Financial Stress and Household Behaviour: A Case Study of Rawalpindi, Pakistan

Submitted By

Azhar Mehmood

Reg # MP-ECO-AS18-ID003

Supervised By:

Dr. Sabahat Subhan

Department of Economics

National University of Modern Languages
Islamabad- Pakistan

Financial Stress and Household Behaviour: A Case Study of Rawalpindi, Pakistan

By

Azhar Mehmood

M.Phil. Economics, NUML, Islamabad

A thesis submitted in the partial fulfillment of

The requirement for the degree of

Master of Philosophy in Economics

Faculty of Management Sciences

NATIONAL UNIVERSITY OF MODERN LANGUAGES

ISLAMABAD

2021

NATIONAL UNIVERISTY OF MODERN LANGUAGE,
ISLAMABAD
FACULTY OF MANAGEMENT SCIENCES

THESIS AND DEFENSE APPROVAL FOAM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with overall exam performance and recommend the thesis to the Faculty of Higher Studiesfor acceptance:

Thesis Title **Financial Stress And Household Behaviour: A Case Study Of Rawalpindi, Pakistan**

Submitted by: Azhar Mehmood Registration #: MP-ECO-AS18-ID003

Student Name

Master of Philosophy

Degree Name

Economics

Name of Discipline

Dr. Sabahat Subhan _____

Name of Supervisor **Signature of Supervisor**

Dr. Malik Saqib Ali _____

Name of HOD **Signature of HOD**

Prof Dr. Naveed Akhtar _____

Name of Dean (FMS) **Signature of Dean (FMS)**

Prof. Dr Muhammad Safeer Awan _____

Pro-Rector Academics **Signature of Pro-Rector Academics**

"In the Name of Allah, the most

***Be**neficent, the most **M**erciful"*

DECLARATION

I hereby declare that the research submitted to Department of Management Sciences at National University of Modern Languages by me is my own original work. This research work has been submitted by me in the partial fulfilment of the requirements for the degree. It is further declare that I have made this report completely on the basis of my personal efforts made under the candid guidance of instructors especially my supervisor Dr. Sabahat Subhan, department of management sciences, National University of Modern Languages, Islamabad, Pakistan. I further declare that the results presented in this thesis have not been submitted for the award of any other degree or fellowship. I am aware of the terms, copyright and plagiarism and I shall be responsible for any copyright violation found in this work.

Submitted by: Azhar Mehmood _____

Student Name **Signature**

Registration #: MP-ECO-AS18-ID003

Master of Philosophy

Degree Name

Economics

Name of Discipline

_____

Date

ABSTRACT

Human economic decisions depend upon their preferences and motives which optimize their satisfaction level and lead their lives to a better end. Households take prime decisions about Consumption and saving. These decisions are affected by different demographic, social and economic factors. This study, tries to explore beahvioural factors which affect human decisions by using primary data of 243 households belonging to salaried class. Financial stress is the key variable which distort the economic decision about saving. Impulsive behaviour, consumer loan, consumer financing instruments, pro-consumptive behaviour, family financial support and domestic externalities are the factors which cause financial stress among households of salaried class. The descriptive analysis shows all variables have significant role in determining of financial stress while ordered logit estimations shows that consumer loan, pro-consumptive behaviour and family financial support are statistically significant factors. 63 % of respondents show impulsive behaviour when something likes or listen about promotions. 66 % of respondents agree that consumer loan makes life worse while 69 % of respondents reports that they feel anxiety when they avail any type of loan, which is a vital symptoms of financial stress. 28 % of respondents feel distress after using Consumer financing instruments of respondents such instruments. 47 % of respondents report that they become fed up by making regular payments while 48 % of respondents are of view that pro-consumption leads to distress. Family financial support is negatively correlate with financial stress as 72 % of respondents verify this fact that increase the family financial support decrease the level of depression among households. 75 % of respondents report that demonstration effect distort the consumption pattern which further leads to early utilization of financial resources which further leads to financial stress. The marginal effects of accepted region (i.e. agree & strongly agree) shows that significant variables have role in determination of financial stress. Consumer loan has 7.5 % while family financial support has 3.8 % and domestic externalities has 4.3 % impact in determination of financial stress. Marginal effects of OLOGIT saving model in accepted region shows that consumer loan has 3.5 % while pro-consumptive behaviour has 3.6 % and domestic externalities has 1.9 % impact in determination of saving behaviours. The financial stress OLOGIT model concludes that consumer loan and domestic externalities have positive

impact on financial stress whereas family financial support has negative impact. The saving OLOGIT model concludes that consumer loan, pro-consumptive behaviour and domestic externalities have negative impact on saving behaviour of salaried class.

DEDICATION

I devote this humble effort to my parents who supported me spiritually and morally throughout this research work and to my wife for her relentless support throughout my M.Phil. Degree program. I would also devote this thesis to my respectable supervisor who grants me valuable Knowledge. God opulently bless all of you.

ACKNOWLEDGEMENT

I firstly pass my heartfelt thanks to the almighty Allah who kept me strong throughout the course and has enabled me to complete this dissertation. I pay special thanks to my dearest parents and my wife for their relentless encouragement and support toward this journey. I also like to express my intense admiration to my supervisor Dr. Sabahat Subhan for his courteously encouragement and candid guidance towards writing this thesis. I wish to thanks to everyone who stood with me spiritually, financially and morally towards the achievement of my goal.

Table of Contents

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICIES

CHAPTER 1

INTRODUCTION

1.1 Introduction

Human economic decisions depend upon their preferences and motives which optimize their satisfaction level and lead their lives to a better end. Consumption and savings are two key factors in an individual life. Consumption has a unique characteristic of direct satisfaction while savings restrain a futuristic impact on human life. In this era of economic crunch, individual saving decisions are sternly effect by consumer debt, credit financing instruments, credit purchasing and most importantly by financial stress. All of these factorize individual incomes except financial stress which create hindrances in making the decision to save.

Economists give a variety of thoughts about savings in economics theories. Gedela (2012) and Ammad & Ahmed (2020) cite Keynes, "Absolute Income hypothesis" Dusenbery (1951) "Relative income hypothesis" and Modigliani (1963) "Life cycle Income Hypothesis". Keynes in his "Absolute Income hypothesis" analyze that an individual increase his consumption along with increase in his income but not in equal magnitude. According to Absolute Income Hypothesis this gap may turn to individual savings. Dusenbery argues in his article "Relative Income Hypothesis" that household saving pattern always influence by consumption pattern of the other household of the same income group. Modigliani in his Life cycle Income Hypothesis states that an individual household has relatively lower level of income at early and end stage of life so individual household seeks a gradual increase in his consumption throughout his life. In his result average propensity to consume changes significantly in life cycle. This hypothesis proposes that saving is a function of demographic composition of population at individual level as it shows a hump shape saving pattern.

Domestic saving consists of corporate, household and public savings, Khan, Gill & Haneef, (2013). Economic as well as demographic variables are main determinants of household saving (Siddiqui & Siddiqui, 1993). Household savings in general is the leftover income after consumption and taxes during a specific period. Researchers

explore a number of demographic factors which may be determines household saving as: age, dependency ratio, population size etc. Among demographic factors age has a positive impact on saving while square of age has negative impact (Rehman, Bashir, & Faridi, 2011).

Financial stress is affecting salaried labour class with severe intensity in recent age. It effects the household decisions and Behaviour especially pertaining to savings. Financial stress is defined as "the inability to meet one's financial obligations"(Northern, O'Brien, & Goetz, 2010). Selye (1950) proposes the three stages of stress in General adaptation syndrome (G.A.S) theory as; Alarm reaction, resistance and exhaustion. According to General adaptation syndrome stress is an interaction between damage and defense. Researchers explore that there is a negative impacts of financial stress on health of human beings. These are depression, anxiety, inefficiencies and poor health (Drentea & Lavrakas, 2000). Paying with our health, a survey conducted by American psychological association (2015), the most rated and significant source of stress was "money". Financial stress is a nationwide issue and is increased in salience over the years (Agrigoroaei, Lee-Attardo, & Lachman, 2017). George Beard in his study "among all form of worries, financial stress is the most frequent, and for ordinary minds, the most distressing"(Beard, 1972).

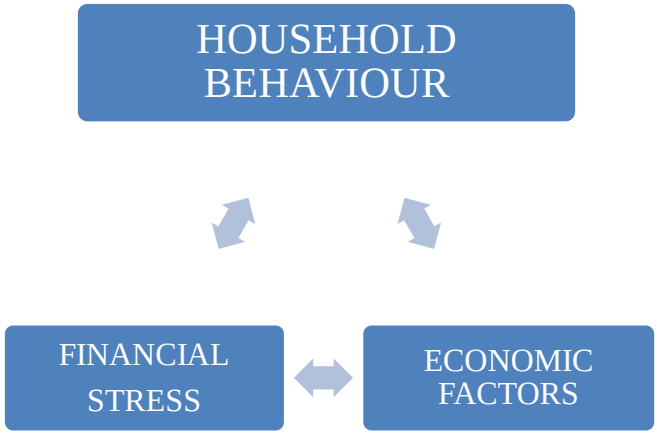


Fig 1: Household behaviour and Financial stress

Economic literature is enormously documented on household behaviours. Various socioeconomic and demographic factors have been proposed in classical, Keynesian and monetarists' school of thoughts to explain household saving pattern. But all school of thoughts put, Behavioural factor in determination of household behaviours, constant. Household behaviour changes with changing economic as well as Behavioural factors. Financial stress taken into consideration as a Behavioural factor which may change economic behaviours of household. This study is an effort to embrace Behavioural factor i.e. financial stress, its determinants and their effects in determining saving behaviours of household. At first stage determinants of financial stress explore and their significance tested with suitable methods. Then significance of determinants of financial stress tested for saving patterns of household.

