The Influence of Family Ties on Labor Market Participation Attitudes: Evidence from Developing Countries

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Abstract

This article investigates the linkages between family ties and working attitudes in developing countries using seven rounds of World Value Survey data from 1981 to 2014. The working attitudes are measured through, following Alesina and Giuliano (2013), the participation of households in the labor market. We find that strong family ties have a positive impact on labor market participation in developing countries. The results of the study imply that the family as an institution has a vital role in determining the economic behaviours, which are measured by working attitudes, of developing countries. Therefore, their strong relations may play a vital role in the progress of their countries as mentioned by Becker (1988) and Akerlof (2007).

Introduction

Family economics secured a respectable place in the literature of economics over the last three decades. Mincer (1960, 1962, 1985), Becker (1988), Akerlof (2007), and Alesina (2010, 2011, 2013) document that family and its composition have a pivotal role in determining the economic behaviours of households. In addition, Akerlof (2007) sees the role of the family from the macroeconomic perspective as well. Therefore, Becker (1988) suggests that the economics of family should be treated more than the economics of birth rate, death rate, marriage and divorce. It is also interesting to mention that Becker (1988) starts the discussion on family ties from the path-breaking theory of Malthus, as Malthus points out that long-term economic growth is linked with an average size of *family*. Keeping this in view, Becker (1988) searches the linkages between family behaviour and economic behaviour. He notes that family is an institution and has an impact on all other institutions which shape up economic development of the countries. Therefore, the welfare of the family is the principal goal and prime objective of an efficient economic system due to its endogenous nature. More clearly, Becker (1988) modified the neoclassical market model where parents choose between the number of children and the capital handed down to the children. Then he explains that saving and consumption may be affected by their saving consumption decisions and then the aggregate demand, labor market participation, wage rate and level of employment may take a hysteresis.

As mentioned earlier the path of family economics has moved forward from the discussion of birth rate, size of family, marriage and divorce. The researchers have started discussions on the linkages between family behaviours and economic behaviour over the last ten years. These researchers note that the behaviour of households is dependent on their surroundings. More specifically, the support and disagreement of others play an important role in the economic decisions of households (Levitan & Belous,1981 Thus, past attempts to abolish the institution of the 'family' have been unsuccessful. The Chinese Cultural Revolution and Cambodian Communism are prime examples that come to mind.

Reher (1998) argues that change in family ties is not a matter of days, months or years rather it takes centuries to occur. The family as an institution is present from the very first day and will prevail till the end of life and will continue to have a strong impact on different sectors of society. However, Chang (2013) points out that the structure of a family may change over a long period. Chang (2013) traces its connection to the level of education, especially with female education. The study empirically measures the impact of education on the behaviour of family and then the selection of the job market. Chang (2013) adds that education level has an important place in determining the strength of families.

Therefore, family ties affect the economic behaviour of countries and specifically the labor supply decision. It is also clear that the study of family economics is not a new concept rather it was started about a

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century ago with inconclusive findings. For example, Weber (1904/05) is of the view that strong family ties are obstacles to the development of a country. On the contrary, Becker (1988) argues that family ties have a link with consumption, investment, saving and then the macro economy. Furthermore, Althusser (1971) argues that for an economic system to survive, people must be taught how to think and behave rationally and, therefore, family is the basic institute in this regard. Then Ben-poratht (1967) adds that F-connection, that is families, friends and firms, has a crucial role in the economics of exchange.

The present study also pursues the investigation of the linkage between family ties and the attitudes of households toward work in the context of developing countries. We shall expand the work of Alesina and Giuliano (2010) which investigates the linkage between family ties and women's participation in the labor force market. We argue that mixing the sample of developing and developed countries may bias the results. As family ties vary from society to society, region to region, culture to culture and religion to religion, therefore, the impact of family ties may differ from country to country (Alesina & Giuliano, 2010). Similarly, Putnam (1993) and Fukuyama (1995) think that the developing and developed countries may differ in the impact of family ties on economic behaviour. However, the family structure in developing countries is not much different no matter what the economic system and the level of development. More clearly, people spend much of their time in a dependent relationship (Alesina & Giuliano, 2013), marriage is a crucial step in their life (Mincer, 1962), and the children absorb time, energy and money from their parents (Putnam, 1993). Divorces often cause economic hardship and mental depression in poor countries (Reher, 1998). Therefore, we may safely claim that the family structure of the developing countries is not much different, despite the differences in terms of culture. Secondly, many of the studies link family ties with women's participation in the labor force market. However, we argue that family ties may impact differently on the participation of male and female participation in the labor market. Furthermore, we argue that if the males and females are significantly different then the results of female labor participation may not be generalized for the whole set of samples. Bielby and Bielby (1989) discuss the gender differences in the effect of family ties by using the neoclassical market model. However, they find that the differences by gender are substantially smaller among men and women who reject traditional notions about husbands' and wives' roles within families. However, their finding motivates the researchers that the finding of female labor participation may not be generalized for the whole set of samples.

However, the attitudes toward work are not solely determined by family ties and their structures but can be determined by other economic, socio-economic and demographic variables like level of income, age and education. For example, Schultz (1991), Tansel (2001) and Tam (2011) document that work attitudes can be explained by the level of education. Specifically, Tansel (2001) notes that the effect of education and age on work attitudes is unclear and depends on the substitution effect and the income effect. Education exhibits both positive and negative links with labor force participation. On the positive side, education increases earning potential, raising the opportunity cost of not working and encouraging higher participation in the labor force (Schultz, 1991; Goldin, 1995). Conversely, the negative effect arises when higher earnings enable individuals to achieve their income goals more quickly, allowing them to prioritize leisure and reduce work hours (Mincer, 1962; Killingsworth & Heckman, 1986; Goldin, 1995).

