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Economic Literacy in a Multidimensional Individualistic Perspective: Evidence from Pakistan's Economy

ABSTRACT

Analyzing individual behavior has become a central theme in modern day economic literature. Understanding subjective behavior of individuals helps researchers to unfold many important phenomena and critical concepts. This study attempts to explore one such concept "Economic literacy", which is of practical and theoretical relevance. Economic literacy is among those concepts which on larger part explain the economic subset of individual's life. The study utilizes survey responses to explore the extent of economic literacy among salaried, self-employed and entrepreneurs and finds considerable heterogeneity among these groups. Economic literacy has been assessed on multidimensional basis whereby the dimensions are characterized by policy awareness, theoretical understanding, institutional awareness and self-aptitude of subjects involved in the survey. Utilizing ordinal levels of economic literacy, the study also offers an empirical investigation of some demographic determinants of this key variable within an ordinal logistic framework. The results reveal that demographics including age, income, education, family background, occupational classification significantly explains differential in ordinal levels of economic literacy. Our study is suggestive of some awareness campaigns and training sessions to be launched to make people more aware about state of the economy, policy making and its covariates.

Keywords: *Economic literacy, Survey Method, Factor Analysis, Ordinal Logit model*

JEL Classification: B21, B31, C25, C42

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Introduction

Individuals' decisions and choice making in daily life largely depends upon their beliefs and understanding regarding various concepts. In particular, making economic choices and decisions regarding consumption, saving, investment, working hours, wages etc., the role of economic knowledge and basic understanding about its covariates becomes vital (Lusardi 2007, 2008; Abreu and Medes 2010). Economic literacy entails the basic economic outlook and behavior in the actions taken by individuals in their routine matters. Economic literacy does not necessarily mean that an individual must have some formal background of economics at elementary or advanced level education. Rather it should be a concept of comparing theory and practice rather than just analyzing standard theoretical knowledge. Hence, if someone can comprehend and justify his economic transactions and decisions with rational reasoning, he should be regarded as economically literate.

Economic literacy is defined in manifold ways in literature; it can be as confined as attributing basic understanding of economic concepts like demand and supply, saving and investment as an indicator of economic literacy or can be as broad as seeking economic interpretation of every decision we take in our domains as consumer, producers, businessman, investors, lenders etc. In behavioral paradigm it is more of an intangible concept rather than tangible. It is a way of how one seeks understanding of economic world around him/her, applies basic principles to his/her decision making and evaluates outcomes of these decisions in a rational way.

Economic literacy owes its importance due to its theoretical and policy relevance. Policy makers value it because an economically literate person can explicate his/her actions better than the contrary (Caplan, 2001, 2002). From central banking perspective, it is a feature which removes communication gap between monetary authority and public; it helps people to comprehend stance of monetary policy in better way and establish a credible tie between these two economic characters (Burke and Manz, 2014; Blendon et al., 1997). In fiscal discipline, economic literacy is regarded with respect to its role in minimizing the biases created by political affiliations and polarization of ruling governments. It is found that economically literate voters normally disassociate themselves from political affiliations and does not allow governments to manipulate and present policy decisions in lieu of these affiliations (Murtinu et al., 2016).

Although a number of researchers have explored the concept of economic literacy but they have concentrated more upon financial literacy (see for example, Karlsson, 2009; Kempson, 2009; Lusardi and Mitchell, 2007, 2014; Abreu and Mendis, 2010; Huston, 2010). In most of the studies economic literacy and financial literacy are used interchangeably. However, economic literacy may

be regard as a universal set and financial literacy as its subset. Financial literacy requires specific knowledge pertinent to most of the financial decisions, while economic literacy is a multidimensional concept. Financial literacy is restricted to the domains of investment decisions, corporate behaviors, diversifications of asset portfolio, understanding of stock and bond markets, understanding of interest rates and concept of compounding and financial numeracy regarding transactions of bank account and insurance plans etc.[1] Economic literacy at the other hand is related to understanding the dynamics of inflation and inflationary expectations, ways in which fiscal and monetary policy operate and adhere to the macroeconomic objectives, theoretical knowledge of institutional linkages that helps in transmission mechanism of different policies, self-oriented discussions on viability of different projects launched by governments etc[2].

