) have different level of capabilities that lead to the difference in possibilities in the granted loan sizes. Our analysis finds out that there are no observable characteristics affect loan allocation. Variables such as gender, years of formal education, nationality found to have no significant effect on MFW disbursed loans. Moreover, MFW branch location has no significant effect on loan size. The outcome of this paper calls for further research to identify the most relevant factors affect loan size in microfinance industry in Jordan.

Key Words: *loan size, Gender-based lending, microcredit, ANOVA, Jordan*

JEL kód: B54, I2, L26, P3

Introduction:

Jordan Today

With a population of about 9 455 million people, and average annual population growth of 3. 186 % (WORLD BANK, 2018), Jordan is growing market in the Arab world (BETZ AND FREWER, 2016). The percentage of population of Jordan who are less than 15 years is 34.3%. The total area of Jordan is 89,342 km^2. The urban population represents 90.3% while the rural population represents 9.7%. The average household size is 4.8 persons and the percentage of illiteracy rate between populations over 15 years is 6.8% (DEPARTMENT OF STATISTICS, 2016).

According to the World Bank Jordan is classified as an upper middle income country; the poverty ratio was 14.4% in 2010, GNI per capita, PPP (current international dollars) was reported at 8,980 in 2016. Jordan's main challenge is to stimulate job generating growth, unemployment is very high averaged 13.17 % from 2005 until 2017, with a low female labour force participation rate in the total labour force reach only 7.7 % in 2016; wages and salaries have stagnated and in no way have kept up with the cost of living. Tight fiscal and monetary policies are expected to continue as Jordan works towards fiscal sustainability and a lower debt-to-GDP ratio. Syrian crisis has also placed immense strains on public services and burden the economy of Jordan (WORLD BANK, 2018). Jordan's main economic indicators were compared to a number of countries with comparable characteristics, as shown in the table below:

Country	Population million 2017	GDP USD billion (2016)	GDP per capita (PPP, 2016)	Unem-ployment rate 2018	Inflation 2018	Current Account to GDP, 2016
Georgia	3.73	14,22	9267.3	13.90%	2.50%	-13.30%
Tunisia	11.44	42,10	4265.4	15.40%	7.70%	-10.40%
Jordan	10.10	38,65	8389.5	18.40%	5.10%	-9.50%
Bulgaria	7.11	52,40	17709.08	6.40%	2.60%	4.60%
Uruguay	3.49	52,42	17709.08	8.90%	7.21%	-0.10%
Croatia	4.15	50,43	21408.55	9.20%	1.90%	3.90%
Hungary	9.8	124,3	25381.29	3.80%	2.8%	6%
Lithuania	2.85	42,74	27904.1	8.10%	2.90%	-17.80%
Finland	5.50	236,79	39422.65	9.30%	1%	0.70%
Ireland	4.77	304,82	62828.34	5.80%	0.40%	12.50%
Switzerland	8.42	659,83	56625.14	2.40%	1%	9.80%
Singapore	5.61	296,98	81443.4	2%	0.40%	19.50%
China	1390.08	11,20	14400.9	3.89%	1.80%	1.30%
United state	325.72	6773,38	53272.5	3.80%	2.80%	-2.40%

Table 1: Benchmark Peer Countries

Source: https://tradingeconomics.com, https://ieconomics.com

Moreover, in the recent 10 years, Jordan has pursued structural reforms in education, health, as well as privatization and liberalization. The government of Jordan has introduced social protection systems and reformed subsidies, creating the conditions for public-private partnerships in infrastructure and making tax reforms (WORLD BANK, 2018). Jordan`s public expenditure on social services (Health, education, pension) were compared to a number of countries, as shown in the table below.

