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Development finance lacks a comparative tool that could confront development impact of a mass microfinance product on a selected target group. Credit mannequin, adjustable to selected level of sensitivity and accuracy, could from this point of view become a way how to display confectional and therefore foretellable set of characteristics of a group of clientele that could thus become etalon or reference standard. The paper attempts to identify nature of such microfinance mannequin on the market of Turkey, which belongs to last few existing countries with a great untapped microfinance markets in the world. Despite its enormous latent commercial and socio-economic improvement potential, few analysis were performed in order to potrait the socio-economic character of its main protagonist: enterprising mother or grandmother operating in the suburbs of urbs. The research compiles results of research carried out by academics from Czech University of Life Sciences and creates a model of a credit mannequin, averaging Turkish microfinance client in Central Anatolia, in the vicinity or border areas of Ankara agglomeration. The assemblage enables to depict genuine relationship of mainstream client towards chosen topics such as bancarization, household size or islamic vs classical microcredit related issues, uncovering the nature of the microfinance market in Turkey and summing up conclusions on its potential development.

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1. Introduction

1.1. Microfinance in Turkey

When compared to neighbouring countries in the region, the microfinance potential of the Republic of Turkey stays far from its fulfillment (1). Although Turkey can be considered the major and most dynamic economy of the Middle East region with an exorbitant relative number of people who are unable to access credit and financial services through formal sector (Burritt, 2003), microfinance systems are rather new to Turkey, with only few academic studies undertaken.(4)

Turkey finds itself in dire need of microfinance, currently under the supervision of to the State Planning Agency as the sector represents key policies of the Republic for employment and income distribution policies intended to help those recipients of aid expected to become service providers and producers who have not been successful.(3) According to information based on OECD sources, Turkey can be characterised by the worst income distribution among OECD members in 2010, showing similar situation in relation to poverty with 18.08% of the inhabitants living under poverty line. (3)

Income disparities betwen rural and urban environment still persist, as the on-going process of urbanisation leads to an increase of the challenges of labour supply, infrastruce and education, between others. Urbanization of Turkey, without so needed development of other subsystems leads to a creation of a specific market type without formal property titles being transformed into "gecekondu"⁴ neighbourhoods, characterized by streams of unemployed labourers entering urbs from the regions. Possibly, microfinance could play an important role in influencing this phenomenon through reduction of migration pressures, stimulation of economic growth and creation of urban as well as rural employments.

The slow development of the sector is the more surprising as it can possibly tie in the long tradition of the agricultural credit cooperatives,

⁴ Gecekondu is a Turkish word meaning a house put up quickly without proper permissions. The gecekondu phenomenon is linked with the problems of unemployment and poverty, especially in the east of the country.

governed by law passed already in 1929, which allowed communities of more than 100 households to establish credit cooperatives, which may be precursors of what is know today to be village bank model (Okan et al., 2013).

Microfinance in Turkey is in its beginnings when measuring the number of clients as well as of range of financial services and financial products.(1) The potential of this financial innovation could be substantial as SMEs form 99% of all enterprises in Turkey, being estimated at 4 million units by TAC⁵, generating 35% of export and employing more than 40% of the workforce. Microfinance is expected to reduce vulnerability of microenterprises as capital permits to make use of opportunities, diversify as well as to augment income.(11)

Apart from that, microfinance can become a tool of empowerment in a country where the rate of women as participants in the labor force is a curious questionmark, as social changes of the recent past did not enable more women employees to become part of labor markets, despite higher education, later marriage and changes in social attitudes towards the institution of marriage, in combination with declining fertility rates. Despite the mentioned issues, the share of women participating in in job markets decreased, from 34% in 1988 to 22% in 2008, illustrating an opposite trend than occurring among OECD countries. (13)

Figure 1: Female labor participation rates development trend in Turkey, 1988-2008 (OECD, 2008) and Labor force participation rates by gender, Turkey in 1955-1990. (Turkstat,1994)



⁵ Tradesmen and Artisans Confederation



Figure 2: Female Force Participation Rates, OECD (OECD, 2008)