Researchers seek understanding of economic literacy by adopting tools like experimental and survey methodologies. At micro level, the most frequently used tool is survey on measuring students and teachers' economic literacy at college and university levels (see for instance, Grimes et al., 2010; Hashim and Kayode, 2013; Shipley and Shetty, 2008; Tabesh and Schuluz, 2007). In macro and broader perspective, more emphasis is laid upon tracking economic literacy at national and international level (Walstad and Larsen, 1992; Walstad, 1994, 1997; Jappelli, 2010). These surveys and controlled experiments are mostly comprised of well-defined standard questions which can reveal the economic aptitude and understanding of respondents or subjects. These questions include certain quantifications (for e.g. calculating present values), comparing relative outcomes (for e.g. comparing outcome of one economic choice like purchase of house with other like investing in stocks), ascertaining the consequence of any policy action taken by government on any variable (for e.g. impact of taxes on employment), knowledge of public about monetary policy and its tools etc.

This paper is an attempt to explore the concept of economic literacy with a broader perspective. It not only addresses its measurement part but also supplements it with exploring its determinants. The results yield some meaningful insights regarding the role of demographics in defining levels of economic literacy. Our study identifies literature gap in the existing literature

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[1] See, Agarwal and Mazumder, 2013; Agarwal et al., 2015; Campbell, 2006; Arianti, 2018; Fernandes et al., 2014

[2] To understand the difference between the two terms, consider the following narrative: If an individual say, "I can understand the role of interest rate in helping me choose between saving and investment". This awareness complies to financial literacy. But if he supplements this with a statement that I understand the role of interest rates for the economy and as policy variable; his knowledge should be termed as economic literacy.

and attempts to fill it in following manner: Firstly, literature lacks sufficiency in capturing economic literacy in multidimensional way. Our study abridges this gap by constructing a multidimensional index of economic literacy. The index is supposed to capture economic literacy with a broader perspective; it does not only focus on theoretical understanding and knowledge of respondents but also complements it with their self-reasoning and aptitude.[3] Secondly, our study is unique in a sense that it makes a comparative analysis of economic literacy among three distinct economic segments including salaried, self-employed and entrepreneurs through a self-administered questionnaire. This occupational comparison is an addition to the existing body of knowledge on the given subject. Thirdly, we have categorized economic literacy into its ordinal levels unlike the dichotomous extremes and continuous version of this variable in past. Finally, differentials in ordinal levels of economic literacy have been explored based on the demographic profile of respondents. Past literature has mostly utilized the ordinary logistic models to ascertain the determining factors of economic literacy. Our study unlike the previous work proposes ordinal logistic framework as a more viable alternative in this deterministic scheme. As per our bleak knowledge not much literature has captured economic literacy in such manner at international level and to date the study is unique of its nature in case of Pakistan.

Rest of the paper is organized as followed: Section 2 provides a theoretical framework for measuring economic literacy and sheds light on some of its determinants. Section 3 pertains to data sources and variable description. Section 4 presents a descriptive analysis. Section 5 makes discussion on estimation results and section 6 summarizes the study in conclusive manner.

Theoretical Framework and Estimation Technique

Measuring Economic Literacy

As economic literacy is multidimensional concept, its quantification first requires identification of its dimensions/indicators; which then can be summarized into a composite index. Policy awareness can be used as an important indicator of economic literacy. Individuals who are familiar with

[3] Some studies fall in exception to this statement. For example, Gerek and Kurt's (2011) utilized a multidimensional economic literacy scale for a survey study of students, the same scale was used by Yayar and Karaka (2017) for determining the economic literacy among the public officers in turkey. But the dimensions used in those studies are distinctively different from those that have been employed in our research.

the baseline ideas regarding policies including policy titles, objectives, linkages and controlling authorities are said to be economically literate. Relational aspects of different macroeconomic variables like inflation and unemployment, wage and employment, money value and inflation, printing of money and government expenditures, risk diversification etc. reflect basic theoretical understanding and knowledge of individuals that can be used to classify them in terms of their economic literacy. Institutional awareness is an important dimension of economic literacy. Many institutions working in the economy are primarily meant for policy advice and its evaluation, some have designated tasks like planning and development and some execute their role for record keeping of economic activities and data collection. Having familiarity with their names and tasks they perform adequately indicate content of economic literacy.