1.2.1 Financial Stress

Stress is psychological phenomenon of unpleasant feelings which results in some common symptoms like anxiety, headache, depression, insomnia etc. Ponnet, (2016) financial stress is frequently associated with problem behaviour, anxiety and depression. The financial stress is a Behavioural phenomenon which arises when an individual failed to pay his financial obligations on time. It may lead to physiological, cognitive and Behavioural changes. Financial stress results in abrupt economic decisions by any individual with a sense of shame on failing both ends meet, repossession and foreclosure financial stress may lead to anger frustration, increasing arguments with family members, Davis & Mantler, (2004). Like different stressor which produce stress, there are few financial stressor which may produce financial stress:

1.2.2 Impulsive Behaviour

Bevilacqua & Goldman (2013) states that "the tendency to act without foresight, comprises a multitude of construct and is associated with psychiatric disorders". The disorders comprises personality disorders, attention deficit and addiction etc. Impulsive behaviour is not always mal adaptive, its outcome may be beneficial in some situations. However in economic decisions, it result in extra financial burden and curtailing of financial resources. Farmer and Golden (2009) Impulsive behaviour refers to a wide

range of Behavioural tendencies those are greatly volatile in form and functions. It is often label as heterogeneous collection of behaviours that vary considerably. Under the impulsivity, one may perform action with a little planning or foresightedness which results in relatively high likelihood of non-optimal, inaccurate and aversive outcomes. Bevilacqua & Goldman (2013) study the genetics of Impulsivity to diagnose its impact on behaviour. Impulsivity is the tendency to act without fore sighting the consequences of results. The study associate impulsivity with psychiatric disorders like addiction, attention deficit and hyperactivity disorder.

1.2.3 Consumer Financing Instruments

Bertaut & Haliassos (2006) Credit financing instruments grow rapidly as it gives consumers an opportunity of cashless purchasing through call, internet, online shopping web stores domestically as wel as from abroad. It has also quality of defferel payment. Mann (2002) The financial instruments awarded to consumer for purchasing necessities of life on credit basis by financial institutions (i.e Bnaks). It includes Credit Cards , Flexi Cards Rebate Cards etc. It is a powerful financial tool which can be used to purchase goods and services at credit. That amount will be paid by individual in a stipulated time frame to secure himself from penelties and interest bearings. In the developed countries, scholars find out that credit cards have high rate of consumer bankruptcy and its widerange of use are inversely correlate with national saving rate. It is one of the worst financial tool for individual with impulsivity disorders. As impulsive behaviour leads to purchse goods without any planning and foresight. Credit financing instruments are handy tool for such individuals for cashless purchasings. In results individuals caught into implicit debt trap.

1.2.4 Consumer Loan

Consumer loan refers to an amount lend by financial institutions to a customer to fulfil his needs. Financial institutions offer consumer loan to renovate, education, marriages and purchase of house etc. Consumer loan on one side may give satisfaction to human beings by fulfilling their needs but on the other side it factorize the financial resources of salaried class. Borrowers bound to pay principle amount in addition with interest which

weaken the financial strength of consumer. It further leads to build pressure on individuals which results in financial stress and distortion of economic decisions.

1.2.5 Family Financial Support

Family financial support is a physical as well as psychological phenomenon. In physical perspective it refers to monetary support by family members to a needy family member. Whereas it correlate with the financial worries and stress level of an individual. It effects human behaviour, decision making and negatively correlate with financial stress degree of a household. Family financial support classified into percieved financial support and actual financial support. The support about which an individual think that he may get at time of need from family members is refer to Percieved financial support. The actual financial support is the support which an individual get when he required.

1.2.6 Domestic Externalities

An economic phenomena which arises when decision of one economic agent directly effects other economic agent in a particular environment. Rossi & Sarte (2012) externalities refers to the effects of an economic transaction by one economic agent on other in which he is not directly involved. It is the result of interaction which is not mediated by market between economic agent. Domestic externalities can be positive as well as negative. Positive externalities may enhance the overall welfare and satisfaction of household whereas negative externalities may distort the economic decisions of household. Domestic externalities may change the consumption pattren by a household which may further lead to distort economic decision (i.e. Saving pattrens).

1.2.7 Pro-Consumptive Behaviours

The behaviour which leads purchasing of goods and services without required financial resources in hand is known as pro-consumptive behaviour.

1.2.8 Household Behaviours

Uher, J. (2016) States that " External changes or activities of living organisms that are functionally mediated by other external phenomena in the present moment". Household is

a group of people living together in which one's economic decision effects other lives. The very basic economic decision of a household is, how to use their financial resources? It contains consumption as well as saving decision. With change in financial resources household behaviour change accordingly. Salaried class economic behaviour may change from other class or group residing in the same geographical location.

1.2.8 Saving Behaviours

Cronqvist & Siegel (2015) are of view that, the choice to save or spend is of utmost importance in individual life. The individual save to ensure smooth consumption over time.

1.3 Problem Statement

In modern world income gap widens between rich and middle class which ultimately worsen the economic condition for households of developing economies. An individual household faces multiplicity of demands which govern his economic decision in day to day life. The economic decision made by household govern by economic as well as non-economic factors. This explorative study is an efforts to find out the factors which distort economic decision of salaried class. There is a lot of literature present on the distributions of income between consumption and saving of salaried class. Researchers explore a number of demographic, economic and non-economic factors which effect household decision regarding consumptions and savings. All of these factors efficiently capture the effect of its domain but couldn't incorporate the Behavioural factors. Financial stress is taken as Behavioural factor which may garble the household decision about consumption and saving. This study explores the determinants of financial stress and analyzes the effect of financial stress on household decision. The significance of determinants of financial stress also analyzed with respect to saving behaviour of salaried class.

1.4 Objective of the Study

The main objective of the study is to explore the determinants of financial stress on household economic Behaviour and analyze the impact. The core objective will be acquired through the following sub objectives:

1. To analyze the impacts of impulsive behaviour, consumer loan, consumer financing instruments, pro-consumptive behaviour, family financial support and domestic externalities in determining financial stress.

2. To analyze the impacts of impulsive behaviour, consumer loan, consumer financing instruments, pro-consumptive behaviour, family financial support and domestic externalities on Household saving Behaviour of salaried class.

3. Statistically analysis of financial stress and household saving behaviour.

1.5 Significance of The Study

This study explore and diagnoses the determinants of financial stress and their effects on the household Behaviours of the salaried class of Pakistan with aim to aware and save the subject class from undergone to financial stress. Financial stress along with its determining factors is shoddily curtailing the decision to save as well as purchasing power of the people which ultimately leads to distort saving Behaviour of the subject class. In addition to these, this study may give policy line to employees of public and private sectors that how they optimally use their financial resources and lessen the chances of financial stress. Finally at the household level, it helps to identify the main causes of financial stress and pave a way out from it which ultimately recommends a prosperous and pro saver society.

1.6 Delimitation of The Study

This is a case study which is base on primary data of Behavioural, Economic and Non-economic variables, collect from public and private sector employees of Rawalpindi, Punjab. Therefore it might not be generalized to whole Pakistan's population. Moreover only the working age group (25-60) considered for this study so it may not give any trace of distortion in saving pattrens of young and old aged. Finally it is time bounded as it is for the year 2019-20.

1.7 Summary

This chapter briefly describe the background of financial stress, its determinants (i.e. Impulsive behaviour, Credit financing instruments, consumer loan, pro-consumptive behaviour, family financial support and domestic externalities) and household behaviours. It also encompass the missing Behavioural aspect in literature of household behaviour regarding consumption and saving as problem statement. Exploration of determinants of financial stress and their impacts are the main objectives of this study. This study pave out the way to secure, household belongs to salaried class of Pakistani society, from being trapped by financial stress is the significance of this study. It also highlight its limitation regarding application of the outcomes.

CHAPTER 2

LITERATURE REVIEW

Introduction

As human civilization progress in the world, human being tries to optimize their resources to develop further. Among many of the resources, financial resource holds the key position in development of infrastructures and in strengthening of any economy in the world. Every Economy generates their financial resources either from domestic resources or foreign resources. Researchers try to explore the different factors which may affect domestic savings, positively or negatively .Past studies explores a variety of factors which affect domestic saving. These factors broadly classified into demographic factors: age, income, dependency ratio and education.

2.1 Saving Behaviour

Rehman et al., (2011) carry out a study on saving Behaviour of different income group in Multan district of Pakistan. This study analyzes the impact of socio economic and demographic factor on house hold saving Behaviour. In this study stratified random sampling method to select sample among lower, middle and higher income group.

Frączek, (2011) conduct a study to check the impact of different factors of household savings and their influence on economy. National saving comprises of household, business and government savings. This study reveals that Income, interest rate, demographic, social and psychological factors affect household savings pattern. Income is the chief factor in determining saving rate while interest rate also plays an important role in saving consumption. Dependency ratio and old age people are also important demographic factor which effect saving decisions.