The lack of data related to the microfinance sector, insufficient regulatory framework as well as little support of microfinance broad spectrum of government institutions, civic society and private sector belong to the key reasons for lack of development of the microfinance sector in Turkey. (5)

1.2. Grameen Microfinance Project (TGMP)

TGMP⁶ was launched in 2003, thanks to the initiative of the Foundation for Waste Reduction which applied for the first time in Turkey the Grameen Bank methodologies to microfinance clientele. TGMP thus became the key target for the survey described in this paper, as it is the most important MFI in Turkey offering standartized product countrywide. TGMP offers microloans in the sum of 200 -500 YTL (140-340 US\$) priced by an interest rate of 18-20 % p.a., distributed between solidarity groups that consist of five to ten clients, mostly women, equally liable for the loan repayment. The clients employ the loans in raising livestock, retail commerce, small scale textile production and distribution of cosmetic products in the neighbourhood. The peer group pressure among the village bank members drives individuals to repay debts in such a way that the micro credit program achieves high repayment rates of 98 % (Rahman 1999).

⁶ As of Oct. 2012, TGMP was operating 94 branch offices, with 60,600 clients and portfolio of 183 millions of of Turkish lira, with 303 employees.⁶

1.3. The concept of microcredit mannequin

A mannequin is a term describing a lay figure or a dummy that attempts to model the behavior of humans and thus helps to illustrate impacts of human activity, such as nuclear tests (Cooper, 2004). This capacity of mannequin to simulate future outcomes is widely used in commercial spheres, especially in retail stores and commercial centers. In military or in medical environment, where "virtual patients" are used, the role of mannequins is indispensable, due to considerable savings of lives as well as resources contributed by mannequins which enable experimentation and testing prior to implementation in reality.

The implementation of credit mannequin in development finance would enable to depict the profile of average client and thus permit to link the financial product characteristics with the averaged nature of the clientele.

2. Research

2.1. Background of the study

In September 2012, team of researchers from Czech University of Life Sciences (CULS) executed in close collaboration with TGMP and SESRIC⁷, a subsidiary of the Organisation of Islamic Cooperation $(OIC)^8$, a survey of the village bank clientele in the outskirts of Ankara. Both organizations provided logistics as well as key infrastructure and support of their employees for the field research. The survey was centered around village bank members, mostly enterprising women working in suburbs and adjacent conurbanisations. The main aim of the project was to create a model of the average microfinance client, based on the profile derived from the survey data and so to assess the microcredit mannequin, the socio-demographic profile of the core Turkish microfinance clientele.

2.2. Research justification

The state of the art knowledge on microcredit is contested.(Kovsted et al., 2000), territorial and non-transferable due to cultural originality of

⁷ The Statistical, Economic and Social Research and Training Centre for Islamic Countries

⁸ Organization of Islamic Conference

every market, and fragmented into many categories. This fragmentation prevents provision of a general picture averaging the client client characteristics. For markets that only seek their characteristic profile,due to the fact that they are immature, homogeneous and untapped such as Turkey, the simulation of a credit mannequin represents a way how to callibrate assumptions and how to position and how to standartize products and services, accessing the mass markets in an efficient way during the initial phase of the market development. Credit mannequin thus is a representation of a simulated client model which displays most probable characteristics that are to be expected in similar habitat. This synthesis thus apprises the average character of the microfinance clientele in Turkey looking for socio-demographic patterns of the standard debtor. The standard debtor character implies a blueprint of the loan product.⁹

Furthermore, the research intends to understand the following issues. How can be described the socio-demographic household of an ideal client? Does religion act as an important influence for credit takers? What experience have microcredit clients with microcredit? What determinants exogenous to market forces could be distilled for the future?What are remarkable particularities of the Turkish clientele, in relation to selected assumptions? What are characteristic details of the socioeconomic traits of households of village bank clientele. What are activities estimating the potentials and threats influencing the rise of Turkish microfinance market?