Subject of economics portrays individuals to behave in certain manner and advocate specific characteristics for individuals in their respective domain as an economic agent. Self-aptitude of individuals may or may not comply with these characteristics, the differential between the ideal and the real also depicts a potential indicator/dimension in which economic literacy can be explored. Last but not the least, economic reasoning and justification for the made choices in a given context is a healthy indicator to elucidate economic literacy.[4] The dimensions of economic literacy are summarized below in Table 1:

Table 1: Dimensions of Economic Literacy

Policy Awareness	
Indicators	• Familiarity with name of policies and institutions responsible for policy • Information about controlling authority • Objectives of Policy
Theoretical Understanding	
Indicators	• Relationship of inflation with government spending and printing of money • Wage-employment relationship • Impact of Inflation on various forms of money (i.e. cash, deposits, savings etc.)

[4] Although the dimensions and questions used to capture economic literacy are designed by respective authors of this study, but this design is made under the guidelines of following references:

- Test of economic literacy developed by National Council on Economic Education (NCEE)
- Surveys on financial literacy organized by OECD around the world on regular basis, for example: Measuring Financial Literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of Financial Literacy, OECD 2011, 2012 etc.

	• Investment and risk diversification
Institutional Awareness	
Indicators	• Familiarity with names of institution (e.g. Central bank, FBR, Planning commission etc.) • Elementary or basic knowledge about the core tasks performed by these institutions
Self-Aptitude	
Indicators	• Aptitude of tradeoffs and comparisons in economic choices and decisions • Choosing best possible options in a given state of affairs. • Aptitude of understanding economic issues by making discussions with experts, better informed and literate people in the community. (e.g. making discussions on significance of economy wise mega projects, discussion on economic issues like energy crisis, discussions on concepts like import/export and trade policies etc.) • Economic topics (including inflation, employment, budget deficits, taxation, stock and money market etc.) as a subject matter of discussion in daily routine.

Determinants of Economic literacy

Economic literacy is a qualitative concept; it is a perceived or acquired tendency rather than a built-in tendency of individuals. Demographics impart a strong impact on the levels and degrees of economic literacy. For example, economic literacy is assumed to be different across different age groups (Walstad and Rebeck, 2002; Nilsson et al., 2009). It can also vary with the level of education one owes (Yasmin et al., 2014), place of residence of a person, income levels of individuals (Wood and Doyle, 2002), and the social and family background of individuals. Age and education are the tools of learning process and can explain variation in economic literacy possessed by different persons. Hypothetically increment in level of age provides better understanding to many practical affairs pertinent to economic literacy. Likewise, more education helps in better processing of available information and allows a margin for it to be utilized in most efficient manner.

Income provides agents with a mean to certain ends; higher income allows more access to the sources which can augment economic literacy of a person. The family background and social environment one lives in creates a huge impact on the aptitudes. Humans normally believe and perceive in accordance with an inductive frame of reference. If someone's father is well educated and has taught him to comprehend every aspect and dimension before concluding anything, he might behave in the same manner. If the place where a person resides comprises of people having in depth knowledge, better economic outlook and understanding of various issues, this would allow him to develop a literate aptitude. Similarly, if a person belongs to an agglomeration, family setup or community where incidence of

unemployment is least experienced, but inflation is more cursed upon, he naturally becomes inclined to think in similar fashion. If this agglomeration is unable to assess tradeoff between inflation and unemployment in an economically literate way, the person would most likely do the same. In nutshell, as economic literacy encapsulates the awareness, knowledge and ways to process information regarding economic concepts and variables like residential, social and family domain counts a lot in explaining it.