The overall impact of education on labor force participation is ambiguous, as it depends on the relative strength of two opposing forces: the income effect and the substitution effect. The income effect, defined as changes in labor supply due to shifts in household income, typically reduces labor force participation. On the other hand, the substitution effect, characterized by adjustments in labor supply due to wage changes while keeping income constant, can increase participation (Tam, 2011). This ambiguity, as documented by Goldin (1995) and Tam (2011), reflects the complex interplay of these effects.

Furthermore, empirical studies suggest that the relationship between income levels and labor force participation often follows a U-shaped pattern. On the downward slope, a strong income effect dominates, leading to a negative relationship between participation and income levels. However, as wages continue to rise, the substitution effect becomes more prominent, driving increased participation along the upward slope

of the U-shaped curve (Schultz, 1991; Goldin, 1995; Tam, 2011). These nuances underscore the need for researchers to revisit and refine analytical frameworks to better understand these dynamics.

The rest of the article is organized as follows. Section II presents a brief literature review. The theoretical framework and econometric specification are presented in section III. Section IV discusses the construction of variables. The detailed analysis of estimated results is presented in Section V and Section VI concludes the study.

A Brief Literature Review

Before moving ahead, it is important to clear the difference between the concept of family and household. For example, Thomson et al (1992) document that the family is a blood relation and the household is a set or group of people linked with one other. Akbarzadeh (2013) adds that males, young, children and females all are important in a family and all components are affected by the strength of family ties as human behaviour affects all of them. As mentioned earlier, the literature on family economics is not an infant and has been discussed by respectable philosophers like Jacob Mincer, Gary Becker and others. However, most of them discussed the components of family like birth rate, death rate, marriages, and divorces. However, Becker (1988) mentioned that the economics of family should be discussed in the context of family behaviours like relations and family ties instead of the components of the family. Therefore, theoretical economists and empirical researchers provide quantifiable literature on the impact of family behaviour on economic outcomes because family is a vital and fundamental part of the formation of societies. Therefore, the family is an important institution for forming a prosperous and flourishing civilized society (Emlen,1995; Gough 1971). Furthermore, Altonji et al (1992) argued that in an extended family, the members of the family are interconnected with each other. In developing countries extended families live in different scenarios as compared to developed countries. If parents are satisfied with their family and have a strong sense of kinship, then they are more likely to transfer these feelings to their children. The altruistic behaviour of the family plays a major role in transferring their assets in the form of inheritance to their children.

However, the major chunk of the literature on the subject argues that the family processes may affect more on the well-being of women as compared to men. Thompson and Walker (1989) noted that women may have a good connection with family as compared to men and these connections guide them to handle both household and market work. Therefore, most of the family behaviour literature is based on the behaviour of women and their relation with the job market. Mincer (1960) documents that women contribute to the labor market at the cost of their family time. Furthermore, Mincer (1962) studies the labor supply of married women and finds that family is important for the decision to join the labor force. Papanek (1979) also recognized the importance of women's work and finds that women's work has an impact on the country's economy. Papanek (1979) noted that women's work in the market has its value but the family or taking care of the home is the question of time management.

Coleman and Ganong (1984) suggest that family has a strong impact on the decision of women to participate in the job market. Furthermore, Mincer (1985) finds that if women are facilitated with the support of their family then their participation in the job market will be boosted. Becker (1988) also notes that the family is an institution and has an impact on all other institutions which shape up economic development of the countries. Therefore, the welfare of the family is the principal goal and prime objective of an efficient economic system due to its endogenous nature. On the other hand, Guiso et al. (2003) note that religious people have strong family ties and do not permit women to work outside the home.

Furthermore, Celik (2008) investigated that the family plays an important role in enhancing the youth employment level if the state is not providing adequate services to the young. The study has a stance that families provide the basic types of help to the young like housing, food, education and health services (if needed). It is also found that in educated families the youth have more pressure for a job as compared to uneducated families. Celik (2008) also noted that women are not easily allowed to work away from home in developing countries. Low education with a low-income background leads to low level of jobs and a high level of education leads to higher income with higher position jobs.

Alesina and Giuliano (2010) reinforced the importance of family from an economic perspective showing that strong family ties play an important role in home production and GDP of the country. The results of such studies have important implications for policymakers. More recently, Alesina and Giuliano (2013) analysed the effect of family ties on the economic behaviour of households. They find that strong family ties are negatively related to women's job market participation and positively related to home production. Strong family ties lead to growth and it assists against stress and leads to wellbeing. However, the impact of family ties is not investigated in the case of developing countries despite its importance. Therefore, the present study is an attempt to fill this gap.

Econometric Specification and Estimation

The researchers have analysed the impact of family on economic behaviour through empirical modelling. For example, Alesina and Giuliano (2013); Chang (2013); Mare et al. (2012); Hofferth and Pinzon (2011); Ermisch and Gambetta (2010); Alger and Weibull (2008); La Ferrara (2007); Lundberg and Pollak (2007); Bertrand and Schoar (2006); Razum et al. (2005) and Blue (2004) may be referred in this regard. Several channels are suggested by the researchers through which family ties can affect the economic behaviour of the households. For example, as mentioned earlier, Mincer (1960, 1962 and 1985) sees the link of family behaviour through the decisions regarding migration, labor force participation and household production. Then Becker (1988) explains that saving and consumption may be affected by their saving consumption decisions and then the aggregate demand, labor market participation, wage rate and level of employment may take a hysteresis. Bielby and Bielby (1989) explored the effect of family ties on the attitude towards work which includes both household work and market work. Their study examines the work attitudes of married men and women based on the data from the 1977 quality of Employment Survey. They find that married women employed outside the home give priority to family in balancing work and family identities. However, Bielby and Bielby (1989) unexpectedly found that length of time in marriage is associated with lower levels of family commitment and higher levels of work commitment. Gemini (2007) studied the relationship between family migration decisions and the labor market. Recently, Alesina and Giuliano (2013) examined family ties and women's market participation.