Studies of this type could illuminate the situation in the Turkish labor markets, which are characterized by low female labor force participation when compared with other OECD countries and which exhibit an unexplained declining trend¹⁰, with family related interrelationships being the explanation for the low relative number of females in Turkish labor markets.

2.3.Methodology

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The methodology selected of this research is a qualitative, nonlongitudinal approach with percentages of categories of responses

⁹ This paper refines and extends previously performed research published in ILHS (12) in terms

of sensitivity of the coinciding answers as well as the sectorial focus of the clientele.

¹⁰ Explanation offered by Under-participation Trap Hypothesis.

representing the principal data that enables to formulate the client characteristics. These responses were retrieved from standardized questionnaires in which qualitative responses were converted into discrete variables. These were examined with correlational tools. The questionnaire was formed out of 30 closed format questions of dichotomous rating scale and close-ended types. The sample was completed by 117 active clients, who belonged to stable core of TGMP client portfolio and who agreed to answered question after their weekly ordinary repayment encounters under the supervision of credit officers, in their apartments, workshops or working spaces.

The initial part of the study describes the interaction of the debtors with loan in the following layers of interest: demographic, religion, household, loan experience, access and employment. The second part follows by the depicition of the model of average turkish microfinance client employing those characteristics of the answerse that coincide in 75% from all sample members. In the third part, those clients that share characteristics desirable by the MFI are selected and assorted. In the following part of the study two aforementioned profiles are compared, in order to obtain credit mannequin profile through intersection of the profiles, including the sectorial focus. The resulting credit mannequin constitutes the most suitable average client profile which could be the ideal target of the MFIs. In the last, fifth part, general assumptions are confirmed or rejected, putting the credit mannequin into context of current microfinance development in contemporary Turkey, leading to recommendations for MFIs.

Figure: 3: Research architecture



3. Research results

3.1. Classification in six research domains

In the following table the questions in the survey classified in six domains are represented.

Dmain	Nr.	Question	Nr.	Question	Nr.	Question
Domain A:	1	Sex	2	Age	3	Marital status
Demographic profile	4a	Children	4b	Number of children		
Domain B: Household profile	5	How many people live in the household?	7	Where do you live?	6	How many of those who live in the household are economically active?
Domain C: Religion profile	28	What is your religion?	29	Does religion form important part of your life?	30	Does your religious leader prevent you from taking microcredit?
Domain D: Credit experience profile	9a	Did you use any type of credit in the past?	10	Did you use the possibility to finance your economic activities with help of microcredit more than once?	23	Does the fact that your are taker of microcredit harm your family / neighbour relationships?
	9b	In case you had any type of credit in the past, what credit did you take?	13	Is frequency of payment of installments of microcredit for you better than frequency of other credits?	25	Does the installment payment meeting influence your working activities?
Domain E: Use of credit	11	Do you at present any oportunity to use any other type of credit?	17	Does microcredit solve your financial situation?	19	Is your microcredit a groupcredit?
	12	Do you prefer islamic credit?	18	What are you using the microcredit for?	26	Do you have more active loans at the same time?
Domain F: Credit access	14	Is microcredit more expensive than any other accessible credits?	16	Do social / family conventions prevent you from being a debtor?	21	Does demand for microloans in your community exceed the supply?
	15	Is it difficult to acquire microloans?	20	Does the length of credit period adress your needs?	22	Do you have your own bank account?
	27	Do you need digger debt or are your finance needs fully covered by microcredit?				

Table 1: Survey questions classified in six research domains

3.2. Profiles of the group of clients with responses coinciding in more than 75% of the sample

The answers to the questions which coincided in over 75% and henceforth present significant reference for the nature of microfinance market, were the following ones:

Nr.	Question	Answer	% of answers
1	Sex	Woman	100
3	Marital status	Married	90.60
4a	2-3 children	yes	76.79
17	Does microcredit solve your financial situation?	Yes	87.13
22	Do you have your bank account?	No	73.53
23	Does the fact that you are taker of microcredit harm your family relationships?	No	96.00
24	Do you recommend your economic active neighbours to take microcredit?	Yes	95.19
25	Does the installment payment meetings influence your working activities?	No	80.81