For empirical investigation we can specify our econometric model in following manner:

$$ET = \alpha_0 + \alpha_1 IL + \alpha_2 AG + \alpha_3 FS + \alpha_4 Edu + \alpha_5 MS + \alpha_6 LC + \alpha_7 FEdu + \varepsilon \quad (1)$$

The credential and nature of variables involved are summarized in the following table along with their value labels:

Table 2: Structure of Variables

Dependent variable				
Variable Name	**Label**	**Scale (Level)**	**Criterion for Construction**	**Code/label**
Economic Literacy	ET	Ordinal (1-3)	If factor score > 66th Percentile	3 (High)
			> 33rd but < = 66th Percentile	2 (Moderate)
			If factor score < = 33rd percentile	1 (Weak)
Independent Variables				
Income Level	IL	Ordinal (1-5)	> =1 Lac Rupee	5 (High)
			Between 70000 and 1 Lac	4 (Fairly-High)
			Between 4000 and 70000	3 (Moderate)
			Between 25000 to 40000	2 (Average)
			< = 25000	1 (Low)
Age Group	AG	Interval (1-4)	Between 20 and 30 Years	4
			Between 30 and 40 Years	3
			Between 40 and 50 Years	2
			Between 50 and 60 Years	1
Family Setup	FS	Dichotomous	Joint	1
			Independent	0
Education	Edu	Interval (1-4)	Intermediate	1
			Bachelors	2
			Masters	3
			MS/MPhil/PhD	4
Marital Status	MS	Dichotomous	Married	1
			Unmarried	0
Location	LC	Dichotomous	Federal Territory	1
			Punjab	0
Family's Educational	FEdu	Ordinal (1-4)	Captured by % of well-educated people in the	Well educated people must

Background	family/relatives	be at least graduate
	> 70% people are well educated	4
	Between 50 to 70%	3
	Between 30 to 50%	2
	Between 10 to 30%	1

Estimation Technique

We will capture economic literacy through multidimensional indicators. The individual aggregated scores of each dimension are analyzed for incidence of economic literacy within each dimension and are also aggregated to construct a composite index using factor analysis. Each dimension and composite index is compared across salaried, self-employed and entrepreneurial category to attribute high or low ranks to each segment according to their revealed content of literacy.

Based on index of economic literacy, we divide individuals into three groups according to their level of economic literacy. Individuals with their economic literacy score equal to or greater than 66th percentile are categorized as "Highly Literate", those whose score falls between 33rd and 66th percentile are categorized as "Moderate Literate", and those with score zero to 33rd percentile are categorized as "Weak Literate". Our dependent variable "Economic Literacy" is of ordinal nature, therefore we will employ ordinal logit model to estimate equation (1).

Data Collection

We utilize survey method to collect data on the relevant information required for our study. As the study focuses on assessing economic literacy across salaried, self-employed and entrepreneurs, these segments mark the targeted population for our study design. We collect data through a self-administered questionnaire from federal territory, Rawalpindi, Faisalabad, Sahiwal, Pakpatan and Arifwala.[5] Our sampling unit comprises of all those individuals who hold at least 5 years of work experience and have completed at least intermediate level of education. The survey primarily captured responses of almost 720 respondents and after data cleaning 696 were left when dealt for missing information.

[5] The selection of these areas is primarily based on the diverse form of enterprises available in those places, which allows a more representative sample of entrepreneurs to be collected.

Descriptive Analysis

This section presents frequency distribution of variables involved in our analysis. The frequency distribution of independent variables is presented below in Table 3.

Table 3: Frequency Distribution of Independent Variables

Education Level		**Age Group**		**Income Level**		**Family Background**	
Category	**%**	**Category**	**%**	**Category**	**%**	**Category**	**%**
Intermediate	22.99	20-29	27.46	High	10.49	> 70%	23.85
Bachelors	43.82	30-39	44.36	Fairly High	26.29	> 50 but <=70%	46.12
Masters	28.02	40-49	20.95	Moderate	28.30	> 30 but <=50%	20.98
MS/PhD	05.17	50-60	07.23	Average	25.72	>10 but <=30%	09.05
				Low	9.20		
Location		**Marital Status**		**Family Setup**		**Occupational Groups**	
Federal	54.17	**Married**	74.86	**Joint**	67.67	Salaried	37.2
Punjab	45.83	**Unmarried**	26.14	**Independent**	32.33	Self-Employed	32.76
						Entrepreneurs	30.03