This study starts the analysis by analysing female labor force participation, to proxy the economic behaviours following Alesina and Giuliano (2013), as dependent variables and family ties, education, age, and income as independent variables. The specified model is as follows:

$$wes_i = \beta_0 + \beta_1 ft_i + \beta_2 ed_i + \beta_3 age_i + \beta_4 iom_i + \beta_5 iou_i + \mu_i \quad (1)$$

Where *wes* is the employment status of women, *ft is* family ties, *ed* is education, *age* is the age of households, *iom* is the income of the middle, class *iou* is the income of the upper class and *u* is Gaussian error

Many of the studies link family ties with women's participation in the labor force market. However, we argue that the family ties may impact differently on male and female labor force participation. Furthermore, we argue that if male and female are significantly different then the results of female labor participation may not be generalized for the whole set of samples. Keeping this in view we extend the equation in two ways. First, we shall regress the independent variables of equation 1 for male participation in the labor market and youth force participation. Second, we shall separate the developing countries from the developed countries. Therefore, the equation 1 shall be re-specified as

$$mes_i = \alpha_0 + \alpha_1 ft_i + \alpha_2 ed_i + \alpha_3 age_i + \alpha_4 iom_i + \alpha_5 iou_i + \mu_i \quad (2)$$

where *mes* is male employment status

$$tes_i = \delta_0 + \delta_1 ft_i + \delta_2 ed_i + \delta_3 age_i + \delta_4 iom_i + \delta_5 iou_i + \mu_i \quad (3)$$

Where *tes* is the total male and female employment status and finally

$$yes_i = \gamma_0 + \gamma_1 ft_i + \gamma_2 ed_i + \gamma_3 age_i + \gamma_4 iom_i + \gamma_5 iou_i + \mu_i \quad (4)$$

Where *yes is the* employment status of youth.

The equation number 1, 2, 3 and 4 can be estimated through the ordinary least square method (OLS) but it has some caveats when applied to dummy dependent variables. The dependent side of our econometric equation comprises of dummy variable of labor force participation which takes the value of 0 or 1. If we estimate by OLS regression then it will give inconsistent and biased results. This will lead to the problem of heteroskedasticity, unboundedness of predicted values and the power of coefficient of determination. This will further lead to the wrong inferences. Furthermore, the interpretation of the coefficients may be misleading and ridiculous. Therefore, we shall use the *logit* model based on the logistic distribution and the probit model based on normal distribution.

It is also important to mention here that the direct interpretation of the coefficients of the logit coefficient is not easily understandable. Therefore, recent studies suggest that the logit coefficients should be converted into odd ratios or marginal effects. We shall follow the recent practice and shall convert the logit coefficient into marginal effect to give the interpretation. Specifically, the marginal effects at the mean of the independent variables of logit regression are presented. The marginal effects are the slope of the logit regression line. The second important thing is that several studies use the probit Model in the large sample size which is based on the normal distribution. But, Amemya (1983) and Stock and Watson (2003) note that there is no difference between logit and probit except the size of the coefficient. Therefore, it should be noted that the marginal effect results presented below are based on the logistic regression line.

Data and Variable Construction

For family ties, we use the database of the World Value Survey (WVS) from 1981 to 2014. The WVS is a compilation of national surveys on values and norms on a wide variety of topics, carried out seven times (1981-1984, 1990-1993, 1995-1998, 1999-2004, 2005-2009, and 2010-2014. We combine the data set of all seven waves from 1981 to 2014 following Alesina and Giuliano (2013); Chang (2012) and Mare et al; (2012). It is a long period; therefore, it is plausible that family structure may have changed in several different countries across the world during this period. However, Alesina et al. (2013) confirm the findings of Durantonand and Pose (2009), and Galasso and Profeta (2012) that there is a strong correlation between family structures today to ancient family structures. This argument is more relevant in the case of developing countries where the demographic structure has not changed much over the last two decades. Reher (1998) reinforces that the change in family ties is not a matter of days, months or years rather it takes centuries to occur. Therefore, combining the data over a longer period will not create an estimation problem. Furthermore, the coverage varies depending on the wave, starting with 22 countries in 1980 and reaching 96 countries in the fifth wave. The questionnaires contain information on different types of attitudes, religions and preferences, as well as information on standard demographic characteristics (gender, age, education, labor market status, income, etc.). Our sample consists of data from 52 developing countries[‡]. The descriptions of these variables are as follows:

Working Attitudes

The dependent variable is the e*conomic behaviour of households* for which we have specified the working attitudes of women as the dependent variable following Alesina and Giuliano (2010). Initially, we shall follow Alesina and Giuliano (2010) who have estimated women's contribution to the labor market. Therefore, our initial task is to examine the women's role in the job market and see those factors that affect their work participation. As mentioned earlier, the data on the employment status is taken from WVS. The question used here is employment status and the answer to this question is from values 1 to 7. The value 1 is for a full-time job, 2 for a part-time job, 3 for self-employed, 4 for retired, 5 for housewives not working outside, 6 for students, and 7 for unemployed. Therefore, the value 1 to 3 is for the working class and 4 to 7 for non-working so we create a dummy variable for 1 for working and 0 for non-working. Then we picked

[‡]The list of the countries is presented in appendix B. The countries are considered developing economies according to the International Monetary Fund's World Economic Outlook Report, April 2011.http://www.imf.org/external/pubs/ft/weo/2011/01/pdf/text.pdf

the number of women from the total employed households. However, it would be nice if the female employment status could be more detailed than a dummy variable. The groups in the 0 category are very different from each other; therefore, there should be a different category for each employment status. However, the research question of the present article is whether the stronger family ties impact the working attitudes of the household or not. Therefore, we consider only binary categories, that is, working and non-working classes of females. Further, we shall take the male and youth force employment status in our analysis which this study claims as an extension of the work of Alesina and Giuliano (2013). Therefore, we picked the numbers of men and youth labor force, defined by the 35-year-old men and women households. More clearly, youth labor force participation is a variable equal to one if a young person is working and zeros otherwise. The age range is 15-34.