Country	Health Care	Education	Pensions
Georgia	1.7%	2.0%	3.1%
Jordan	6.2%	3.9%	12.3%
Hungary	5.0%	4.7%	9.9%
Lithuania	4.7%	5.2%	6.0%
Tunisia	4.2%	6.2%	-
Ireland	5.2%	6.2%	6.2%

Table 2: Provision of Social Services/public Expenditure on Social Services % share of GDP, 2013

Source: World Bank, https://data.worldbank.org

Worldwide, microfinance sector comes as an attractive tool because of its ability to accommodate more employees and allow entrepreneurs to develop their skills and underpin the entrepreneurial spirit of startup who have innovative ideas. A number of micro loan providers exist which are either formal or informal, formal providers include commercial banks (CBS), governmental and non-governmental organizations and informal providers include traditional money lenders (BRIÈRE AND SZAFARZ, 2015). According to (MUTENGEZANWA et al., 2011) the informal institutions compete the formal organization because of their innovativeness and flexibility. In Jordan microfinance sector includes structured as quasi-governmental organisations (NGO), non-profit, for profit companies and financial institutions. The largest microfinance providers registered as non- profit companies (SANABEL, 2009). These institutions tend to share some common characteristics but also differ in their legal status, operation, size, and their financial performance (HARDY et al., 2006). In Jordan there are two different types of actors in microfinance (ISAIA, 2005):

1. **Subsidized credit provider**: included all the government and quasi- gov ernment organization, government institutions: included Development and Employment Fund (DEF), Ministry of Social Development, Agricultural Credit Organization

2. **Non-governmental institutions** included:
   - **Market oriented microfinance institutions(for profit)**: included Middle East Microcredit Company (MEMCC), Ahli Microfinance Company (AMC),Ethmar,Finca
   - **Non-profit institutions:** Noor al Hussain Foundation, Hashemite Jordanian Fund (JUHOD), Jordan Valley Foundation, Micro Fund for Women (MFW), Jordan Microcredit Company and National Microfinance Bank.

3. **International agencies:** include UNRWA, and Save the Children Organization

For our study we obtained data from Micro Fund for Women (MFW) an affiliate of women`s world banking in New York (OECD, 2017) which is the largest MFI`s in Jordan (KIVA, 2018). The Fund was initiated by Save the Children in 1994 as a pilot group guaranteed lending program, It`s mission is to provide sustainable financial services to women micro entrepreneurs (ISAIA, 2005). Since its inception in 1994 the Fund has provided over 400 000 loans totaling JOD 150 million, loans started from JOD 200 and extend to JOD 10 000, average loan

size is JOD 243 ,with repayment rate exceeds 98%, borrowers repay reasonable rates of interest and repayments are made based on their capabilities (OECD, 2017). The market share of MFW in the first quarter of 2017 reached 35% of the number of borrowers and 25 % of the existing outstanding portfolio (MICRO-FUND FOR WOMEN, 2018), grace periods vary from 6 -12 months, collateral is not needed but guarantor for 20 % is required, repayment period vary between 36 and 48 months maximum and payment are repayable in monthly instalments over a period of 1-18 months depending on the loan size and the enterprise cash flow (ISAIA, 2005). Through its 60 branches across the country the number of MFW active borrowers reach 134, 46 with gross loan portfolio 81, 57 USD million in 2016 (MIX MARKET, 2018). Today, the debate is on what constitutes a microenterprise, or a small or medium-sized firm, the quest for precise definition of smallness is driven by the compulsion to target assistance (ADAM AND VON PISCHKE, 1992). Microfinance is a broad definition than microcredit, however, the definition of microcredit varies among context depending on the social environment and economic situation and policy goals. Thus, the core of microfinance represented by microcredit (BILAU AND ST-PIERRE, 2017). According to (BOGAN, 2011) microfinance refers to an array of financial services that include credit, savings, and insurance, while microcredit is the provision of credit which is usually used as capital for small business development. According to the (EUROPEAN COMMISSION, 2007), microcredit is a loan under EUR 25 000 to new or existing micro-enterprises, although the experts agreed that, depending on the target group, sums can be much smaller, especially in the lower market segment. This broad definition of microcredit is also used because of the diversity of microcredit practices across countries.