In terms of education level, maximum proportion of our respondents (44% and 28%, respectively) holds "Bachelors" and "Masters" degree. This is in line with the objectives of our purposive sampling design. As our sample mainly comprises of educated people and includes businessmen, it is no surprise that high proportion of survey respondents falls in "Moderate" (28.3%) and "Fairly high" (26.3%) income category on income scale. As per age category, almost half of our sample respondents belong to age group 30-39 and 27.46% respondents belong to young age group between 20 and 29. As per conventional norms of our society, a major 68% of respondents in our sample are found affiliated with joint family setup rather than living independently. Almost three-fourth of the survey respondents are married. In terms of geographical classification 54% respondents belong to federal area and rest 46% are from Punjab. As per occupational classification self-employed and entrepreneurial entities almost share equi-proportional fraction in the sample while proportionate share of salaried group (37.2%) is relatively higher than the other two occupational categories.

As our sample is comprised of three distinct groups; salaried, self-employed, and entrepreneurs, it is most desirable to compare economic

literacy across these sample sub-groups. Table 4 presents the results on relative ratio of score acquired by each group in a respective dimension.[6]

Table 4: Economic Literacy Across Sample Categories

Categories	Policy Awareness	Theoretical Understanding	Institutional Awareness	Self Aptitude
Salaried	46.84	53.37	51.3	40.05
Self-employed	36.79	49.81	39.24	32.14
Entrepreneur	51.13	45.43	41.94	40.08

Table 4 presents the economic literacy of the three sample groups against each dimension of economic literacy. All three groups have shown a low economic literacy on the score card as represented by the ratio of aggregated acquired scores out of maximum attainable score against each dimension. In relative terms salaried and entrepreneurial groups have performed better than the self-employed category of individuals. Entrepreneurial class has outperformed salaried and self-employed class in terms of policy awareness. This result is not a surprise as most of the decisions taken by entrepreneurs require vigilance and awareness against the policy actions taken by fiscal and monetary authorities. Salaried class has superseded the other two groups in terms of theoretical understanding and institutional awareness. The performance of salaried and self-employed category against the Self Aptitude is almost identical. Self-employed group is deficient in its performance across all dimensions except theoretical understanding where its percentage score lies close to 50%.

The individual score against each of the above-mentioned dimensions are used to construct a composite index of economic literacy using factor analysis. Factor analysis requires each dimension to load strongly in the retained component and the retained component should explain significant proportion of variance in the final solution.[7] In our case we are able to extract a one factor solution explaining almost 54% of variance, the factor loadings of the four dimensions; Policy Awareness, Theoretical Understanding, Institutional Awareness, and Self- Aptitude are 0.8, 0.50, 0.85 and 0.74, respectively. The factor loadings are employed to extract the

[6] This ratio is calculated by dividing the aggregate score of a respective dimension by the aggregate of maximum attainable score in that dimension.

[7] The recommended cutoff for factor loadings is 0.5 for any item to be retained in the factor solution. In physical sciences the retained component or factor is recommended to explain at least 80% of variance in the final solution, however in subjects which involve subjective behavior this cutoff is relaxed even up to 50% for factor solution to be admissible.

factor scores which are categorized based on percentile distribution and are finally summarized into a composite construct of economic literacy with three distinct categories: "Highly Literate" (if factor score is equal and greater than the 66th percentile), "Fairly literate" (If factor score is equal and greater than the 33rd percentile but less than 66th percentile), "Weakly literate" (if factor score lies below 33rd percentile). There is almost equal spread of respondents lying in the three specified categories based on percentile distribution.

Estimation Results

We have employed an ordinal logit to our equation 1. The results are presented in Table 5.