Table 2: List of answers that coincide in over 50% of the cases

Concluding, the filtrated answers that coincide in over 75% of the cases indicate that the microfinance markets in Turkish urban-semiurban environment are formed by clients featured by the following profile traits:

Table 3: Client answers coinciding in over 75% of the cases

Questions	Profile characteristics			
1,3, 4A	A woman married		mother	
4B	with 2-3 children			
17	declaring that microcredit solves her financial situation			
22,23	u	stating that microcredit does not harm family relationships		
24,25	recommending neighbours to take microcredit	saying that weekly meetings do not influence her activities		
28,29,30	a muslim	for whom religion is an important part of her life	while her religious leader does not prevent her from taking microcredit.	

3.3. Desired client profile

The profile of most desired clients for the MFIs was derived from the answers to those questions that are related to topics that deliver positive value to MFIs in terms of their probable willingness to include such respondents in its portfolio as clients. The profile of the desired client is derived from the characteristics of these respondents which coincide in 100% of the answers to selected questions. The selection is chosen on the base of those topics that represent an understandable contribution for any MFI, as illustrated below.

Table 4: Desired client answers that coinc	cide in over 75% of the cases
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Nr.	Question	Desired nswer	% of nswers
13	Is frequency of repayment of microcredit for you more apt than frequency of other credits?	Yes	84.00
16	Do social/ family conventions prevent you from becoming a debtor?	No	89.11
23	Does the fact that you are taker of microcredit harm your family/ neighbour relationships?	No	96.00
24	Do you recommend your economic active neighbours to take microcredit?	Yes	95.19

The clientele that answered in line with the desired answers was separated from the rest and the answers to survey questions were structured in percentual charts. The responses from those who fall into the desired client profile are presented below in the respective predetermined domains.

3.3.1. Domain 1: Demographic profile of desired clientele



Figure 4: Demographic profiles of answers to question 1-4B





3.3.2. Domain 2: Household of desired clientele

5. Number of People living in the household

Figure 6: Household profiles of desired answers to questions 5-7B



6.Active people per household

7. Urban / rural



3. Marital Status

3.3.3. Domain 3: Religion of desired clientele

Figure 7: Religion related profiles of desired answers to questions 28-30

29.Importance of religion

30. Prevention by religious leader



3.3.4. Domain 4: Credit experience of desired clientele

Figure 8: Credit experience profiles to questions 9A, 9B and 10

9A. Credit in the past?

9B. What type of credit?



10. Microcredit more than once?



3.3.5. Domain 5: Use of credit of desired clientele

Figure 9: Credit experience of answers to questions 11,17,18,19, 26

11. Opportunity for other type of credit? 17. Is microcredit a solution?



18. Use of credit?



- 19. Is your loan a grouploan?
- 26. Are you holder of more than once loan at the same time?



3.3.6. Domain 6: Credit access of desired clientele

Figure 10: Credit experience graphs of desired responses to questions 14,15, 20, 21,22, 27

14. Is microloan more expensive than other loan?

15. Is it difficult to access microloan?



20. Does the credit period adress your real needs?



21. Does microloan demand in your community exceed the supply?







27. Do you need higher loans or are your finance needs fully covered by microloan?



Figure 11: Importance of religion for the microfinance clients

3.3.7. Importance of religion for the clientele



Figure 12: Relation between religion and debt



3.3.8. Relation between religion and debt

3.4. Overlapping result: Credit mannequin profile

The credit mannequin is constructed by permitting the 75% coincidence profile (3.2.) to intersect with the profile of the desired client (3.3.), resulting from the fitration of answers through both filters.¹¹ The result is the following ideal microfinance client profile filtered from the real personalities.