Family Ties

Family is defined as a group of people living together, connecting through blood relations with each other and are influenced by the actions of other family or society members. Different studies have measured the effect of family on different variables. Bertrand and Scholar (2006) investigate the impact of family ties on economic development. Ferrara (2007) studies the importance of family ties and kinship in economic growth. Alger and Weibull (2008) analyse the family ties incentives and development by conducting the theoretical investigation of several questions and modelling the family as a pair of ex-anti-identical individuals. Following Alesina and Giuliano (2010 and 2013), we also use the WVS data set for our analysis. The independent variable includes family ties as a main regressor. The questions of the World Values survey regarding family ties are included in the appendix in detail.

Then following Alesina and Giuliano (2013) we prepare a family ties index by using principal component analysis (PCA) based on these questions. The rationale for using PCA is very obvious. If we use all these variables in the regression, then there may be a chance of multicollinearity and if we drop any of the variables then there may be a chance of a loss of information on the family ties. The results of the PCA analysis are presented in Table 1.

Table 1. Principal Component Analysis for Family Ties Index

Principal Component	**Eigenvalues**	**% of Variance**	**Cumulative %**
1.	1.7519	0.5110	0.5110
2.	0.8716	0.2340	0.7450
3.	0.5230	0.1510	0.8960
4.	0.0460	0.1040	1.0000
Variable	**Factor Loadings**	**Communalities**	**Factor scores**
*fam*1	0.7986	0.5621	0.3520
*fam*2	0.3003	0.6787	0.3130
*fam*3	0.4379	0.5962	0.2150
*fam*4	0.2192	0.4914	0.1200

Source: Authors' calculations

The eigenvalues reveal that the first principal component accounts for approximately 51% of the standardized variance (see Table 1). This makes it the most significant factor in assessing family ties. The factor scores indicate the respective contributions of fam1, fam2, fam3, and fam4 to the standardized variance of the first principal component as 35%, 31%, 21%, and 12%. These contributions serve as weights for constructing a family ties index.

The Control Variables

Age is important in the context that with an increase in age habits and attitudes also change and with age, the behaviour of a person undergoes different variations which affect his participation in market work. *Education* plays an important role and with the increase in the level of education, the effect also varies so to

check the influence of education on market participation the education variable is incorporated. *Income* is the factor that influences the participation of all groups and with variations in income level spending and participation are also affected. *Gender* role is included in our analysis estimation to test the effect of family ties on three groups of society as males and females have different attitudes and behaviours. All data for measuring control variables is taken from WVS. The descriptive statistics of the variables are presented in Table 1.A.

Table 1.A World Value Survey: Summary Statistics

Variables	Observation	Mean	Standard Deviation	Minimum	Maximum
Parents Responsibilities	196867	1.1776	0.4170	1	2
Respect and love for parents	191344	1.8020	0.3980	1	2
Family important in life	197988	3.8500	0.4120	1	4
Family Ties Index	190191	-0.0167	0.3440	-0.917	0.498
Medium Income	189178	0.37 0	0.4830	0	1
High Income	190213	0.2920	0.4550	0	1
Primary	195912	0.2530	0.4350	0	1
Secondary	195912	0.3000	0.4580	0	1
Working Females	151326	2.806	0.835	1	7

Results and Discussion

A total of 4 models are estimated in this study, where, Models 1, 2, 3, and 4 present the empirical results on the impact of family ties and the employment status of women, employment status of men, total employment status, and employment status of the youth labor force, respectively. Model 1 of Table 2 presents the empirical results of Equation 1. The marginal effects at the mean of the independent variables of logit regression are presented.

Table 2. The Impact of Family Ties on the Household Behaviour

	Model 1	Model 2	Model 3	Model 4
Family ties	0.01151***	0.00140	0.01679***	0.00764***
	(0.00113)	(0.00151)	(0.00180)	(0.00102)
Education	-0.04317***	-0.06033***	-0.09096***	-0.01469***
	(0.00327)	(0.00423)	(0.00522)	(0.00351)
age	0.19263***	0.32580***	0.56750***	-0.13446***
	(0.00421)	(0.00503)	(0.00584)	(0.00116)
age^2	-0.03262***	-0.05059***	-0.09060***	*NA*
	(0.00069)	(0.00079)	(0.00584)	*NA*
income middle	-0.00239	0.01867***	0.01582**	0.01895***
	(0.00429)	(0.00561)	(0.00687)	(0.00376)
income upper	0.03579***	0.02688***	0.07931***	0.02141***
	(0.00420)	(0.00535)	(0.00633)	(0.00381)
Gender	*NA*	*NA*	0.33220***	0.11053***
	NA	*NA*	(0.00326)	(0.00224)
Constant	-3.13760***	-2.70427***	-3.50012***	0.69671***
	(0.05159)	(0.04237)	(0.04402)	(0.03886)
		Diagnostic Check		
McFadden's R^2	0.2037	0.2041	0.1570	0.2310
Count R^2	0.816	0.67	0.6810	0.7430

Note: In the upper panel, the estimates without parentheses are the marginal effects at the mean of the independent variables of logit regression. The values in the parentheses are the standard errors of the estimates. *, **, *** implies 10 percent, 5 percent and 1 percent level respectively. The lower panel is self-explanatory, the values of different R^2 are presented.

The column of model 1 shows that family ties are positively related to the employment status of women. Specifically, the tendency of women to join the labor market may increase by 11 percent by doubling the level of family ties' strength. Our results are in sharp contrast with the study of Alesina and Giuliano (2010). Alesina and Giuliano (2010) find that family ties are negatively related to female employment.

One possible interpretation is that Alesina and Giuliano (2010) take a mix of developing and developed worlds. Therefore, the results may be biased towards the negative side. The ties, like family ties, social ties, religious ties, etc. in developing countries are different from the ties in developed countries. As discussed earlier, the people are self-centred with less concern for their families and therefore the ties do not have strong grounds in developed countries. On the other hand, the family ties are strong in developing countries. Therefore, we bifurcate the developing countries from the developed countries and have focused only on developing countries in our analysis in contrast to Alesina and Giuliano (2010)and find a positive relationship between family ties and women's employment status. This implies that if a family has strong ties then the women will go more towards labor force participation as compared to the family with weaker family ties.