For example, in Romania micro lending institutions starting with small loans and based on the success or repayment, the subsequent loan amounts could be higher, the maximum value for microcredit was of EUR 25 000. In Thailand loan size cannot exceed THB[1] 20 000 per borrower, in some cases it can be extended to THB 50 000 (POP AND BUYS, 2015). From the other hand, in Jordan several criteria for the definition of micro credit are used, such as labor, capital, added value, management properties, specialization, production methods, or market trends .The most common criterion to determine the size of enterprise is the number of employees (SAYMEH AND ABU SABHA, 2014). However, according to the Central Bank of Jordan loan ceiling up to 20 000 JD[2] is considered a micro loan (CENTRAL BANK OF JORDAN, 2017)

[1] The currency of Thailand ,on 21 June, 2018 (1Thai Baht =.026 EUR)

[2] The currency of Jordan, on 21 June,2018 (1 Jordanian Dinar = 1.22 EUR)

Literature review

Worldwide, microfinance institutions (MFI`s) expand the frontier of finance by providing loans and other financial services to underserved populations (HARTARSKA AND NADOLNYAK, 2008). Microfinance industry is one of the most dynamic industries in the world of development cooperation, this high-growth industry poised to become the world's largest banking market in terms of customers served (GARCIA -PEREZ et al., 2017). In Europe microfinance serves as a device for austerity facilitation and self-employment with significant success in Russia, Poland and other parts of Eastern Europe (RIVA et al., 2005). In western European countries, 51027 loans were granted in 2009 totaling EUR 477 million. In developing countries promotion of microenterprises is justified by their abilities to foster economic growth, alleviate poverty and generates employment. It also has positive effect on the social conditions in the area served (PIOT-LEPETIT AND NZONGANG, 2014).

However, the empirical literature on discrimination in the lending industry involving loan size determination detecting discrimination based on race, gender and ethnicity (HARTARSKA AND NADOLNYAK, 2008). A study by (PIOT-LEPETIT AND NZONGANG, 2014) reveal that in Cameron loan requested depend on applicants characteristics .While in Brazil there is gender gap in loan size and there is a glass ceiling on loan size that hurts the women entrepreneurs' with larger projects. Undoubtedly women are more risk aversion since they request smaller loans than men. By contrast there is claim that term of lending don't vary by gender of borrowers, even when discrimination exist there is little impact on success of female-owned small businesses. Moreover, the request amounts of loan give a fair indication of the scale of the project.

In contrast a study carried out in Jordan reveals that personal characteristics such as gender, years of formal education have no significant effect on the amount disbursed, borrowers in the northern region of Joran are more likely to be rationed; this may reflect the fact that they frequently apply for microcredit or due to the high population density in this region, while the sector of operation and region have no significant effect on microcredit disbursed since each lender may have its own target group and target sector (DUTTA AND MAGABLEH, 2006).

While the current literature is mostly focused on loan denial rates, examining loan size is may also prove insightful. Having a loan approved is good news for an entrepreneur, but when it comes to the purpose of business, loan size matter too. The most common measure of loan size is dollars disbursed whether a given loan is seen as "large" or "small". Poorer borrowers are more likely to request smaller loans than less poor borrowers; the fixation on loan size does not imply that bigger is bet-