Questions	Profile characteristics				
1 – 4A	A woman	aged between 20- 50+	married	mother	
4B -7	with children 2-3	with 3-4 people living in the household	of out of whom 2 are economically active	living in urban area	
10	, v	with a sole experience	e with microcredit		
11-15	who does not know if there are other credits available	claiming that frequency of payments is not better than other credits	and that microcredit is less expensive than other types of debt	and that microcredit is not complicated to access	
16-19	and that social / family conventions do not prevent her from becoming a debtor	and that microcredit solves her financial situation	using the microcredit for production, retail commerce and repayment of other debts	in form of group credit	
20-23	and that the length of microcredit period doesnot adress her needs	and that microcredit demand exceeds supply	unbanked	and that microcredit does not harm family relationships	
24,25,27	who recommends neighbours to take microcredit	while weekly meetings do not influence her activities	who does not need bigger debt as the needs are covered by microcredit		
28-30	a muslim	for whom religion is an important part of her life	and her religious l prevent anybody f microcredit.		

Table 6: Credit mannequin profile in verbal description

¹¹ Unlike similar studies done in the past where 50% of the coinciding answers was set as a benchmark, this research sensitivity of coinciding answers was set to a threshold of 75%, eliminating previously identified basic education, previous experience with microcredit and use of parallel debt at a time.

3.5. Acceptance / Rejection of assumptions

3.5.1. Assumptions

We have established four assumptions in order to corroborate them. These assumptions were chosen in order to respect the particularity of the market in Turkey, which is original and differs from neighbouring microfinance markets, in particular in the relationship of the state with the civic society, as well as secularity of state and its development stage. The rejection or confirmation of the assumptions will permit to understand better the nature of the microfinance market in Turkey and thus position credit mannequin into wider context. The assumptions follow:

- A. Islamic credit represents a competing financial product to village bank microloan in terms of client desirability.
- B. The probability of enrollment in the microcredit programmes in Turkey is correlated with the size of household in terms of number household members.
- C. Bancarization is an important pro-microfinance factor.
- D. As per the findings of the research, microcredit does not represent a threat to financial stability of households.

3.5.1.1. Analysis of Assumption A.

The results were tested on interdependence through Chi-square test, which identifies the difference between the observed and expected results, while H_0 postulates the non-existing correlation between the group samples.

Figure 12:

$$\mathbf{X}^{2} = \sum_{i=1}^{r} \sum_{j=1}^{c} \frac{(O_{i,j} - E_{i,j})^{2}}{E_{i,j}}.$$

O = the observed value E = the expected value

We further rate the survey data in table which serves the purposes of analysis as it consists of variables that correspond to number of collected questionnaires, economically active people in the household next to suitability of the clientele, and qualify it with rates of 1 to 3 scale, converting qualitative into quantitative, ordinal data.¹²

The Chi-square test making use of the available respondent data provides us with answers that reject or confirm the assumptions.

	Less desirable clients	More desirable clients	Marginal Row Totals	
Islamic credit preferred	9 (10.67) [0.26] ¹³ 95 (93.33) [0.03]		104	
Classical microcredit preferred	3 (1.33) [2.08]	10 (11.67) [0.24]	13	
Marginal Column Totals	12 105		117 (Grand Total	
The Chi-square statistic	0.106084			
p < 0.05	2.6116			

Table 7: Responses to questions 11-14

Answers to the selected questions nr. 11 and nr. 14 indicate that competition between islamic credit and village bank microcredit is not significant at present as major part of the clientele stipulated (58.60% and 79.20%) that few choices are available. The answers to question nr. 12, which show that big part of the respondents considered the term "islamic credit" a synonym for microloan provided by TGMP, seems to confirm that Shari'ah-compliant loan related literacy is negligible.

Finally, the Chi-Square test does not confirm the assumption on the level of confidence of 5% as per Table nr. 8.

3.5.1.2. Assumption B: Number of clients living in large households correlates with the microfinance enrollment potential.

We compare groups of clients with desirability characteristics¹⁴ formed into two groups with two groups of clients, living in smaller and major

 $^{^{12}}$ 3 points: desired clients as per 3.3; 2 points: ordinary clients falling into categories of desired / less desired / undesired; 1 point: less desired client who answered 1 of the answers to questions

in Table 6; 0 points: undesired client with 2 or more indicated answers to the questions in Table 6.