Table 5: Ordinal Logit Model, Parameter Estimates and Odd Ratios

BRANT Test	**Chi- Square**	**25.09**	**Prob.**	**0.122**		
Independent Variables	**Categories**	**Parameter Estimates**	**Std.Error**	**Z-Value**	**P>|z|**	**Odd-Ratios**
Age Group	Between 30-40	0.12	0.23	0.52	0.601	1.126
	Between 40-50	0.24	0.28	0.85	0.398	1.268
	Between 50-60	0.84	0.39	2.13	0.033	2.326
Education Level	Bachelors	1.26	0.215	5.83	0.000	3.512
	Masters	1.59	0.252	6.31	0.000	4.908
	M.Phil./PhD	2.09	0.420	4.97	0.000	8.100
Marital Status	Married	-0.074	0.236	-0.32	0.752	0.928
Family Setup	Joint	0.026	0.177	0.15	0.884	1.026
Family Educational Background % of graduates	Between 30-50%	0.312	0.320	0.97	0.330	1.366
	Between 50-70%	0.76	0.299	2.53	0.011	2.135
	> 70%	1.24	0.313	3.97	0.000	3.468
Sample groups	Self-Employed	-0.391	0.210	-1.86	0.063	0.676
	Entrepreneur	-0.731	0.253	-2.88	0.004	0.481
Income Level	Low	0.359	0.311	1.15	0.249	1.431
	Average	0.642	0.320	2.00	0.045	1.900
	Fairly High	1.784	0.367	4.86	0.000	5.956
	High	1.534	0.425	3.61	0.000	4.639
Region	Punjab	-1.119	0.166	-6.71	0.000	0.326

/cut1	1.032	0.431
/cut2	2.867	0.443

An important prerequisite for ordinal logit regression is the satisfaction of proportional odd assumption, which states that the coefficients of independent variables remains same across ordinal categories of dependent variable. We have employed a Brant test for verification of this assumption and the results presented in Table 5 above show that we cannot reject the null of proportional odds and proceed with the interpretation of ordinal logit model estimates.

Column 3 of Table 5 reports parameter estimates corresponding to each category while the last column provides odd ratio.[8] Results show that with the increase in age the economic literacy also increases, however, it is significance for the age group of between 50 and 60 years. The odd of lying in highest rank of economic literacy is 2.32 times higher for individuals having age between 50 to 60 as compared to those who lie between 20 to 30 years of age. This suggests that more aged people are more likely to fall in high ranks of economic literacy. Our study primarily captures economic literacy in terms of policy awareness, institutional awareness, theoretical understanding of concepts pertinent to economy and self-aptitude of people in their economic way of thinking and decision making. As per indicators used for economic literacy we can safely contend that all such things included in our measure strengthens with age and experience, therefore our result is not a surprise.

As per education level, all levels or categories of education have been found significant. The positive coefficients correspond to each category of education (compared to least education level: base category) documents that more educated people are more likely to have high economic literacy as compared to combined fairly or weakly literate group. If we make a magnitude wise comparison across each successive level of education, the last column of odd ratios figures out that bachelors as compared to

[8] The significance of the variables included in the model has also been tested in the continuous version of independent variables and is found in compliance with the results reported in Table 5 which accounts for categorical nature of independent variables. For example, when we treat age as a continuous variable in ordinal logistic regression of equation 1, this is found significant with positive parameter coefficients suggesting positive association alternatively more likelihood of falling in highest ranks of economic literacy. Same has been found as true for income level and education.

intermediate are 3.51 times more likely to be highly literate as compared to weakly literate. The likelihood successively increases when we compare Masters with intermediate (4.91) and M.Phils/PhD's with intermediate category. (8.10). The categorical scheme confirms that individuals with highest qualification are most likely to be in high ranks of economic literacy as compared to those with less qualification. Education always is a source of enhancing our information content and changes the way we approach and access certain aspects of our economic and social life. Irrespective of the discipline or field one adopts in his educational domain, the interactive environment at educational institutes allows educated people to learn many interdisciplinary things. In essence, the economic matters and debates certainly remain at the core of this interdisciplinary outlook and provide prospects of enhancing economic literacy.

Variable titled as "Family background" (represented by the proportion of well-educated people in the family) is found a positive determinant of economic literacy. Individuals who have been a part of a family with more educated people are found more likely to be highly literate as compared to fairly highly or weak literate. The proportional odds of high economic literacy for individuals having a family with 70% or more graduates is 3.47 times higher than those who belong to family with least proportion of graduates (10-30%). Likewise, this odd ratio is 2.13 when we compare those with 50-70% graduates as compared to least category. The results are indicative of successively higher economic literacy across higher proportion of graduates in the family background. The results are in line with our proposed hypothesis that more educated family members whom we interact and communicate with impart an impetus for us to behave in economically literate manner. As our own education positively matters for our economic literacy the education level of members comprising our family background plays a positive complementary part.