Jilani et al(2013) analyze the determinants of national savings of Pakistan. Researchers try to evaluate impacts of GDP, inflation rate, fiscal deficit, age dependency ratio and rate of interest on national savings. This study conducted after a report of World Bank by Gallina Vinceleete in 2006. Pakistan national saving rate was around 14% while the domestic saving was at 11% in that period. According to the report, Pakistan is not a big

domestic savor as compared to other countries of the region. This study reveals that the low saving rate is the key reason of international borrowing. This study uses Secondary data of 1973-2011 and analyzes it by using co-integration and Error Correction model (ECM) techniques. Stationarity of data, check by Augmented Dickey Fuller test, Johansen Co-integration test used to check long run association between DV & IV's. ECM use to analyze short run dynamics of the model. All IV's have integration of order zero except age dependency ratio. The result of study shows that GDP, inflation, fiscal deficit and rate of interest have long run association with National saving rate. Inflation has negative and significant impact, while interest rate has negative but insignificant impact on National saving.

Khan et al (2013) examines the impacts of demographic factors: age, income, dependency ratio, education and efficiency of financial system on private saving in Pakistan. This study mainly analyze the impact of seven independent factor which affect household savings on 33 years of time series data from 1975-2008 by using co integration analysis. Researcher uses Augmented Dickey Fuller (ADF) test to check Stationarity of data and long run association by using Jhon Integration technique. Domestic savings are classified into three heads; corporate, household and national saving. In Pakistan economy, house hold saving remained on 11percent since last three decades. The study reveals that low saving rate, in Pakistan, is the main reason to get loans from IMF and foreign capital inflows to finance major projects in the economy. This study concludes that except dependency ratio all other factors have positive impact on savings. The study further added that education can increase the job opportunities to labor force but also helps in efficient management of household expenditures.

Soharwardi et al (2015) conduct a case study about the determinants of household savings of Yazman. The research work analyze the impact of Income of household heads, expenditure on children's education, Income source, Land size, Total Unmarried and total family size on household savings of targeted population. This study point out that National savings and foreign savings has inverse relation as when Pakistan savings are at 20.8 % of GDP then foreign savings are negative while these are at opposite end in 2007-08 with 13.5% of national savings with foreign savings at 8.5 % of GDP. The study is

based on primary data that collect from urban and rural families of Yazman. Data collect through interview method from a sample of 120 respondents. The data is analyze by using OLS technique. The results conclude that as income of household heads increase, saving rate also increase. Land has positive while No of unmarried persons has negative relation with saving rate.

Rikwentishe et al (2015) conduct an analytical study on socioeconomic factor which affect saving habits in Nigeria. In the study, the level of Income, level of education, Age, Household size, spouse spending habits, credit facility, interest rate, inflation and societal norms are analyze. In the study, multistage sampling technique to select sample from targeted population. Both primary and secondary type of data is use to reach the results. Primary data collect through questionnaires and interviews while secondary data gets from multiple online resources. Regression analysis applies to analyze the data. The results show significant and positive relationship between incomes, age, household size, perceived financial wellbeing and interest rate with saving habits. While educational level, spouse spending habits, credit facility, rate of inflation and societal norms have insignificant effects on saving habits and investment.

Mensahkla et al (2017) conduct an empirical study of the determinants of saving behaviour by household in HO, Ghana. The study mainly focus to determine those factors which influence the choice of savings through financial institutions. It also analyze the impact of economic and socio-cultural factors which effect household savings. The data collects from the employees, market men, women and different financial intermediaries. Both primary and secondary data collects for the study. Primary data collects through structured questionnaire. Data collects by using probability (stratified sampling) and non-probability (purposive sampling) sampling techniques from 152 respondents of the region. The data analyze through descriptive and inferential statistics techniques. The study find that respondents are motivated by interest rate given by financial institutions and also saving behaviour increase among those who have less dependents. Automated teller machines are one of the motivation of savings among population of the locality. The study concludes that the size of family is positively related with saving behaviour of household. As the size of family increases the saving behaviour is remarkably increase as

compare to small size households. Level of education significantly correlates with household saving behaviour. Economic factors like income, dependency ratio, inflation rate and growth are also positively related with the saving behaviour of the households. Financial knowledge about savings, individual household assets and automated teller machines are also the motivating factors of saving behaviour in the locality under study.

Syed et al (2017) conduct a study to analyze the saving and investment behaviour of urban households in Peshawar. The study take household saving behaviour and investment behaviour as dependent variables while income, education, employment status, assets and number of dependents are the variables which effect dependent variables. The study find that domestic savings are mainly consist of three: household savings, corporate savings and public savings. The main objectives of the study to study saving and investment behaviour of urban households and to find out the effect of different socio-economic factors on household savings. Primary data is use for the study and collects from 201 respondents. The primary data collected through interview based on structured questionnaire while the secondary data collects from Peshawar development authority. Multiple regression model employs for estimation and results. Chi square statistics indicate significant association between household size and size of plots. The results reveals a negative relationship between dependency ratio and level of household savings. The study concludes that households saving behaviour and investment behaviour are influenced by household size, education, income level, earning members in the household and dependency ratio. The study find that domestic savings are mainly consist of three: household savings, corporate savings and public savings.

Ismail et al (2018) conduct a study to analyze the determinants of saving behaviour in Malaysian society. The study take service quality, religious belief and knowledge as a determinants of saving behaviour. Primary data collects from 150 respondents of private sector employees through questionnaire method. 86 respondents are female whereas 64 are male respondents. Purposive sampling technique use to collect data from individuals. The data analyze through regression analysis, descriptive statistics and scale reliability by using SPSS. Cronbach's alpha coefficient obtain to check reliability of all variables. The results shows that all variables have value more than 0.7 which is acceptable except

service quality which take 0.67. Multiple regression analysis to predict the variance in the dependent variable. The results of regression analysis shows that all the three variables are statistically significant and have positive impact in determining saving behaviour of under study population. Semi structured interviews conduct to reassure the quantitative results. The results assure that all the three variables significantly affect saving behaviour of Malaysian employees of private sector.

Satsios & Hadjidakis (2018) examine the saving behaviour household of Pomak, Greece by using Ajzen's theory of planned behaviour as a theoretical framework. The study mainly focuses on relationship among intentions, attitude, subjective Norms and perceived behaviour control. The study also try to explore the factor which effect saving behaviours of household. Primary data collect from 600 households by questionnaire method. The sample includes 410 male and 190 female respondents by employing Snow ball sampling method. Path analysis apply to test hypothesis. The results show that attitude, subjective Norms and perceived Behavioural control have a positive impact on intentions towards saving behaviours of household. Confirmatory and planned factor analysis apply to check the reliability and validity of Theory of Planned behaviour. The study conclude that household with more positive intentions intend towards more savings. The study reveals that attitude and subjective Norms is a good and strong predictor respectively of intentions towards saving. The study also finalize that perceived Behavioural control has positive statistical effect on intention towards saving but has a direct negative effect on final saving behaviour of household.

Njenga et al (2018) conduct a study to analyze the impact of institutions on saving behaviour in Kenya. Rank ordered multinomial and conditional probit model use to analyze the data. In this study, three sets of cross sectional data from Financial Access National survey of 2006, 2009 and 2013 are used. The main goal of these surveys are to measure financial access landscape in the country. The total respondents are 4418 (2006), 6598 (2009) and 6449 (2013). The no of sample select for the study are 1503, 2430 and 1843 respectively from each year. The Chi square statistics of data of 2006 and 2009 reveals that institutional factor and decision maker attributes are statistically significant at 1%. The result shows that institutional factor, travel cost to institution, trust factor,

information and saving expectations influence the saving behaviour. The institutional factor influence the saving factor accordingly. The travel cost is negative associated with saving behaviour as it increases, the level of saving decreases. The results also shows that there exist a positive relationship between source of financial advice and significant level of savings. The level of saving also different between males and females. Males saving level are more than female. Number of dependents are also inversely relates with level of savings. The study also unveil the fact that formal education, income level and minimization of gender gap are also important factors in enhancing savings.

Angamuthu, (2020) conduct an empirical study, in Tiruvannamalai Town, a place in India, to identify the socio-economic and demographic factors which are responsible for saving behaviour in the vicinity and to identify the most effective saving behaviour base on the finding of the study. The study identify three types of savers; negative savers, zero savers and positive savers. The most common factor taken which influence the saving behaviour of household; sex, marital status, age, level of education, number of family members, economic status of household, living condition of household, income, expenditure and saving. A stratified random sampling method use to collect primary data from the respondents. 125 questionnaire distribute among respondents and only 105 responses are accepted and remaining twenty are rejected. Secondary data is collect from journals, magazines and government reports. Percentage analysis and chi square test use to analyze the data. The finding disclose that no household remain negative savers in long run. The study also find that to enhance investment and to increase growth rate, household saving must be increase. Saving habits must be promote from childhood. The study suggest that group insurance scheme extend to household at rural level and procedural reforms should be introduced.

Mwangi, (2020) conduct a study on household saving behaviour in Kenya. Multinomial Probit and Binary Logit model use to study household saving behaviour. By using discrete choice model, this study tries to explore the factors which motivate household saving behaviour. The study reveals that domestic saving is vital for capital formation and economic development. This study is mainly base on Life cycle income hypothesis and Permanent income hypothesis. Kenya's Fin Access survey data use to estimate

simple logit and multinomial probit model. Fin Access survey conducted every three years to track development in the financial sector. The simple logit model uses as binary dependent variable while in multinomial probit model, formal and informal savings are use as dependent variables. The study reveals that access to saving products varies with change in demographics in Kenya. The results of study shows that household saving choice is motivate by age up to a certain point whereas gender coefficient does not explain any remarkable variations. The study conclude that investment in financial education, financial literacy and economic activities can enhance saving.