¹³ (the expected cell totals) and [the chi-square statistic for each cell]

households. According to the results, there seems to be a statistically significant relation between the clients living in larger households (>3) and the suitability of a microfinance clientele and the assumption B is confirmed. In other words, the influence of family background cannot be accepted as a significant statistic force driving household members becoming microfinance clients, as per Table Nr. 9.

	Less desirable clients More desirable clients		Marginal Row Totals	
Small Household 8 (3.35) [6.4 [*]		5 (9.65) [2.24]	13	
Large Households	18 (22.65) [0.96]	70 (65.35) [0.33]	88	
Marginal Column Totals	26 75		101 (Grand Total)	
The Chi-square statistic	10.0013			
p < 0.05	0.001564			

Table 8: Result of X2 test.

3.5.1.3. Assumption C: Bancarization is an important promicrofinance factor.

We compare groups of clients with desirability characteristics¹⁵ formed into two groups with two groups of clients, the bancarized and the non-bancarized ones. According to the results, there seems to be non statistically significant relation between the bancarized clients and their desirability as microfinance clientele. Therefore, we cannot confirm the assumption, as per results in Table Nr. 10.

Less desirable clients	More desirable clients	Marginal Row Totals		
2 (3.15) [0.42]	29 (27.85) [0.05]	31		
10 (8.85) [0.15]	77 (78.15) [0.02]	87		
12	105	117 (Grand Total)		
6362				
0.425091				
	2 (3.15) [0.42] 10 (8.85) [0.15]	2 (3.15) [0.42] 29 (27.85) [0.05] 10 (8.85) [0.15] 77 (78.15) [0.02] 12 105 6362		

Table 9: Result of X2 test.

3.5.1.3.1. Assumption D: Financial stability of households is not threatened by microcredit.

Eventhough the body of evidence is not sufficient for wide scale generalizations, 15% of the microcredit is used in order to repay other debts, which means microcredit is not served the original purpose which is to provide investment or working capital for microenterprises, while 31% of respondents as per Figure Nr. 14 have more credit in place.



Figure 13: Number of answers related to the use of microcredit

Table 10: Number of answers related to the use of microcredit

Nr. of answers	9	33	26	0	1	12
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4. Conclusion

The study provides us with a counterfactual opportunity to combine assumptions on the microfinance market in Turkey with the profile of credit mannequin based on the intersection of client profiles derived from the field data, and to position the profile of the clientele in the context of contemporary markets for microfinance in Turkey. Despite constraints of the research, due to limitation of the sample as to market habitat, sex and and market selection which may lead to generalization of the results, the research and literature review to this study hint at an unexplored field of relationships in the Turkish households from the angle entrepreneurship, gender and labor markets. Unlike similar studies done in the past, this research attempts to view the sensitivity of coinciding answers as one of the elements of the intersecting client based data which was set to a higher threshold of 75%, which eliminated previously identified elements of basic education, previous experience with microcredit and parallel use of several debts at a time.

The immediate conclusion can be drawn on basis of the survey that it cannot be confirmed that Islamic microcredit competes with classical solidarity collateral based microcredit, nor that bancarization is important for the prospect aptness to become a microfinance client. On the other hand, household size seems to be an important factor for the suitability of the clientele. Disconcerting finding can be done in the sense of uncovering the fact that 15% of the respondents intend to use microcredit for the repayment of other credits and more than a third has more credits in parallel, which may lead to the suspicion that a considerable part of microcredit may be abused and employed for other than the original target, deepening the risks of a debt trap, in combination with the on-going underparticipation trap related to surprising and a constant reduction of female employment in labour force in Turkey.

The credit mannequin modellation indicates the retail commerce sector and small scale production as the most promising markets and shows little relevance of education and age, the current price policy, average loan amounts nor repayment frequency as a source of reconsideration. Past experience can be seen as a significant characteristics to be targeted when searching for a new clientele, while marital and family status of married women with 2-3 children and a strong family background seems to be important characteristic of the credit mannequin.