ter. What matters for social welfare is not that loans are large, but rather that the aspects of loan size be tailored to the demand of the borrower (SHRIENER, 2001). From the other hand, loan size can be barrier for doing business, for example in Hungary one of the reasons that conditions are not conducive for the sustainability of micro credit schemes is the demand for small loans (KALLY, 2003). Contradictory (MADER, 2016) criticize the smallness of loan size, sine the tiny loan sizes lead talented Microenterpruners for noncreative microenterprise activities. A study carried out by (MIRPOURIAN et al., 2016) found that the proximity to the loan limit should not be due to other individual confounding factors. In India the loan size varies from INR[3] 2 200 to INR 16500 (inclusive of interest rates). While microcredit in Portugal delivers only one type of a loan for a minimum of EUR 1000 and up to a maximum of EUR 10 000, however the first block of the loan cannot exceed EUR 7 000 and the second, which cannot exceed EUR 3 000 can only be obtained once the business has been assessed after one year of activity (BILAU AND ST-PIERRE, 2017). A study by (HARTARSKA AND NADOLNYAK, 2008) found that Bosnian MFIs employed lending technologies to be culturally appropriate, loan started at 1000 KM, adjusted to serve unique clientele, considering that new poor in Bosnia differed from new poor in Asia and Africa, as the new poor were highly educated populations. A study in Thailand indicates that estimation of household factors influencing loan size of microcredit, gender, education were influential to the amount of loans. Result show that education is significantly negative to loan sizes. But result reveals that loans between THB 1, 500 to THB 7,500 would have no impact because it was too small to be productive. Data analyzed from Ethiopian urban household survey find that geographical location and schooling of households heads are significant factors that determined loan sizes of urban households, another evidence from Nigeria prove that distance from MFI`s office significantly encouraged farmers to get larger loan size. While, household with higher education tend to get smaller loans (FONGTHONG, 2012). However,unlike developing countries, In portugal 18 % of microcredit borrowers had higher education (BILAU AND ST-PIERRE, 2017).Moreover, analysis of determinant of demand for loans from microfinance program in Bangladesh show that education of households affected the demand for microcredit. Education for women had negative effect on the loan size. More educated clients who have lower unfulfilled demand for credit and are less concerned about larger loans in the future may exert less effort to improve their repayment performance (AL-AZZAM et al, 2011). From the other hand , immigrants excluded from credit because of low income and cultural factors, study conducted in Germany provide evidence

[3] The currency of India , on 21 June ,2018 (1 Indian Rupee =.012 EUR)

that entrepreneurs immigrants are significantly more likely to be rationed or to be granted smaller loans than native entrepreneurs. High percentage of borrowers of microcredit program in Portugal is immigrants 13.4 % while their weight in the population was only 4.3 % (BILAU AND ST-PIERRE, 2017).

Another important aspect of our argument is related to outreach. the term outreach is typically used to refer to the effort by lending institutions to deliver loans and financial services to large number of clients(breadth of outreach) with a focus toward the poorest of the poor (depth of outreach) (CONNING ,1999). In the literature the average loan balance and percentage of women borrowers were used as a measurement of depth of outreach, it was found that MFIs that have lower average loan balances and more women borrowers as clients are less efficient (HERMES et al, 2011). Longer loans signal shallower outreach because the most creditworthy—and hence the least-poor— usually get the longest loans), thus longer loans signal less depth of outreach and larger disbursements mean less depth of outreach (SCHREINER AND COLOMBET, 2001). According to (POP AND BUYS, 2015) the outreach of MFI`s increases as they are located closer the population at risk ;territorial distribution of the Romanian microfinance institutions shows a high concentration within the more developed country regions than within the regions in need of microfinance support .

Moreover, in Bosnia the average MFI had 9 branches in different locations, geographic expansion allowing for better reaction to target clientele`s needs. It's possible that MFIs themselves have self –selection to serve the most promising regions (HARTARSKA AND NADOLNYAK, 2008).While the green field microfinance institutions extend their branch networks, though their loan sizes which is larger than most African MFIs, indicating less outreach to the poorest market segments (CULL et al, 2015). According to (MORDUCH et al., 2003) programs that target very poor clients perform better than others in terms of cost per borrower. Some argues that loan size may be related to the term or type of the loan granted, and/or it may be related to the lending methodology of the MFI (DIAGNE et al, 2000). Further, the impact of micro credit lies not only 'the size of the loan' or 'number of loans' in a given period of study but also it depends on market dynamics which is beyond the scope of this paper (GONZALEZ AND ROSENBERG, 2006).