2.2 Financial Stress

Northern et al. (2010) defined financial stress as "the inability to meet one's financial obligations". Researchers conclude the following negative impacts of financial stress: Depression, anxiety, Poor academic performances and poor health.

Worthington, (2006) examine the role of demographic, socioeconomic and debt on financial stress for Australian households. Binary logit regression model uses in the study, as it is useful to analyze "Dichotomous" variable, to find association between dependent and independent variables. Secondary data take from a household's expenditure survey containing a sample of 3268 probability weighted Australian households. The result showed that demographic and socioeconomic factors have significant impact on financial stress while debt has not significant impact on it.

Hakkio and Keeton (2009) study the financial stress at Macro level by taking US economy. The financial stress hamper the US economy by increasing cost of credits, making business and household cautious. The study introduce new financial stress index "The Kansas city financial stress index" (KCFSI). The study reveals that financial stress has few main signs; Uncertainty increase among lenders and investors about fundamental value of financial assets, during financial crises uncertainty increases price volatility of assets and behaviour of others investors, increase in asymmetry of information between lenders and borrowers, willingness to hold risk assets decrease sharply. The prime objective of this article is to construct financial stress index. The study reveals that the objective of KCFSI are to compare it with other financial stress indices like Illing and Liu

financial stress index and IMF financial stress index, to identify the past episodes of financial stress in US economy.

Delafrooz & Paim, (2011) conducted a study on relationship between saving Behaviour and financial problem. In this study impact of, financial stress, financial literacy and financial management practices were studied. This study reveals that credit purchases, debts, inadequate spending skills, low income rate and lack of financial literacy are the key causes of workers financial problem. These financial problems further lead to cause stress and crises. This study refers financial stress as economic stress and pressure. Moreover stress could affect individual's personal life as well as financial aspects. This study based on a sample of 2246 of public and private employees. Cronbach's coefficient alpha is use to examine the reliability of the variables while Confirmatory factor analysis used to analyze convergent and discriminant validity. The results of study show that financial literacy and financial management have significant impact on saving Behaviour. Financial problems are significantly predicted by financial stress. Three main variables of the study; financial literacy, financial management practices and financial stress have the most significant effect on saving Behaviour.

Lim et al (2014) examine the role of financial stress, self-efficacy on the financial help seeking Behaviour of college students. The main objective of the study is to explore the factors which have significant impact on college student Behaviour who seeking financial help from professional finance personal based on Grabble and Joo's work. By adopting cognitive approach, a mixture of personal finances and psychological method, they use self-efficacy as moderating variable between financial stress and seeking financial help. The target population is college students so class rank, school type and financial knowledge includes in the model. Student loan is also including as a financial stressor. In the study, data of Ohio financial wellness survey is used. The study is based on a report of National center for education statistics of 2102. According to report fee hike to compensation of inflation rate emerges as a source of financial stress. Results of study shows, 40% of respondents seek financial help. The no of female students are greater than male students. Financial knowledge, financial stress and student loan balances have

significant determinants. The financial self-efficacy has also positive impact on help seeking Behaviour.

Britt et al (2015) conduct a research to explore the predictor of financial stress and to analyze the effectiveness of financial counseling center. The study states that peer influence play a vital role saving Behaviour in general settings. In this research work sample of 675 college students who would undergo free financial counseling during the time period of November, 2009 to December, 2013. All respondents are to fill out a questionnaire. 14% of sample took part in follow up survey. The average age of respondents was 23 years. Regression analysis is used to analyze and interpret the data. To determine financial stress researcher uses resources, developmental stages, family structure and perception as independent variable in their model. Resources are further measure by: income, student loan debt, and credit card debt. Developmental stage is further divide into two; age and grades. Age measure continuously while grades are again classifies into five categories: freshmen, sophomores, juniors, seniors and graduate students. Family structure was measured by marital status. The results of study shows that students loan, grade level have significant positive relation with financial stress.

Durante & Laran, (2016) conduct a study to find effect of stress on consumer saving and spending behaviour. The study reveals that in a stressful situation consumer may leads to excessive saving or spending. As a result of stressful event, consumer show impulsive behaviour. To find out the consequences of stress, seven experiments carry out. A pilot experiment is also carry out in which participants are ask to write for two minutes either about the things which stress them out or about a typical day without stress. Participants also ask to write about all things which make them sad. In this experiment 162 people participate. The result of pilot experiment provide preliminary evidence for influence of stress on saving. Experiment one test the relation between stress and saving and the role play by perception of control. Two hundred thirty undergraduate students participate in this experiment. ANOVA use to evaluate the results statistically. The results shows that stress increase willingness to save money and this behaviour is also a strategy to restore control after stressful situation. Experiment two carry out with three goals; influence of stress on willingness to spend, influence of stress in a different way and third is to show

difference between stress and control. Seventy participants participate in this experiment. The results reveal that there is no correlation between stress and control. Experiment 3 carry to study impact of stress under high control. 210 undergraduate students participate in this experiment. The result of this experiment shows that the effect of stress on consumer saving is driven by the loss of control associated with the stress. When participants have control over the stressful situation and they have no need to restore control, intention to save decrease. In experiment 4, the mediating role of restoring control try to evaluate. 223 undergraduate participants employ to carry out this experiment. The result shows that stress leads people to spend on necessities. This behaviour driven by their willingness to restore control over lives rather by cognitive resources ability. Experiment 5 try to evaluate, it is not compulsory that people save after a stressful shock but it also leads to an impulsive behaviour. 276 participants participate in this experiment. The result shows that stress can increase the spending on non-necessities such as when they believe buying of expensive clothing is necessary for their job. Experiment 6 is an effort to evaluate that more spending can be done when it is believe that control cannot be restored. 174 people participate in this experiment. The result shows that when control cannot be restore, then people prefer spending on non-necessities rather savings. The results of seven experiments reveals that people intend to save after a stressful situation but spend strategically on necessities of life. This study also reveals that how stress influence spending and the role of people sense of control in determining how stress affects consumer behaviour.

Stromback et al (2017) study how humans make financial decisions and which psychological factors influence those decisions. The study measure the financial behaviour, self-control, subjective financial wellbeing, optimism, deliberative thinking and demographics through survey method. The study concludes that respondents with more self-control save more and have better financial behaviour. The research reveals that self-control is a human ability to control bad habits, resist temptation and overcome first impulses from brain i.e. impulsivity. Human beings act in non-optimal way when self-control fail. Data collect from 2063 whose age ranges between 20-75 respondents of Swedish people. 1048 Respondents are female while 1015 are male. The results show that self-control has a significant impact on financial behaviour as well as perceived

financial well-being. The self-control has positive impact on saving behaviour which ultimately leads to conclusion that impulsivity has negative impact on saving behaviour. The results further clarifies that respondents with good self-control are less suffer from anxiety and depression which justify that financial stress hamper the human being financial decision and financial behaviours. The study also confirms that Non-cognitive factors like optimism and deliberative thinking also influence individuals' financial behaviour and financial well-being.

Tran, Lam and Legg, (2018) study the correlation between financial stress and anxiety by using family support, social support and gender as moderators. A sample of 304 college student takes to complete it. Mental health issues like anxiety and depression link with financial stress. The existing literature shows that social support provide buffering effect against financial stress and anxiety. General anxiety measure through "The seven items generalized Anxiety disorder scale" (GAD-7). The Response option for this measure is scale from 1-4. The higher mean value indicate greater level of anxiety. "The seven-item Financial Anxiety Scale" method employs to evaluate financial stress among respondents. The responses measure on a scale from 1-7. "The 13-item Kinship Social Support scale" use to measure perceived family support. Likert type scale (1-4) uses to report responses. The study conclude that a moderate positive correlation between gender social support and perceived family support. The low level of family support link with greater level of financial stress.

Antony (2018) study the relationship between credit card and financial stress. The researcher notes that excessive use of credit card lead a consumer to unmanageable debt which ultimately led to financial stress. The study identifies that credit card create two type of stress; in emotional sense , may create a friction between consumer and his spouse while in monetary sense , may clinch financial ability of consumer. Both primary and secondary data used for this study. Primary data collected from 250 respondents through questionnaire method while secondary data collected through journals, magazines and internet resources etc. To find the association between attributes, Chi Square test used. Results identifies that 42% of consumer experience heavy stress while 54.8 % experience mild level stress. Only

3.2 % consumer respond with no stress cause by credit card. The study further identifies that there is no relationship exist between sex and stress perception of credit card users. Whereas Income and age have a strong association with credit card user and their perception of stress.

2.3 Literature Gap

The above cited literature review reveals that economic decisions by households are effect by different demographic, social and economic factors. But there is no study which incorporates Behavioural factors to estimate economic decisions. The missing Behavioural factors are taken as research gap and efforts made to incorporate these factors in estimating and measuring behaviours of households belongs to salaried class in Pakistan.