The other variable in the model is education which is negatively related to the employment of women. The coefficient implies that if a woman wants to increase one year of schooling then there is a 0.0431 percent chance of a decrease in female employment. This implies that if women are busy getting higher education then their labor force participation is decreasing. Our results are in line with the findings of Alesina and Giuliano (2010) and Alesina (2013). However, as mentioned earlier, Schultz (1991), Tansel (2001), and Tam (2011) note that work attitudes can be explained by the level of education but Tnasel (2001) argues that the effect of education on work attitudes is unclear and depends on the substitution effect and the income effect The impact of education on labor force participation exhibits ambiguity, particularly among males, as documented by various researchers. Similarly, the effect of education on female labor force participation remains inconclusive due to the interplay between the income and substitution effects. Empirical evidence suggests that the substitution effect often dominates, establishing a positive correlation between education and female labor force participation (Tansel, 1996). Conversely, Kottis (1990) highlighted instances where education negatively influences female labor force participation under specific conditions. This divergence in findings underscores the multifaceted and context-sensitive relationship between education and female workforce engagement, warranting further exploration to disentangle the underlying dynamics.

The variable of age positively enters the labor force participation regression. It implies that the higher employment of the female will be increased as their age increases. More explicitly, a one-unit increase in age leads to a 0.1926 percent increase in female employment. The more interesting results are when we include the squared term of the age. The results of the squared term of age are negative. This suggests the labor force participation of women may decrease after a critical point of age. Family responsibilities and early retirement are possible explanations. Another important factor is that in strong family ties the children don’t want their mothers working out of home especially when they are old enough to work and earn.

The income of the middle class is negatively related to the employment of women while that of the upper class is positively related to the employment of women. This result is not surprising because a person, who belongs to the middle class and has a large number of children, must take care of a family with a low income. Therefore, one does not have enough income to spend on female education. If a female cannot get good and higher education, then she cannot participate in the labor force. On the other hand, the people who belong to the upper class have access to good education which has a positive effect on female employment. However, Alesina and Giuliano (2010) show that both middle and upper-class income is positively related to female labor force participation. The possible reason for this contrasting result is that Alesina and Giuliano (2010) include developed country data. In developed countries, the middle class also has enough resources to spend on female education and their male females possess equal rights to acquire education while in developing countries it is not so. Both the middle and upper class is positively related but their magnitude is different and the upper class is more significantly related to the employment of females in labor force participation.

Male Participation in the Labor Market

The estimation of the women's labor force participation has been done, following Alesina and Giuliano (2010), which shows that family ties have a strong impact on the labor force participation of women. But, in developing countries, the male component of the labor force is significantly different from the female in terms of the nature of the job, household responsibilities and the time allocation to family. Therefore, the results of female labor force participation cannot be generalized for the male labor force. Keeping this argument in view, we estimate a separate model for the male labor force. This section renders this idea.

Model 2 in Table 2 presents the results of equation 2 where male labor participation is a dependent variable. The variable of family ties enters positively. It implies that if family ties are double the existing position then there is more than a 10 percent chance that the male labor force participation will increase. In developing countries, the positive relationship between family ties and labor force participation is understandable. If the families have strong ties, then the males will do more work to earn for their families.

The other control variables do not alter the sign as compared to model 1. For example, education is also negatively related to male employment in our model which implies that as the males pursue higher education then they cannot be job candidates. Specifically, there is 6 percent chance of quitting the job market as they go for one more year of schooling. *Age* enters significantly and positively in the labor force participation regression. It implies that the employment of the male will increase as their age increases by one year. But, the squared term of age is negative. This suggests that the labor force participation of men may decrease after a critical point in their age. The retirement age may be a plausible reason for this. Another important factor is that in strong family ties the children don't want their parents should work after they are employed. Income is positively related to employment because when income increases, the persons have more chances to do their own business and be employed so upper-class income has more effect as compared to middle-class income. The value of the constant is -2.7042 which indicates that there are other factors which affect male employment and those variables are negatively related to male employment.

Total Employment

For robustness purposes, we also test the relationship between the total labor force employment and family ties. Total employment is affected by family ties, 1% increase or decrease in family ties leads to a 0.0167 probability increase or decrease in total employment respectively. Education is negatively related to employment, one unit increase in education results in a 0.0909 probability decrease in total employment. Age is positively related to employment as in young age a person works more as compared to older people. A year increase in age leads to a 0.5674 probability increase in employment. Income is also positively related overall. One unit Increase in middle-class income leads to a 0.0158 probability increase in employment and one unit increase in upper-class income leads to a 0.0793 probability increase in employment. Gender is also positively related to employment.

Youth Labor Force Participation

The difference in the demographic structure of developed and developing countries widened in recent years. Therefore, the economics of ageing is emerging very rapidly in recent years. But it is interesting to mention that 61 per cent of the youth of the total world population is in developing countries so its impact is also important for the economic development of developing countries. On the contrary, youth unemployment is also a major issue in developing countries. Therefore, it is important to discuss the young labor force participation in the context of family ties. Specifically, Freeman and Wise (1982) and Smyth (2008) document that when family ties are strong, parents and siblings are in good job positions then the coming generation has better opportunities to get good jobs. We estimated model 4 in this regard and presented the results in table column 4 of Table 2. The measurement of family ties is positively related to youth employment in developing countries. Specifically, if the level of family ties doubles then there are 14 per cent chance that the youth will go into the labor force market. If families are in strong bounding, the youth participation in the job market will increase.

In our estimate, education is negatively related to youth employment as young people are busy getting higher education then they are not part of labor force participation so 1 year of schooling increases to get higher education decreases the probability of young from labor force participation by .01469. Age is insignificantly/negatively related to youth labor force participation because when the age increases, the youth ceases to be part of the youth so age negatively affects youth employment.