Our model also analyzes the potential impact of occupational differences upon economic literacy captured by the variable titled "Sample subgroups. It is evident from the results that both self-employed and entrepreneurs are less likely to fall in high ranks of economic literacy. However, there is a subtle difference in terms of proportional odd ratio. The proportional odd of being highly economically literate as compared to fairly or weakly literate for entrepreneurs is (1-0.48) = 0.52 times lower as compared to salaried class, while this likelihood is (1-0.67) = 0.33 times lower when we compare self-employed with salaried. The results suggest that out of three occupational groups, the one with the highest rank on literacy scale is salaried class. One can contend that the self-employed and entrepreneurial class might hold their own self-created rules of thumb for evaluating and analyzing the economic outlook and indicators. Their responses might not

fall true to the theoretical propositions based on this reliance (a difference between theory and practice), this might have caused their performance to be relatively weak as compared to the salaried class.

We have hypothesized in our theoretical framework that income level should impart a positive impact on levels of economic literacy. The results against this variable provide a testimony to our formulated hypothesis. Incremental income levels are found to be positively associated with ordinal ranks of economic literacy. Three out of four categories of income level are found significant in this regard. Although all significant categories of income level represent a high odd of being lying in high ranks of economic literacy as compared to lower ranks, but the highest lies correspond to 'Fairly high' income categories (5.95). A visible divide exists between the odd ratios of higher levels and low level of income. Economic literacy necessarily requires acquiring of pertinent and relevant information for creating a broad vision and scope in decision making and evaluating the outcomes of these decisions. As our income provides a mean to this end, in essence a higher income level potentially generates stronger information set which provides a competitive edge to the individuals with higher incomes in terms of their performance on economic literacy scale.

Finally, the regional classification also holds significance in our empirical model. Individuals lying in Punjab region as compared to federal territory are less likely to belong to highly literate category as compared to combined fairly literate or weakly literate category. This result can be analyzed with respect to characteristics of population residing in both regions. Perhaps the relatively higher proportion of educated people living in federal territory as compared to Punjab can be an explanation for this differential. The head offices of various economic institutions like Planning commission, policy making institutes, data collecting agencies like Bureau of Statistics in or around the federal constituency might be another reason for grasp on superior information on the part of individuals living in federal area and its proximities.

Conclusion and Policy Implications

The study is an attempt to capture the concept of economic literacy in multidimensional perspective. Survey respondents have been assessed for their respective performance on identified dimensions of economic literacy. The performance of respondents has been evaluated based on median cutoff. Relatively high proportion of respondents display weak performance on literacy scale across all dimensions with reasonable amount of heterogeneity. A composite index of economic literacy has also been constructed for evaluation of an empirical model. Quite a few demographic

variables have been tested for their potential link with economic literacy including age, education, income, family background, occupation, marital status, family setup and regional classification. Treating economic literacy in ordinal manner the results of ordinal logistic regression revealed that demographics hold significance in defining the ordinal ranks of economic literacy. Old age individuals, individuals with high level of education, individuals with high income levels and finally individuals with strong family background are found more likely to be in high grades of economic literacy as compared to low grades. Occupationally entrepreneurs and self-employed individuals have shown less content of literacy as compared to salaried class

Optimality of economic decisions and choices made by individuals has remained a subject matter of discussion in economic literature for a long time. Among the key factors, this optimality largely depends upon the knowledge and awareness of certain economic aspects linked with those decisions and choices. Our study has examined the level of this knowledge and awareness (termed as economic literacy) on the part various economic agents (salaried, self-employed and entrepreneurs) in their individual domains. We have found in our study that maximum proportion of respondents lacks sufficiency in terms of this awareness and knowledge, this in essence can provide us with a healthy reason for sub-optimality of choices mentioned in literature. Our study implicates that individual choices remain suboptimal in economic terms because they lack economic literacy. From policy perspective, this deficiency creates a wedge and communication gap between public and policy makers (Government or Central bank). It leads public to misinterpret certain aspects of announced policies therefore opting for inappropriate responses at times. Our study in essence suggests that special emphasis must be laid on making people aware of at least some basic economic concepts through certain training sessions and awareness campaigns so that this wedge can be rectified or removed.

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