This study confirms that the determination of the potential clients to become factual microfinance clients in Turkey is somehow related with the weight of the household as a specific market institutions, providing base for enterpreneurship, being the basic stone of credit mannequin's solvency and risk management philosophy, while it has not identified any concrete obstacles in terms of culture and community that will enable its smooth future development. Therefore, microfinance can be considered a tool of development based on family cohesion and by providing higher support for its progress, the State is to acquire robust grass root development tool, currently below its potential reach.

References

Grossman H. (2006) Demand Study for Micro-Finance in Turkey Results from a Field Survey Major Findings, Bankakademie International

Arasli B. (2011) Is Turkey microfinance investable? Hurriyet Daily News

Burritt K. (2003) Microfinance in Turkey A Sector Assessment Report, United Nations Development Programme

Karatas A. (2008), The microcredit strategies for SMES in Turkey in the eu harmonization process, 8th Global Conference on Business & Economics in Florence

EIFhttp://www.eif.europa.eu/what_we_do/guarantees/news/2012/finansbank.htm (10.12.2012) High demand from Turkish businesses secures more finance from the EU Competitiveness and Innovation Programme

Elliot I. (2010) Fact Finding Report on poverty and housing in Turkey

TGMP (2.12.2012) Corporate presentation, http://eng.tgmp.net/

Toros A. (2010) How compatible is the Turkish population structure with EU Countries? Hacettepe University, Institute of Population Studies.

Erman T. (2011) Urbanization in a southern context: the transformation of the urban periphery in the case of a Gecekondu neighborhood in Ankara, Turkey

Ajaz Ahmed Khan et al. (2010) The influence of faith on Islamic microfinance programmes, Islamic Relief Worldwide

Kovstedt J. (2009) Synthesis of impact evaluations of microcredit evaluation Study, Centre for Economic and Business Research Porcelénshaven Kandemir O. et al. (2011) Important of microcredit in fight against poverty in Turkey, International Journal of Economics and Finance Studies

World Bank (2009) Female Labor Force Participation in Turkey: Trends, Determinants and Policy Framework

Ali Ashraf and M. Kabir Hassan, "An Integrated Islamic Poverty Alleviation Model" Chapter 14 in Contemporary Islamic Finance: Applications, Innovations and Best Practices, edited by Karen Hunt-Ahmed, John Wiley and Sons, 2012.

Ali Ashraf, M. Kabir Hassan and William Hippler, "Performance of Micorfinance Institutions in Muslim Countries," *Humanomics*, Volume 30, No. 2 (2014): 162-182

Hassan, M. Kabir, Benito Sanchez and Geoffrey Ngene, "Scales and Technical Efficiencies in Middle East and North African (MENA) Micro Financial Institutions," International Journal of Islamic and Middle Eastern Finance and Management, Volume 5, No. 2 (2012): 157-170

Hassan, M. Kabir and David R. Tufte. "The X-Efficiency of a Group-Based Lending Institution: The Case of Grameen Bank," World Development, Volume 29, Number 6, June 2001: 1071-1082.

Hassan, M. Kabir and Louis Renteria. "The Experience of Grameen Bank of Bangladesh in Community Development," International Journal of Social Economics, Volume 24, Issue 12, 1997.

Hasan, Mostafa M., Hassan, M. Kabir and Uddin, Mohammad R. Local Government Investment Outreach and Sustainability of Microfinance Institutions: A Case Study of BURO, Bangladesh , Journal of Social, Political and Economic Studies, Volume 34, No. 3 (Fall, 2009): 318-346

Cooper, J. B., Taqueti, V. "A brief history of the development of mannequin simulators for clinical education and training." Postgrad Med J. 84 - 997(2004): 563-570.

Okan, D., N., Okan, C. (2013) An overview of cooperatives in Turkey. Fao Policy Studies on Rural Transition Nr. 2013-13.

Hes, T., Neradova, A., Srnec, K. "Socio-economic profile of village bank members in suburband Ankara: Microcredit Mannequin and assumptions on microfinance market in Turkey, International Letters of Social and Humanistic Sciences, 7 (2013): 76-85.