Table 2.1 Summary of literature

Sr. No	Year	Author 's name	Title of article	Data and time period	Variables	Estimation technique	Conclusion
1	2011	Rehman et al	Saving behaviour among different income groups in Pakistan	The primary data collects from 292 households through stratified random sampling	IV: Income groups, Education, Marital status, Liabilities, Spouse participation, Income, Size of land holdings	Multiple regression analysis	Higher income level group save more due to high Income, Education, Spouse participation. While middle income group save less due to children education expenditure and liabilities
2	2011	Fraczek	The factors affecting the level of household s saving and their influence on economy developm ent	Time series data of saving of different countries	IV: Household saving, Economic growth, rate of saving	descriptive analysis	The result shows income, Interest rate, demographic, social and psychological factors affect household saving pattern. Moreover saving boost economic growth.
3	2013	Jilani et al	Determina nts of National Saving in Pakistan	Secondar y data 1973-2011	IV: GDP, Inflation rate, Fiscal deficit, Age, Dependency ratio, Rate of interest	Co-integration and Error correction model	GDP, Inflation rate, Fiscal deficit and Rate of interest have long run association with national saving. Inflation rate has significant and negative impact while Rate of interest has insignificant impact.
4	2013	Khan et al	Determina nts of private saving: A case study of Pakistan	Househol d saving data 1975-2008	IV : Age, Income, Dependency ratio, Education and efficiency of financial system	Co-integration and Dicky Fuller Test	The result shows that except dependency ratio all other variables have significant impact on saving.
5	2015	Soharw adi et al	Determina nts of household saving: A case study of Yazman-Pakistan	Primary data collect from 120 urban and rural families of	IV: Income of household, expenditure on children, income source, land size, family	OLS	The result shows saving increase with increase in income. Land has positive while unmarried person have negative relation with saving

				Yazman	size		
6	2015	Rikwentishe et al	Analysis of socio economic factor affecting saving habits in Jalingo Taraba	Primary and secondary data	IV: Income, level of education, spouse spending habits, societal norms, Inflation rate, Age, Rate of interest	Regression Analysis	Income, household size, and interest rate have positive relationship with saving habit while spouse spending habits, societal norms, Inflation rate and credit facility have insignificant effects.
7	2017	Syed et al	An Analysis of Household Saving and Investment Behaviour among Different Income Groups in Urban Area of District Peshawar	Primary data collects from 201 households And Peshawar development authority	IV: Household saving behaviour and investment behaviour	Multiple regression analysis	The result shows household saving behaviour and investment behaviour are influenced by socio-economic factors like household size, income, education, dependency ratio, assets and numbers of earners in the household.
7	2017	Mensahkla et al	An empirical analysis of the determinants of saving behaviour by households in Ho, Ghana: A case study of Ho municipality, an individual level analysis	Primary data collects from 600 households	IV: Choice of savings	Descriptive and inferential statistics	The result shows size of family, level of education and different socio-economic factors are positively associated with choice of saving in the locality. ATM machines in the area are saving choice motivators.

8	2018	Ismail et al	An empirical analysis of saving Behaviour among Malaysian employees	Primary data collects from 150 respondents	IV: Service quality , religious beliefs and knowledge	Cronbach's alpha and multiple regression	The result shows all the three variables are statistically significant and have positive impact in determining saving behaviour of under study population
9	2018	Njenga et al	Institutions effect on households savings in Kenya: A ranked ordered multinomial/conditional probit model approach	Secondary data from Financial Access Survey of 2006, 2009, 2013	IV: Institutional factor, travel cost to institution, trust factor, information and saving expectations	Rank ordered multinomial and conditional probit model	The result shows institutional factor influence saving decision. The travel cost is inversely associated with saving behaviour.
10	2018	Satsios & Hadjidakis	Applying the theory of planned behaviour in saving behaviour of Pomak Households	Primary data collects from 600 households	IV: Attitude, Subjective norms, perceived Behavioural control	Confirmatory and planned factor analysis	The result shows more positive intentions leads to more savings. Subjective norms are good and strong predictor of intentions. Perceived Behavioural control positive statistical effect on intentions towards saving but has a negative effect on final saving behaviour
11	2020	Angamuthu	A study on household Saving behaviour	Primary data collects from 125 respondents	IV: sex, marital status, age, level of education, number of family members, economic status of household, living condition of household, income, expenditure	Chi square test	The results explore three types of savers; positive savers, negative savers and zero savers. age, level of education, income have positive impact on household savings
12	2020	Mwangi	Household Behaviour in Kenya: A discrete choice approach	Kenya financial access survey data	IV: demographics	Multinomial probit and Binary logit model	The result shows that age is a significant factor and people save up to a certain age. Gender shows no remarkable impact on household savings.

13	2006	Worthington	Debt as a source of financial stress in Australian Households	Secondary data of household expenditure survey	IV: Demographics, Socioeconomic	Binary Logit model	The results shows demographics and socioeconomic factors have significant impact on financial stress while Loan has insignificant impact.
14	2009	Hakkio & Keeton	Financial Stress: What is it, How can it be measured and why does it matter?	Kansas City Financial stress index	Financial stress index	Kansas City Financial stress index	The result shows that uncertainty increase among lenders and investors, increases price volatility of assets and increase in asymmetry of information with increase in financial stress of a country.
15	2011	Delafrooz & Paim	Determinants of financial wellbeing among Malaysian worker	Primary data collects from 2246 employees of Public and private sector	IV: Saving behaviour, financial literacy, credit purchasing, debts, income	Cronbach's Alpha, Confirmatory factor analysis	The results shows financial literacy and financial management have significant impact on saving behaviour. Credit purchasing, debts, low income level are the key causes of workers financial problems.
16	2014	Lim et al	Financial Stress, Self-Efficacy and financial help seeking behaviour of College students	Ohio Financial wellness survey	IV: Financial Stress, Self-Efficacy	Percentage analysis	The result shows hike in fee to compensate inflation effect is a source of financial stress. Financial efficacy has positive impact on help seeking behaviour.
17	2016	Britt et al	Financial Stress and Financial Counseling: Helping college students	Primary data collect from 675 students	IV: Peer influence, Student loan	Regression analysis	The result shows student and grade level have significant positive relations with financial stress.

18	2016	Durante & Laran	The effect of stress on consumer saving and spending	Seven experiments with different numbers of participants	IV: Saving and spending behaviour	ANOVA	The results of seven experiments reveals that people intend to save after a stressful situation but spend strategically on necessities of life. This study also reveals that how stress influence spending and the role of people sense of control in determining how stress affects consumer behaviour.
19	2017	Stromback et al	Does Self-control predict financial behaviour and financial well being	The data collects from 2063 respondents of age between 20-75 years.	IV: self-control, optimism, deliberative thinking	Descriptive analysis	The result shows more self-control leads to more better financial behaviour and has positive significant impact. Non cognitive factors like optimism and deliberative thinking influence financial behaviour.
20	2018	Tran, Lam & Legg	Financial Stress, Social support, Gender and anxiety during college	Primary data collects from 304 college students	IV: Gender, family support, social support	The seven items generalized anxiety disorder scale, The seven items financial anxiety disorder scale, The thirteen items kinship social support scale	The result shows moderate positive correlation between gender, social support and perceived family support. Social support buffering affect against financial stress.
21	2018	Antony	A study on consumer debt stress caused by credit cards	Primary data collects from 250 respondents	IV: usage of credit card	Chi square test	The results show that 42% of respondents reports heavy stress, 54.8 % opt mild stress whereas only 3.2 % reports no stress. There is also a relationship exist between gender and stress perception of credit card users.

CHAPTER 3

THEORETICAL FRAMEWORK AND METHODOLOGY

Introduction

This study is an effort to explore a link between psychological variables and their impacts on household behaviour regarding saving. This chapter enlighten the theories which discovers the relationship of household saving behaviour and demographic and economic variables. It also enlighten the theory which describe that how psychologically human behaviour varies at different stages. Ordered Logit model employ to analyze the primary data which collects from salaried class on different psychological and economic determinants of household behaviour.

3.1 Theoretical Frame Work

This study is mainly based on two theories; Theory of consumer preferences and Theory of Planned Behaviour (TPB) which covers its psychological aspects. The theory of preferences explains the consumer preference about which consumer is indifferent between these two. The theory of planned Behaviour is proposed by Icek Ajzen in1985 in his article “From intentions to actions”. Economics litreature reveals that saving rate is determined by variety of demographic and socioeconomic factors. But if we look one step back, saving decisions are greatly effected by human behaviours. In fact it is the human behaviour which lead a household either to save or not. A person with an absolute income may save a specific fraction if he or she has intention to save. Financial stress is a cognitive phenomenon , according to which a person is under financial stress when he or she is unable to pay his liabilities on time. So if a person is under financial stress , he or she would never intend to save a single peny of his disposable income. If this phenomeneon is valid then Financial stress distorts the saving behaviours of household. Fianancial stress is further deteremine by a number of factors : Impulsive behaviour, Loan , Credit Financing, Pro consumptive, domestic externalities and Financial support.

Since the advent of economics literature, economists are trying to analyze dynamic household economic behaviours. Classical economist argues that for further capital accumulation and development, saving is vital Rehman et al., (2011). The works of keynes, Friedman and Modigliani are mainly based on economic and demographic factors which determine the level of savings (Aniola-Mikolajczak & Golas 2014). Keynes present his Absolute income hypothesis which depicts that savings and consumption increase with increase in income (disposable income) while remaining other factors constants but not necessarily at the same rate. It reveals that household tend to increase their MPS decision with the increase in their income level. James Duesenberry (1951) propose Relative income hypothesis which reveales that individuals make their consumption according to relative magnitude in the economy. Duesenberry find two important conclusions on the basis of his hypothesis; aggregate saving is independent of aggregate income and individual's propensity to save is function of his position in income distribution. Friedman's presents theory of permanent income. According to this theory, people compensate old life consumption by saving in early ages. Ando and Modigliani in his Life cycle income hypothesis, individuals save less in young and old age as compared to middle age where the propensity to save is more then consumption.