Hypothesis

The research hypotheses that have been formulated from the literature will be tested as following:

Hypothesis 1: There are significant differences at level of (0.05) between loan sizes according to the education

Hypothesis 2: There are significant differences at level of (0.05) between loan sizes according to the gender.

Hypothesis 3: There are significant differences at level of (0.05) between loan sizes according to the area.

Hypothesis 4: There are significant differences at level of (0.05) between loan sizes according to the nationality**.**

Methodology and data analysis

Secondary data of (88 054) micro entrepreneurs obtained from Micro Fund for Women (MFW) in Jordan in the period (2011-2017). The dataset contained borrower`s demographic characteristics such as :qualification (illiterate ,preparatory,secondry,diploma,primary ,higher education), the geographic coverage of MFW branch placement across Jordan (Amman, Zarq, Mafraq, Irbid, Madaba, Jerash,Ma`an, Madaba, Ajloun, Aqaba, Ramtha, Karak, Tafeleh, Gour), borrower`s gender (male, female), and the amount of loan granted. The data also contain information about borrowers nationality (Jordanian, Syrian, Egyptian, Iraqi), product type (home–based, independent licensed, independent –unlicensed), and loan product (development, start up, retired). We will focus on borrowers' characteristics as an issue to be investigated in our study.

We utilized and analyzed Data using parametric statistical test (Anova) to determine if personal characteristics of borrowers are significantly correlated with loan size. We used Anova test because it can be fit to our data. According to MONTGOMER (2001) Anova "is the most useful technic in the field of statistical inference. Based on statistic quantifying the sum of the pairwise differences between the sample means has been determined (GOONZALEZ-RODRIGUEZ, 2012). By using Analysis of variance data composed into grand mean, main effects, possible interaction and error term .The statistical procedures underlying the using of analysis of variance is decomposition of sum of squares into component for each source of variation in the model- along with an associated the (F-test) of the hypothesis that any given source of variation in the model is zero, Specifically it tests the null hypothesis (GELMAN,2015)

$$H_0=\mu_1=\mu_2=\mu_3\ldots=\mu_k \quad (1)$$

Where μ= group mean and =number of groups

The null hypothesis should be rejected whenever the "external" variability between groups, as measured by the difference between their "sample means" is large enough at a prescribed level, we will get significant result for Anova test when we accept the alternative hypothesis that there are at least two group mean statistically significantly different from each other (CUEVAS et al., 2004). While

Anova test cannot tell us which specific groups were statistically significantly from each other, we will run Fisher`s LSD test for additional exploration on which means are significantly different from each other, any difference larger than LDS is considered a significant result (STEVENS, 1999).

Result and discussion

Hypothesis 1: There will be significant difference at level of (0.05) between loan sizes according to the qualification

We used Means and Std. Deviation, and One Way ANOVA to test whether or not differences between loan sizes are significant according to the qualifications.

Table (1) Mean and Standard deviation

loan size

qualification	Mean	N	Std. Deviation	Minimum	Maximum	Std. Error of Mean
Illiterate	1120.6587	334	411.13428	500.00	3000.00	22.49627
Un-known	1162.3701	3367	924.33308	500.00	25000.00	15.92968
Preparatory	1173.3620	21914	716.96323	500.00	20000.00	4.84324
secondary	1179.0200	41573	736.89533	500.00	25000.00	3.61410
diploma	1234.7589	8730	846.78703	500.00	17000.00	9.06290
higher education	1280.6894	7012	1066.24864	500.00	25000.00	12.73320
primary	1162.9701	5124	722.24880	500.00	15000.00	10.08979
Total	1189.4423	88054	781.42080	500.00	25000.00	2.63336

Source: Own compilation

The result showed there is a difference between Means in the loan size according to the qualifications, and to show the significant differences, we used One Way-Anova test.