Income, both upper and middle-class income, is positively related to youth employment. However, the magnitude of the effect of upper and middle-class income is different as the upper class has more resources and spends more on youth while the middle class has fewer resources and spends less on youth. The interesting fact is that the middle class spends less on females as compared to the male population. The middle class has a traditional and stereotypical approach and they think that the male payback ratio is higher as compared to that of females. One-unit increase in the income of the middle class leads to a 0.01894 probability increase in youth employment. One-unit increase in upper-class income leads to a 0.0214 probability of change in youth employment and vice versa.

Comparison and Predicted Probabilities

It is obvious from the above-mentioned result that family ties are positively correlated to the economic behaviour of the households which is measured by the labor force participation of the households following Alesina and Giuliano (2010). The measure of family ties is significantly positive in all four regressions. However, the magnitude varies from regression to regression. This implies that family ties have different impacts on the different clusters of the household. The interesting story is that women's participation is affected more than men's participation in the labor market. If the level of family ties doubles then the chances of women's participation are increased by 22 percent which in the case of the male labor force participation is only around 3 percent. The difference is understandable.

Some other important statistics are given in Table 3. The predicted probabilities are calculated based on the logit model for three major models, that is, women's labor force participation, men's labor force participation, and youth labor force participation. The table gives the probabilities of participating in the job market with different scenarios of the strength of the family ties. The questioners of WVS divide the family ties into four categories, that is, the family is not at all important, family is fairly important, family is very important and family is very much important. The predicted probabilities are calculated based on average values of other control variables, that is age, education, and level of income. The probability of the female going to work is 0.1697 in the absence of family power but this probability may increase to 0.1916 when the family ties become fairly important for her. Similarly, the probability of entrance into the job market may increase to 0.2240 and 0.2471 when family ties get very important and then become very important. This implies that the economic behavior of a woman towards participating in the job market may increase with the strength of family ties.

Table 2. The predicted probabilities for various scenarios of family ties and labor force participation

Scenario	Female	Male	Youth
Family is not important	0.1697	0.3189	0.1434
Family is fairly important	0.1916	0.3203	0.1512
Family is very important	0.2240	0.3217	0.1594
Family is very much important	0.2471	0.3231	0.1679

Interestingly, the decision of a man to participate in the labor market is not affected significantly by the improvement of family ties. The probabilities are changing partially from 0.3189 to 0.3231 in all four levels. However, the youth labor force participation is showing a clearer picture than the men labor force participation. Another key finding is that the squared term of age has a negative effect on both female and male labor force participation, suggesting that as wages increase, both genders are motivated to reduce their work effort once a certain income threshold is reached. However, an interesting difference emerges in the critical point at which this occurs for each gender. For women, the turning point is reached earlier, whereas for men, it occurs later, typically after a significant increase in income. This indicates that women tend to

exit the labor market more quickly than men. This finding aligns with the theoretical expectations of family economics. Prior research supports this observation, attributing women's earlier labor market exit to factors such as marriage, family responsibilities, childcare duties, and other socio-economic factors that disproportionately affect women.

Conclusion

The family has been known to have inferences both on microeconomic and macroeconomic outcomes; such as a significant role in determining economic behaviour. The importance of family cannot be denied in the development of society. Despite this fact, this institution is not paid due attention in economic literature until the seminal study of Becker (1988). The present study was also conducted in this vein to investigate the effect of family ties on the economic behaviour of households by using the data from the World Values survey wave from 1981 to 2008 for 52 developing countries. Developing countries are selected because of their varying nature and demographics from developed countries. Furthermore, many of the studies link family ties with women's labor force participation. We argue further that family ties may impact men and women differently. It is because males and females are significantly different then the results of female labor participation may not be generalized for the whole set of samples.

Keeping this in view we measure four different models. First determines that woman market participation is affected by strong family ties. Second, whether male labor market participation is affected by strong family ties, the third model measures the effect of family ties on total labor force market participation. The fourth model determines the effect of family ties on youth labor market participation. In the end, we make a comparison of male, female, and youth labor force participation to see which group is more affected by strong family ties. The results show that women's participation is affected more by strong family ties whereas the effect on male labor force participation is minute as compared to female labor market participation. Similarly, strong family ties also have a positive impact on youth labor market participation.

Furthermore, higher education is negatively related to employment in the case of developing countries. The level of income has positive effects on the working attitudes of all classes. However, the magnitude of the effect of middle-class income is lesser as compared to the upper class. Age has a positive effect while age square hurts employment of three sectors of the economy as age increases, the capacity to work decreases. Interestingly, middle-class families spend fewer resources on the education of their women as compared to men whereas higher-class families spend almost equal resources on the education of both women and men in the case of developing countries.

The results of the study suggest that women may show their preferences for joining the labor market in the presence of stronger family ties in the case of developing countries and the same is true for young labor participation. Importantly, women and the young labor force are the major chunk of the labor force in the demographic structure of developing countries. Therefore, their strong relations may play a vital role in the progress of their countries as mentioned by Becker (1988) and Akerlof (2007). The final message of this article is that family behavior is the active determinant of the prosperity of the countries; therefore, the evolution of the family structure may have a stronger impact on economic development. Therefore, the government, media, and other important institutions should guide households to develop a healthy family system in developing countries.

References

Alesina, Alberto, and Paola Giuliano (2010). The power of the family.*Journal of Economic Growth*. 15, 93-125.

AlesinaAlberto and Paola Giuliano, (2011). Family ties and political participation. *Journal of the European Economic Association* 9: 817-839.

Alesina, Alberto, and Paola Giuliano (2013). *Family Ties*. National Bureau of Economic Research. Working Paper No 18966.