A key objective of Microeconomics is to study consumer choices and decision pattren Kreps (1990). The Theory of consumer preferences explains the consumer preference about two commodities in which he is indifferent. It explain how an individual identify and quantify his preference about given two choices. This theory is based on rigorous preference axioms which characterize human choice behaviours. In this study household has two choices about which he can make decision i.e. Cosumptions and Savings. This study extended the consumer preferences theory in Behavioural context that how an individual makes decision between consumption and saving in the presence of different determining factors of financial stress.

The theory of Planned Behaviour is proposed by Icek Ajzen in1985 in his article "From intentions to actions". This theory explains why people do certain actions. Cook, Kerr, and Moore (2002) use Theory of Planed Behaviour in economics. In Theory of Planed Behaviour Ajzen (1991) propose three stages that detremine the intention are; attitude to

wards Behaviour, subjective norms and perceived Behavioural control. Attitude towards Behaviour explains why a person form postive or negative evaluation towards behviour while subjective norms are social pressure to show a certain Behaviour or not. Perceived Behaviour control refers to people perceptions about individual ability to perform a specific action. In addition to this while three different stages of theory of planned Behaviour use to analyze whether different determinig factors of financial stress either distort saving behaviours or not.

A salaried person has a limited disposable income. If he purchase more then his specific need at a specific time , he is a victim of impulsive behaviour. Such purchasing pattren distort his monthly budget which ultimately reduce the intention to save.

Loan is another factor which may determine financial stress as a person take loan against his specific salary amount, a little fluctuation in his daily or monthly expenditure may lead to financial stress as he already cut down a specific amount of his income against loan installment.

Third element is comperatively new to the society . Durable and consumable goods are available on installments now a days. Almost every human being want to increase his utility and satisfaction level . To do so , he purchses things by using credit cards or on installments. In both scenarios , he further put a new bracket on his disposable income. As his limited income further cut down which ultimately leads to generation of non saving impulse in his mind.

Pro consumptive behaviour is the bases of credit financing. It is a Behaviour under which a person like to purchse goods and services with borrowed or credit financial resources rather then his savings.

Our fifth factor is domestic externalities , it is a compartive anlaysis by a person himself with other people of his locality . As financial stress is a cognitive factor which emerges due to impulse generation in our brain . So when a person compare himself with other people of his location then this comaprison may lead him to fiancial stress .

Financial support is a support from a person's parents , family ,peers or institution. It further divide into two ; percieved and actual. Either percieved or actual support , in both case it would effect impulses of financial stress.

3.2 Methodology

This study is mainly focus on the determining factors of Financial stress and analyzing their impacts on household savings . Financial stress and its determinants uses as determining factor of household saving decision. The primary data collect through questionair method . The target population for the collection of the data is public and private sector employees of Rawalpindi, punjab. The snow ball sample method use to collect data and respondents selected randomly throughout the whole population of the selected city. Data collects are uses for two purposes, to explore determinants of financial stress and to analyze impact of financial stress determinants in determining saving behaviour of households. This study complete in two step i.e. evaluation of determinants of financial stress and determination of saving behaviour. At first, evaluation of financial stress by using its determinants i.e. Impulsive behaviour, Consumer financing Instruments, Consumer loan, Pro-consumptive behaviour, Family financial support and domestic externalities. In second step detreminant of financial stress use as the main independent variables while the household savings pattren is the dependent variable.

CHAPTER 4

DATA AND DESCRIPTIVE STATISTICS

Introduction

This chapter is the description of variables, source of data which is used in this study and model which is used to estimate the results. This study is based on primary data which is collected from Rawalpindi region. The independent variable is financial stress while there are six other variables which are used as dependent variables as well as a source of financial stress. The Ordinary Logit Model is used to estimate the impacts of dependent variables on financial stress.

4.1 Types and source of data

This study is an attempt to explore the determinants of financial stress and their impacts on household saving behaviour. Primary data collect through google survey form from employees of public and private sectors of Rawalpindi district for this explorative study.

4.2 Variables

The study mainly focuses Behavioural aspects of household and on saving. All the variables are ordinal in nature. Ordinal variables employs to capture the real time household behaviour by using Likert scale ranging from strongly disagree to strongly agree.

4.2.1 Dependent Variables

The study base on two independent Logit model. Therefore two independent variables, financial stress and saving behaviour.

Financial Stress

The inability to meet one's financial obligations. It is worry, fear and anxiety about finances.

Saving Behaviour

Saving is the amount left after consumption from disposable income. But the saving behaviours are intentions to save by any individual or household.

4.2.2 Independent Variables

To explore the determinants of financial stress, following variables are use in the study;

Impulsive Behaviour

Bevilacqua, L., & Goldman, D. (2013) states that "the tendency to act without foresight, comprises a multitude of construct and is associated with psychiatric disorders". The disorders comprises personality disorders, attention deficit and addiction etc.

Consumer Financing Instruments

The financial instruments awarded to consumer for purchasing necessities of life on credit by financial institutions (i.e Bnaks). It includes Credit Cards , Flexi Cards Rebate Cards etc.

Consumer Loan

A financial instruments used by households to fulfil their domestic needs.

Family Financial Support

A phenomena which effects human behaviour, decision making and negatively correlate with financial stress degree of a household.

Domestic Externalities

An economic phenomena which arises when decision of one economic agent directly effects other economic agent in a particular environment. Domestic externalitie can positive as well as negative. Positive externalities may enhance the overall welfare and satisfaction of household whereas negative externalities may distort the economic decisions of household.

4.2.3 Control variable

Control variables are remains constant and unaffected during the path of investigation or research. In statistical analysis, control variables are entered as independent variables but have a different interpretation. Control variables are not the primary interest of researchers. Current study uses some important control variables that are inflation, population and interest rate.

4.3 Sample and Sampling Technique

The sample consist of 243 respondents who are employed in different public and private sector institutions. The Snowball sampling technique use to collect primary data. Snow ball sampling one respondents ask to refer acquaintance and other respondent. Data collect through questionnaire method by using google survey form. All question design by using five-point Likert scale ranging from Strongly disagree(1) to strongly agree(5). Data relating to vast variety of demographic variables also collect from respondents as Age, Gender, Family size, No of working years, Marital status, Education, Income, No of Earners and monthly savings. The questionnaire covers both demographic and Behavioural aspects of household. Moreover to eliminate the chance of biasedness, questionnaire comprises both positive and negative questions.

4.4 Ordered Logit Model (OLOGIT)

This study is an explorative as well as qualitative research as it entails to investigate the determinants of financial stress and to capture the effects of determinants of financial stress on saving behaviours of households. All variables in study are ordinal variables in nature. Gujarati (2015) Ordered Logit model is use to estimate response of ordinal variables. When variables of interest or their responses are of qualitative nature, ordered Logit regression model use to estimate the M number of ordinal variables. Ologit has a dependent variable which is binary (i.e. 0 or 1) in nature. Independent variables may be binary or continuous. It capture responses of nonlinear qualitative variable.

The general from of Ologit model for this study is ,

$$\rho(Y_i > j) = \frac{exp(\alpha_i + X_i\beta_j)}{1+[exp(\alpha_i + X_i\beta_j)]} \ , j = 1,2,3, \ldots\ldots, M-1$$

First Orderd Logit Model

To explore the impact of determinanats of financial stress,

$$FS_i = \alpha_0 + \alpha_1 I\ B + \alpha_2 CL + \alpha_3 CFI + \alpha_4 PCB + \alpha_5 FFS + \alpha_6 DE + \varepsilon_i$$

Second Ordered Logit Model

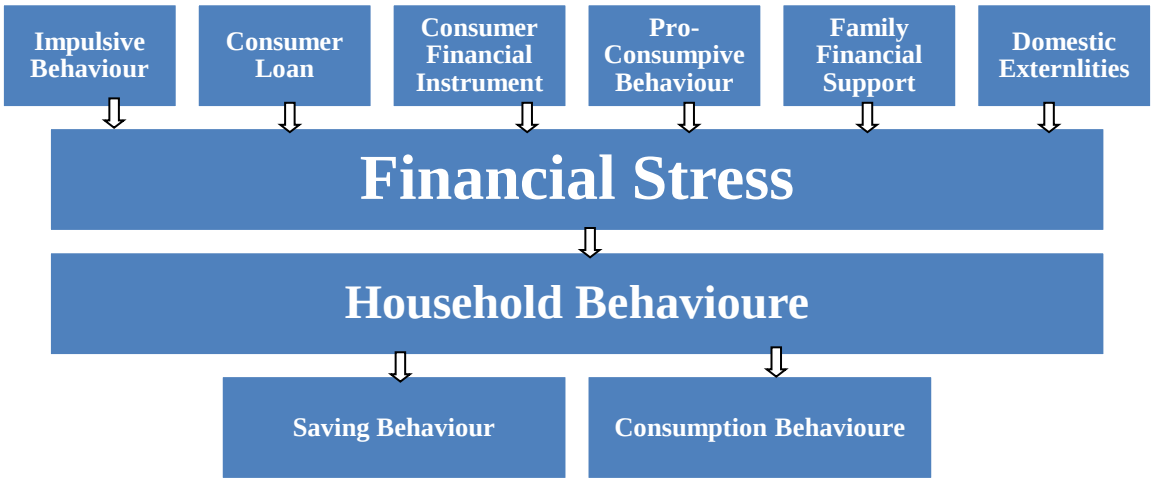
To check the impact of determinanats of financial stress on household saving behaviour

$$S_i = \alpha_0 + \alpha_1 I\ B + \alpha_2 CL + \alpha_3 CFI + \alpha_4 PCB + \alpha_5 FFS + \alpha_6 DE + \varepsilon_i$$

Description of Variables

Variables	Abbreviations	Description
Financial Stress	**F**	Symptoms of stress and anxiety due to financial obligations
Savings behaviour	**S**	Household saving decision
Impulsive behaviour	**IB**	Un-planned purchasing by households
Consumer loan	**CL**	Loan which obtained to ful fill domestic needs by household
Consumer financing instruments	**CFI**	Financial instuments like, Credit card, flexi card etc
Pro-consumptive behaviour	**PCB**	Purchasing of household through hire purchase schemes
Family financial support	**FFS**	Financial support got from family members at time of need
Domestic externalities	**DE**	Demonstration effects and locality factors which effect consumption decisions
Error term	$\boldsymbol{\varepsilon_i}$	Part of the model which remains unexplained

4.5 Research Framework



4.5 Assumptions

To reach the ultimate truth few assumption make:

i. Salaried class are more vulnerable to financial stress.
ii. Determinants of financial stress also put an impact on household saving patterns.
iii. Behavioural aspects have more significant impact on salaried class households.