Table (2) ANOVA					
loan size					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	94130931.515	6	15688488.586	25.736	.000
Within Groups	53672656844.989	88047	609590.978		
Total	53766787776.504	88053			

Source: Own compilation

The result showed that there is a difference in the means between loan sizes according to the qualification, (F value is (25.736), P value < 0.05).To show the source of differences, we used LSD test for multiple comparison. The differences in the loan size was favor of Diploma and Higher education, that's could be explained because of high unemployment rates specially between females, thus borrowers with academic qualification demand micro loans to create income and to mobilize their potential and skills in productive activities .When we compute Eta squared the result indicates that the size of effect is quite small; the qualification predicts only .001 of the variability in the loan size so we will reject the null hypothesis because the result show that **there is no statistical critical effect between loan size and qualification.**

Hypothesis 2: There will be significant differences at level of (0.05) between loan sizes according to the gender.

We used independent Sample t- test to show if there are significant differences between loan sizes according to the gender, the result shows that Mean of Male (1781.1845) is higher than the Mean of females (1091.0538). Men received higher average loan size than women, this result indicates that women demand smaller loans because they are more risk aversion; another reason is due to high rate of poverty and unemployment between women since they are vulnerable and poor. From the other hand this result can be explained by the fact that women prefer home based businesses which they don't need high capital due to family responsibilities and barriers for social mobility while men prefer large scale projects so they demand larger loans. The smaller the loan size the higher the repayment rate, so this result also explain why women are more credit worthiness than men. But the standard deviation for male is higher than standard deviation for female; the observations' in female group is closely distributed around the mean while the observations in the second group are spread out over a wider range of values.

Table(3)Mean and Standard deviation					
	gender	N	Mean	Std. Deviation	Std. Error Mean
loan size	Male	12443	1781.1845	1343.56495	12.04470
	Female	75599	1091.0538	578.33221	2.10339

Source: Own compilation

Table(4)Independent Samples Test										
F		Levene's Test for Equality of Variances		t-test for Equality of Means						
		Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
loan size	Equal variances assumed	8961.796	.000	96.869	88040	.000	690.13072	7.12440	676.16696	704.09448
	Equal variances not assumed			56.443	13210.418	.000	690.13072	12.22698	666.16408	714.09736

Source: Own compilation

The statistical value for (t value is (690.13072), P value < .05).The differences within each group is statistically significant, female have less average loan size than males. The coefficient of Pearson correlation between loan size and gender is - .31 indicates that there is weak negative correlation between loan size and gender. We will reject the null hypothesis that there are significant differences at level of (0.05) between loan sizes according to the gender.

Hypothesis 3: There will be significant differences at level of (0.05) between loan sizes according to the area.

We used Means and Std. Deviation, and One Way ANOVA test to show if there are significant differences between loan sizes according to the area as following:

Table (5)Mean and Standard deviation						
loan size						
Area	Mean	N	Std. Deviation	Minimum	Maximum	Std. Error of Mean
Ma'an	1305.1418	282	531.80029	500.00	5000.00	31.66825
Tafelah	1187.0528	587	425.39201	500.00	3000.00	17.55781
Aqaba	1295.3357	697	663.40395	500.00	7500.00	25.12822
Karak	1141.6136	1729	568.33822	500.00	9800.00	13.66814
Ajloun	1364.4663	2046	769.30198	500.00	8000.00	17.00764
Mafraq	1036.8774	2610	426.69770	500.00	7000.00	8.35218
Madaba	1205.4813	2618	1161.38083	500.00	25000.00	22.69812
Jerash	1224.5817	3287	671.96463	500.00	10000.00	11.72051
Salt	1152.9190	1370	709.32618	500.00	10000.00	19.16398
Irbid	1233.9200	8530	775.46941	500.00	15000.00	8.39634
Zarqa	1089.2918	15704	654.93428	500.00	15000.00	5.22628
Amman	1213.0275	44113	838.72487	500.00	25000.00	3.99334
Gour	1349.4128	1107	750.41105	500.00	10000.00	22.55410
Ramtha	1155.7054	3374	652.05499	500.00	10000.00	11.22565
Total	1189.4423	88054	781.42080	500.00	25000.00	2.63336