Alger, Ingela, and WeibullJörgen (2008). Family ties, incentives, and development: a model of coerced altruism.in Arguments for a Better World: Essays in Honor of AmartyaSen: Volume II: Society,

Institutions and Development (Basu, K., and R. Kanbur, eds), Part II, chapter 10, Oxford University Press

Akbarzadeh, Fatemeh (2013). The impact of three types of economic, cultural and social capitals on youth's happiness. *Journal of Applied Sociology.*50: 15-18.

Akerlof, A. George (2007) The missing motivation in macroeconomics. *American Economic Review*. 97: 5-36.

Altonji, Joseph G., Fumio Hayashi, and Laurence J. Kotlikoff (1997). Parental altruism and inter vivos transfers: theory and evidence. *Journal of Political Economy.*105:1121-1166.

Altonji, Joseph G., Fumio Hayashi, and Laurence J. Kotlikoff (1992). Is the extended family altruistically linked? Direct tests using micro data. *American Economic Review*.82:1177-1198.

Althusser, Louis. (1971). Ideology and ideological state apparatuses. In L. Althusser (Ed.), *Lenin and Philosophy and other Essays*. New York: Monthly Review Press.

Amemiya, Takeshi (1983).Regression analysis when the dependent variable is truncated normal. *Econometrica*. 41: 997- 1016.

Ben-porath, Yoram (1967). The production of human capital and the life cycle of earnings. *Journal of Political Economy.*4:352-365.

Becker, S. Gary (1988). Family economics and macro behaviour. *The American Economic Review*.78:1-13.

Bertrand, Marianne., and Schoar, Antoinette (2006). The role of family in family firms. *Journal of Economic Perspectives*.20:73-96.

Bielby, T. William, Denise, D, Bielby (1989). Family ties: balancing commitments to work and family in dual earner households. *American Sociological Review*. 54: 776-789.

Blue, Sarah (2004) State policy, economic crisis, and gender and family ties: Determinants of family remittances to Cuba. *Economic Geography*.80: 63-82.

Boserup, E. (1970). Women's Role in Economic Development. New York: St Martin's Press.

Brady, H.Elizabeth (1950).Social learning beings at home. *Educational Leadership*, 7, 292-96

Celik, Kezban (2008). My state is my father youth unemployment experiences under the weak State welfare provisions of Turkey. *Journal of Youth Studies*. 11: 429-444.

Coleman,Marilyn and Ganong,H.Lawrence (1984).Effect of family structure on family attitudes and expectations.*Family Relations*.33: 425-432.

Chang, Wen-Chun (2013). Family ties, living arrangement, and marital satisfaction. *Journal of Happiness Studies*. 14: 215-233

Daron, Acemoglu, and David.Lyle (2004). Women, war, and won the wage: The effect of female labor supply on the wage structure at mid-century. *Journal of Political Economy.*112: 497-551.

Durand, J.D. (1975). The Labor Force in Economic Development, Princeton: Princeton University Press.

Duranton, G. and A. Rodriguez-Pose (2009), "Family Types and the Persistence of Regional Disparities in Europe", *Economic Geography,* 85: 23-47.

Ermisch, John, and Gambetta, Diego. (2010) Do Strong Family Ties Inhibit Trust? *Journal of Economic Behavior& Organization*. 75: 365-376.

Ellison,G, Christopher (1990). Family ties, friendship and subject well-being among Black-Americans. *Journal of Marriage and Family.* 52: 298-310.

Emlen, T. Stephen (1995) An evolutionary theory of the family. *Proceedings of the National Academy of Sciences of the United States of America* 92: 8092-8099.

Ermisch, John and Francesconi, Marco, (2001). Family matters: Impacts of family background on educational attainments. *Economica*. 68:137-156.

Ermisch, John & Gambetta, Diego, 2010. Do strong family ties inhibit trust?, *Journal of Economic Behavior & Organization*, 75(3), 365-376

Freeman, B. Richard and Wise, A. David (1982). The youth labor market problem: Its nature, causes and consequences. In the Youth Labor Market Problem: Its Nature, Causes and Consequences, Freeman and Wise", 1982 (Eds.) (Chicago: NBER and University of Chicago Press).

Fukyama, Francis (1995). Trust: The Social Virtues and the Creation of Prosperity. New York: Press.

Galasso, V. and P. Profeta (2012), When the State Mirrors the Family: The Design of Pension Systems,Bocconi University, mimeo.

Goldin, C. (1995). The U-Shaped Female Labor Force Function in Economic Development and Economic History, in T.P. Schultz (ed.). Investment in Women's Human Capital, Chicago: The University of Chicago Press.

Gough, Kathleen (1971). The origin of the family. *Journal of family and marriage* 5: 760-771.

Gemici, Abu (2007). Family Migration and Labor Market Outcomes", (January 1, 2007). Dissertations available from ProQuest. Paper AAI3271753. http://repository.upenn.edu/dissertations/AAI3271753

Guiso, Luigi, Sapienza, Paola, and Zingales, Luigi.(2003). People's Opium?Religion and economic attitudes.*Journal of Monetary Economics* 50: 225-282.

Hofferth, S., and PinzonA. (2011) Do nonresidential fathers' financial support and contact improve children's health? *Journal of Family and Economic Issues* 32 (2), 280-295.

Killingsworth, M.R. and J.J. Heckman (1986). Female Labor Supply: A Survey, in O. Ashenfelter (ed.): Handbook of Labor Economics, Vol. 1, Amsterdam: North-Holland, pp. 103-204

Kottis, A.P. (1990). Shifts over time and regional variation in women's labor force participation rates in a developing economy. *Journal of Development Economics*, 33, 117-132.

La Ferrara, Eliana., (2011). Family and Kinship Ties in Development: An Economist's Perspective. in: J-P Platetau and R. Peccoud (eds), Culture, Institutions, and Development, *Routledge Studies in Development Economics*, 107-124

Lundberg, Shelly, and Pollak, A. Robert (2007). The American family and family economics. *Journal of Economic Perspectives*.21:3-26.

Mare, Mauro, AntonelloMotoroni and Francesco Porcelli (2013). *Family Ties and Underground Economy*. AuleStorichedell'Universita, Pavia, Italy. 24-25 September 2012. Web. 22 May 2014.