CHAPTER 5

RESULTS AND DISCUSSION

INTRODUCTION

This chapter presents the descriptive and empirical result of the study. It consist of four sections. In first section demographic results of demographic variables present while second section contains descriptive analysis of ordinal data. Third section presents ordered logit estimation in addition with marginal effects of financial stress model. In fourth section ordered logit estimations of saving model alongwith their marginal effects has been presented. In the last section a comparative summary of all the result present.

This study is an effort to explore determinants of financial stress which influence the human economic decisions. Previous studies crave out a lot of demograghic, economic and non-economic factors which effect household decisions regarding consumption and savings out of their disposable income. There are few studies which show the effects of financial stress, financial literacy and efficacy on the saving behaviour of individuals and households. This study principally tries to explore Behavioural factors which may influence household economic decisions. To reach the truth a data of 243 households from the districts of Rawalpindi, Pakistan has been collected, two independent Ordered Logistics model use for this purpose. First Ordered logistic regression (OLOGIT) model employes to explore determinants of financial stress whereas second model investigate the influence of determinanats of financial stress on saving behaviour of household. This chapter covers the descriptive analysis and empirical results find out through OLOGIT model.

A variety of demographic use to analyse the population of salaried class of Rawalpindi district. To cover the overall household behaviour of salaried class and to keep randomness intact, data on eight different demographs are collect. Snowball sampling method employs to reachout respondents and Google survey form use to collect responses of individual household. 243 responses received in which 75.3% are male while 24.7% are female respondents. They are working either in public or private sectors. 55.6% respondents are working in public sector setup whereas 44.4% are working in

private sector. This combination makes the analysis more realistic as it bifercate into two halves. The study focus to analyse household behaviour of salaried class, to accommodate this fact data is collect from group of working age which ranges between 18-60. To make it more clear working age is further classified into five different groups. The first age group range is 18-25, 28% of respondents are belongs to this group. The age of second group is between 26-30, 24.7% of respondents falls in this category. Third category is the largest category, it contains 33.3% of respondents. This statistics also strenghten the idea of basic idea of relationship between salaried class and financial stress.

Table 5.1 **Demographic Statistics**

DEMOGRAPHIC VARIABLES									
GENDER									
Male					**Female**				
75.3 %					24.7 %				
AGE									
18-25		**26-30**		**30-40**		**40-50**		**<50**	
28 %		24.7 %		33.3 %		9.5 %		0.5 %	
OCCUPATIONAL STATUS									
Public					**Private**				
55.6 %					44.4 %				
NO OF FAMILY MEMBERS									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**>9**
-	3.3 %	7 %	16.9 %	25.1 %	19.8 %	12.3 %	5.8 %	2.5 %	7.4 %
EDUCATION									
Matric		**Intermediate**		**Bachelor**		**Master**		**Mphil / PhD**	
4.5 %		11.1 %		30.5 %		28.4 %		25.5 %	
NO OF EARNERS									
1		**2**		**3**		**>3**			
54.3 %		26.3 %		13.6 %		5.8 %			

NO OF WORKING YEARS						
1-5	**6-10**	**11-20**		**21-30**		**>30**
-	**-**	**11-15**	**16-20**	**21-25**	**26-30**	**-**
43.6 %	15.2 %	14.8 %	14 %	7 %	3.7 %	1.6 %
SAVINGS PER MONTH						
1000-2500	**2501-5000**	**5001-7500**		**7501-10,000**		**>10,000**
36.2 %	**13.2 %**	**9.1 %**		**8.2 %**		**17.7 %**

The last two groups ranges between 41-50 and above 50. In the second last group 9.5 % respondents lies while merely 0.5 % respondents belongs to above 50 age group.

As this study mainly focus on household behaviours, so number of family members is a key factor. To collect data on this factor, 9 bifercations are use. 25.1 % of household contains 5 person while 19.8 % familes have 6 person and 16.9 % familes have 4 persons in their houses. These three categories contains 61.8 % of the data. The data shows only 10.3 % families have two to three persons. 12.3 % and 5.8 % familes have 7 and 8 persons respectively. 7.4 % families have more then 9 members in their family whereas only 2.5 % have 9 memebers.

According to Education criteria 30.5 % respondents have done graduation while 28.4% have Master degree. 25.5 % respondents have Mphil and PhD degree. 11.1 % respondents have done Intermediate whereas merely 4.5 % respondents are with matriculation. This stat confirms the understanding of respondents about financial stress and its determinants. One household may have more then one earner in the family. To encompass this factor data is also collect of this factor. According to collected data 54.3 % households have only one earning member while 26.3 % familes have 2 earners in the family. 13.6 % of households have three no of earners whereas 0nly 5.8 % of families have more then three eaning members in the household.

To collect data on number of working years by house hold, respondents are divide into seven groups. In first group respondents with 1-5 years of working place. 43.6 % respondents pertains to this group.

15.2 % of respondents lies within 6-10 years working group. 14.8 % of respondents are in third group which ranges from 11-15 years of working while 14 % of respondents falls in forth group (16-20). Fifth group anges from 21-25 and has 7 % of respondents whereas in sixth group only 3.7 % of respondents. Only 1.6 % of households have more then 30 years of working in their lives.

The last demographic variable is amount of saving by one individual household in a month and of discrete in nature. Among 243 respondents, 36.2 % of household save upto 1000-2500 in a month from their earnings. 13.2 % of household save 2501-5000. 9.1 % of households save 5001-7500 rupees in a month. 8.2 % of respondents save 7501-10000. 17.7 % of resppondents who are 43 households save more then ten thousand in a month. Approxilmately 10 % of households save nothing in a month.

Table 5.2 **Descriptive Statistics**

Variables	Obs	Mean	Std.Dev	Min	Max
Impulsive Behaviour	243	3.11	0.58	1	4.4
Consumer Loan	243	3.67	0.58	1.6	5
Credit Financing Instruments	243	2.96	0.65	1	5
Pro-Consumptive Behaviour	243	3.27	0.51	1	5
Family Financial Support	243	3.48	0.78	1	5
Domestic Externalities	243	3.34	0.60	1.6	5
Financial Stress	243	3.83	0.57	1.2	5
Savings	243	3.14	0.61	1.6	5

Table 5.2 present the descriptive statistics of 243 respondent's ordinal data collected for the study on the basis of 5 stage liket scale. Base on the whole population of the data the study shows mean ranges between 3.1-3.8 except mean of credit financing instrument which is 2.96. The overall standard deviation ranges between 0.5-0.6 except standard deviation of family financial support which is 0.78. For all variables, the minimum value comes 1 while the maximum is 5 which re-ensure the range of likert scale. The range of mean values shows the overall behaviour of household tends from neutrality to agreeness.

While the minor values of standard deviation ensures the reliability of data. According to mean values, the mean value of consumer loan is 3.67 which shows the involvement of this factor in disturbing the day to day life of understudy households. The mean value of impulsive behaviour is 3.11 which shows the mild tendency of impulsivity in respondents behaviours. The mean value of credit financing instruments is 2.96 which shows the lower level of acquireness of such instruments by the respondents. Family financial support take mean value as 3.48 which shows the respondents agreement towards that, it can reduce financial stress upto an extent and also it relates inversally with the factor of stress. Domestic externalities mean value is 3.34 which also tends toward agreeness of the logic of distorting household behaviours. The two key variables of the study are financial stress and savings of household. The mean of financial stress is 3.84 which identify the presence of financial stress among under study households. While the value of mean of saving is 3.1 which is near to neutral value shows the minor attitude of saving of households.