Source: Own compilation

The result shows that there is a difference between Means in the loan size according to the area, and to show the significant differences, we used One Way ANOVA test as following:

Table (6)ANOVA					
loan size					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	376630454.394	13	28971573.415	47.774	.000
Within Groups	53390157322.110	88040	606430.683		
Total	53766787776.504	88053			

Source: Own compilation

The result show that there is a significant difference between loan sizes according to the area, (F value was (47.774), P value < .05) ,to show the source of differences we used LSD test for multiple comparison ,if we compare between areas ,the significant differences will be in favor of Mafraq,then Zarqa then Gour. But when we calculate Eta squared = .007 it shows that the size of effect is quite small ,area predicts only .007 of the variability in loan size, so there **is no statistical critical effect between loan size and area.**

Hypothesis 4: There will be significant difference at level of (0.05) between loan sizes according to the nationality.

We used Means and Std. Deviation, and One Way ANOVA test to show if there are significant differences between loan sizes according to the nationality, the result as following:

Table(7) Mean and Standard deviation

loan size

nationality	Mean	N	Std. Deviation	Minimum	Maximum	Std. Error of Mean
Jordanian	1189.8967	86165	784.71052	500.00	25000.00	2.67328
Egyptian	1037.4046	131	354.38698	500.00	2500.00	30.96293
Palestinian	1203.5933	1308	646.05987	500.00	5000.00	17.86360
Syrian	1103.4121	381	558.25283	500.00	7000.00	28.60016
Total	1189.4988	87985	781.55907	500.00	25000.00	2.63486

Source: Own compilation

The result shows that there is a difference between Means in the loan size according to the nationality, and to show the significant differences, we used One Way ANOVA test as following:

ANOVA

loan size

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6127423.988	3	2042474.663	3.344	.018
Within Groups	53737542738.262	87981	610785.769		
Total	53743670162.250	87984			

Source: Own compilation

The result shows that there is a significant differences between loan size according to nationality, (F value was (3.344), P value < .05) it`s significant at level (.05). But Eta squared (.00011) it's quite small. Also, Pearson`s correlation coefficient between loan size and nationality) is -.004 its very weak correlation .That's mean nationality explain only .00011 of variability in loan size, all nationalities have equal loan size and the MFW don't discriminate in lending process in the granted loan size between borrowers based on race or ethnicity and encourage integration of immigrants in the community.

Conclusion

This paper uses descriptive statistics and Anova statistical method to test if characteristics of micro entrepreneurs affect the requested loan size. It found that female request more loans than males while for most female micro entrepreneurs reliable access to small loans was more valuable than having large and long term loans. The gender gap in loan size increases disproportionately according to the scale of the project. It was also found that borrowers with diploma and higher education demand larger loan size than borrowers with other qualification. This paper shows that differences in loan sizes in governorates of Mafraq, Zarqa, and Gour are more than other governorates. Our findings reveal that factors such as borrower`s gender, level of education, nationality and MFW branch location is not deterministic in loan sizes differences.

Insights on relevant factors affects loan allocation are needed to improve entrepreneur's access to credit and to improve loan sizing policies for micro lenders in order to provide sustainable financial services to the target market from one hand and to expand lending activities from the other hand. From a policy perspective, this case study suggests that MFI`s in Jordan should broaden the scope of their loan policies, which are usually more focused emphasizing small short term loans may be appropriate in credit programs for microenterprises according to the best practice polices in micro lending industry.

Limitation of study

The scope of the study was limited to single institution, so the result may be different for the whole microfinance industry in Jordan .The findings may suffer from selection biases by Micro Fund for Women. We used secondary data only because it was the best available data, we couldn't access quantitative data such as (borrower's level of income, Borrower's level of saving, number of household members… etc.). Despite these limitations this paper adds to the existing literature by providing scope for further investigation within the same area of research.

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