Mincer, Jacob (1960) Labor Supply, Family Income, and Consumption. *American Economic Review*.pp. 574-583.

Mincer, Jacob (1962). "Labor force participation of married women: A study of labor supply", In Aspects of LaborEconomics,ed. H. G. Lewis. Princeton, 63-97

Mincer, Jacob (1985). Inter-country comparisons of Labor force trends and related development: An overview. *Journal of LaborEconomics,*3:s1-s32

Papanek, Hanna (1979). Family status production: the "work" and "non-work" of women". The labor of women: *Work and family*. 4:775-781.

Psacharopoulos, G. and Tzannatos, Z. (1989), Female labor force participation: An international perspective. *World Bank Research Observer*, 4(2), 187-201.

Putnam, D. Robert (1993). The prosperous community: social capital and community life. *The American prospect*. 13: 35-42

Reher, David (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review*.24:203-234.

Razum Oliver, Sahin-HodoglugilNuriye and Polit, Karin (2005), Health, Wealth or Family Ties? Why Turkish work Migrants Return from Germany, *Journal of Ethnic and Migration Studies.*31:4,719 - 739

Levitan A. Sarand Richard S. Belous (1981). Working wives and mothers: what happens to family life? *Monthly LaborReview*, 104:26-30.

Razum O, Sahin-Hodoglugil NN, Polit K (2005) Health, Wealth or Family Ties? Why Turkish work Migrants Return from Germany.*Journal of Ethnic and Migration Studies*31(4): 719–739

Smith, J.P. and Ward, M.P. (1985). Time series growth in the female labor force. *Journal of LaborEconomics*, 3(1), 59-90.

Smyth, C.Iannelli (2008). Mapping gender and social background differences in education and youth transition across Europe.*Journal of Youth studies*, (2008), 11:213-232.

Stock H. James and Watson Mark W. (2003) Variable trends in economic time series.*Journal of American Economic Association*, 2:147-74

Schultz, T.P. (1991). *International differences in labor force participation in families and firms*. Economic Growth Center Working Paper, No. 634, New Haven: Yale University.

Tam, A. (2011). U-shaped female labor participation with economic development: Some panel data evidence. *Economics Letters*, 110, 140-142.

Tansel, A. (2001). Economic development and female labor force participation in Turkey: Timeseries evidence and cross-province estimates. Middle East University Technical Paper

Thompson, Linda and Alexis Walker. 1989. Gender in Families, *Journal of Marriage and the Family*51: 845-871

Thomson, Elizabeth, Sara S. McLanahan, and Roberta B. Curtin, (1992). Family Structure and Parental Socialization.*Journal of Marriage and the Family* 54:368-378.

Smith P. James and Michael P. Ward (1985). Time series growth in the female labor force, *Journal of LaborEconomics*, 3: S59-S90.

Thompson L. and Walker, A. J.(1989). "Gender in families: women and men in marriage, work, and parenthood." *Journal of marriage and family*, 5, pp 845-871.

Weber, Max (1904/05). Die protestantischeEthik und der „Geist“ desKapitalismus. *ArchivfürSozialwissenschaft und Sozialpolitik*20: 1-54 and 21: 1-110. Reprinted in: *GesammelteAufsätzezurReligionssoziologie*, 1920: 17-206. [English translation: *The Protestant Ethic and the Spirit ofCapitalism*, translated by Talcott Parsons, 1930/2001, London: Routledge Classics.]

Appendix-I

Table A1. Developing countries list

1) Albania	19) Hungary	37) Rwanda
2) Argentina	20) India	38) Slovenia
3) Armenia	21) Indonesia	39) south Africa
4) Azerbaijan	22) Iran	40) Saudi Arabia
5) Bangladesh	23) Iraq	41) Taiwan
6) Belarus	24) Jordan	42) Tanzania
7) Brazil	25) Lithuania	43) Thailand
8) Bulgaria	26) Macedonia	44) Trinidad
9) Chile	27) Malaysia	45) Turkey
10) China	28) Mali	46) Uganda
11) Colombia	29) Mexico	47) Ukraine
12) Croatia	30) Moldova	48) Uruguay
13) Dominican Republic	31) Morocco	49) Venezuela
14) Egypt	32) Nigeria	50) Vietnam
15) el Salvador	33) Pakistan	51) Zambia
16) Ethiopia	34) Peru	52) Zimbabwe
17) Georgia	35) Philippines	
18) Guatemala	36) Romania	

Appendix-II. Variable Definition

Family ties are measured by these questions.

1. *The first question, taken from the World Values Survey (WVS), asks: How important is family in one's life? Respondents can choose from four options, ranging from "most important" to "not important." This variable is labeled FAM1.*
2. *The second question asks: Do you have love and respect for your parents? The response options are "yes," "no," and "don't know," and this variable is labeled FAM2.*
3. *The third question relates to the responsibilities of parents toward their children, with a simple "yes" or "no" answer. This variable is labeled FAM3.*
4. *The final question asks respondents to agree with one of the following statements, choosing either (1) or (2):*
   1)Parents have a life of their own and should not be asked to sacrifice their well-being for the sake of their children.
   2)It is the parents' duty to do their best for their children, even at the expense of their own well-being.This variable is labeled FAM4.

To measure the overall strength of family ties, these four variables are combined in two ways. One approach is to take the sum of all the responses, where a higher total indicates stronger family ties.

Male

Male is an indicator variable equal to one if the respondent is male, otherwise it is two (zero).

Age; *Age is expressed in years*.

Education:

Education is the age in years at which the respondent completed his or her highest education.

Income:

Income is coded based on the response to the question: "*Here is a scale of incomes. We would like to know in what group your household is, counting all wages, salaries, pensions, and other income that comes in. Just give the letter of the group you. Household falls into, before taxes and other deductions*" (income categories are coded by decile for each society, 1=*lowest decile, 10=highest decile).*