Impulsive behaviour

Table 5.3 Impulsive behaviour Results

Impulsive Behaviour	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I often buy more than required things	12.3 %	33.3 %	25.9 %	25.1 %	3.3 %
2	I often buy when knew about promotions/sale	6.6 %	30.9 %	27.6 %	29.6 %	5.3 %
3	I often tend to buy if something I like	4.5 %	9.1 %	23.5 %	48.1 %	14.8 %
4	I feel I have impulsive shopping Behaviour	11.5 %	24.3 %	35.8 %	25.5 %	2.9 %
5	I always shopping according to list	4.5 %	15.6 %	18.1 %	46.9 %	14.8 %

The table shows the results of Impulsive behaviour of 243 household. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that impulsivity didn't matter a lot and not pose any financial stress upon household who have impulsive shopping behaviour. The

third scale shows neutrality of respondents who have judgment that impulsivity may or may not is present in their lives. The fourth and fifth scales are agress and strongly agree. The percenatge of respondents who comes under these categories have positive signs of impulsive shopping behaviour. Moreover the responses also unveil the disguise impact of financial stress in the form impulsive behaviour of households. The first item shows that 45.6 % of the households have no tendency of impulsivity in their day to day purchasings. On the other hand 28.4 % of households have such tendency which urge them to purchase more goods as they required at a point of time. While the remaining 25.9 % of households are neutral in this aspects of Behaviour. The results of first item indicate the presence of impulsive attitudes in salaried class. The second item's results 37.5 % of respondents are not interested in any promotions or sales while 34.9 % of respondents are showing tilts towards over expenditures when hear about promotions or sale. This % is little higher then the % of first item which simply shows the tendency of impulsive behaviour. It also indicate that the respondents which are not clear about impulsive tendency are tend to purchase goods during promotions or sales. 27.6 % of respondents are still remain neutral in the case of promotions which is little higher then first case. The third item of impulsive behaviour is practical in nature and its results shows the higher degree of impulsivity in human behaviour. It's a natural phenomenon that human beings wants to fulfil his wants as much as they can with their available resources. The results shows a high inclination in impulsive behaviour with 62.9 % of respondents agree to purchase goods of their likings. This result shows the higher degree of impulsivity in salaried class. Only 13.6 % of respondents are able to contro their intentions and negates the aspect of impusivity in their purchasings. 23.5 % of respondents are still indetermied their behaviours as they are neutral between impulsive buying and strict to the plans. The fourth item's results shows the intentions of respondents about impulsive attitude. 35.8 % of respondents are in view that they have no impulsive intetions in their minds as well as the same number of repondents are remain neutral in this case. Whereas 28.4 % of respondents shows they have clear intention about impulsive purchasings. The fifth item shows the number of respondents who remain strict to their list or plans. 20.1 % of repondents are not restrict themselves to purchasing list whereas 61.7 % of respondents remains ccording to list. Only 18.1 % of respondents are

neutral in this case. The overall results of human behaviour regardings impulsivity is that there is positive indication of impulsive buying. The respondents are more likely to purchase goods when they like some thing which is the key factor in impulsive purchasings. As the repondents are related to salaried class who have limited financial resources and due to purchasings base on liking leads to exhaust their financial resources quickly. On average 30.52 % respondents disagrees with the impact of impulsive behaviour on households whereas 26.18 % of respondents are of view that there may or may not be impact of impulsive behaviour on household decisions. 43.26 % of respondents claims that impulsive behaviour effect their lives and saving or consumption patterns in one or other way.

Consumer Loan

Table 5.4 Consumer Loan Results

Consumer Loan	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Consumer loans makes life worse rather better off	4.1 %	9.9 %	19.8 %	40.3 %	25.9 %
2	I easily manage my monthly expenditure after paying my instalments	4.5 %	17.3 %	22.2 %	46.1 %	9.9 %
3	I never failed to pay loan instalment	3.7 %	14 %	23.9 %	40.7 %	17.7 %
4	I think Loan is expensive way to fulfil needs	4.5 %	5.8 %	13.6 %	40.3 %	35.8 %
5	I feel anxiety while facing unexpected expenditures	1.6 %	9.5 %	20.2 %	56 %	12.8 %

This table shows the result obtained from the reponses of 243 repondents. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that consumer loan did not pose any financial stress upon household who use this financial tool. The third scale shows neutrality of respondents. It means that they think of that conumer loan may or may not be cause of financial stress. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that consumer loan can be cause of financial stress and worsen their financial matters. Moreover the

responses also shows that how many respondents experience adverse effect of financial stress in their lives. The result of first item depict the financial condition of respondents. 66.2 % of respondents agreed that consumer loan worsen off the overall financial condition of household. This fact also apprised the fact that a salaried person has little financial resources for day to day consumption as well as for saving. As it add one more cause of consumption from specfic amount of salary of a household. 19.8 % of respondents remain neutral about the effects of consumer loan on household financial position. Only 14 % of respondents are of view that consumer loan didn't put any adverse effect on financial position of household. The secod item shows mental ease of households. 21.8 % of households feels hard to manage their consumption after taking consumer loan while 22.2 % of respondents remain neutral in their responses about the effects of consumer loan. 56 % of respondents mangae their financial resources efficiently. The third item's result shows that 58.4 % of respondents manage their installments of loan in better way and they never face any financial hardship after paying installments. 23.9 % of respondents remain neutral in this case. 17.7 % of respondents experience difficulty in managing installments of loan. This difficulty further lead to financial stress of household. As similar to results of first item which shows a general perception of worsen effcts of consumer loan on households. The results of fourt item shows that 76.1 % respondenst are of view that consumer loan is an expensive way to fulfil households need. As it leads to weaken the financial situation of households. 13.6 % of respondents remain neutral in this case as their intentions may go either sides. Only 10.3 % of respondents disagree with the fact that consumer loan is not a reliable financial resource to fulfil requirements. 11.1 % of respondents feel anxiety and depression fits when came across any unseen expenditures after taking consumer loan. 20.2 % of respondents remains neutral as they didn't experience any anxiety or depression. 69.7 % of respondents are of view that consumer loan results in anxiety and depression whenever any unseen needs arises. The overall results shows that respondents think that consumer loan is not good and reliable source of financing to fulfill human wants. It also cause anxiety and depression that futher leads to financial stress. On average 14.98 % respondents disagrees with the impact of consumer loan whereas 19.94 % of respondents are of view that there may or may not be impact of consumer loan on

household behaviour. 65.10 % of respondents claims that consumer loan worsen their lives and distort saving or consumption decisions.

Credit Financing Instruments

Table 5.5 Credit Financing Instruments Results

Credit Financing Instruments	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Do you feel credit card/Flexi card is suitable tool for purchasing?	10.7 %	23.9 %	25.1 %	32.1 %	8.2 %
2	I always pay credit card bill without delay	5.3%	10.7%	43.2%	27.6 %	13.2 %
3	I often avail credit card instalments plan	19.8%	28.4%	32.1%	17.3 %	2.5 %
4	Credit card is a source of financial freedom	14%	21%	26.3%	30.5 %	8.2 %
5	I feel any distress after using credit card	5.8%	25.9%	39.9%	21.8 %	6.6 %

This table shows the responses of respondents about the usage of credit card and flexi card. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that credit financing instruments did not pose any financial stress upon household who use these financial tools. The third scale shows neutrality of respondents. It means that they think of that conumer financing instruments may or may not be source of financial freedom and they use these instruments without any side effects. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have positve signs of financial stress and experiencing negative impacts of these instruments. Moreover the responses also shows that how many respondents experience adverse effect of financial stress in their lives. These cards are financial instruments which offers credit purchasings for households. Tthe first item's results indicate that either credit cards are reliable financial tools or not. 34.6 % of respondents found that these cards are less beneficial for households while 25.1 % of respondenst remain neutral. 40.3 % of respondents are of view that these cards are suitable for purchasing as it offer an extra amount for expenditures and they can satisfy more wants at a point of time. The results of

second item shows that either a large number of respondents didn't have any card or manage a balance between consumption from actual financial resources and credit purchasing. 43.2 % of respondents are remain neutral for the case of payments of bills of credit financing instruments. 40.8 % of respondenst manage their credit cards bills efficiently. Only 16 % of respondents cannot manage to pay their bills at stipulated time. The third item's result shows that respondents tendency to avail installment plan to clear credit purchasing obligations. 48.2 % of repondenst didn't avail any installments plan after using credit financing intruments. 32.1 % of respondents remain neutral in this case. The only 19.8 % of respondenst avails installment plan after using credit cards. The fourth item shows the general perceptions of respondents about percieved freedom from financial worries. 38.7 % of respondents are of view that credit financing instruments give financial freedom whereas 35 % of respondents negate the fact of financial freedom. 26.3 % of respondents neither find any freedom nor any financial constraints while having credit financing instruments with them. The fifth item's shows the number of respondents who caught by financial stress and other type of financial worries. 28.4 % of respondents exerience distress after purchasing mad with credit cards. 39.9 % of respondents remain neutral in this case. 31.7 % of respondents negate the feelings which arise distressing behaviour. Overall 1/3 of respondents remain neutral in this case while the the other 1/3 % repondents goes in the favour as well as against the use of credit financing instruments. On average 33.12 % respondents disagrees with the impact of credit financing instruments while 33.32 % of respondents are neutral about their effects. They claims that there may or may not be impact of credit financing instruments on household behaviour. 33.60 % of respondents agrees that credit financing instruments worsen their lives and can cause financial stress.

Pro-Consumptive Behaviour

Table 5.6 Pro-Consumptive Behaviour Results

Pro-Consumptive Behaviour	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I always save first then purchase item	4.5 %	16.5 %	22.2 %	42.8 %	14 %
2	I often willing to purchase item on instalments	13.6 %	27.1 %	23.9 %	30.5 %	4.9 %
3	Instalments plan is reliable source of purchasing costly items	8.2 %	17.3 %	18.5 %	48.1 %	7.9 %
4	I feel fed up by making monthly payments	2.9 %	19.3 %	30.9 %	36.6 %	10.3 %
5	Pro Consumptive Behaviour leads to distress	2.1 %	12.8 %	37 %	42.8 %	5.3 %

This tables shows the results about pro-conumptive behaviour of households. It includes purchasings of households on installments through hire purchase schemes. The responses indicates that there are a large numbers of household who satisfied their wants through this method of purchasing. As household's pro- consumptive behaviour increase the marginal propensity to save decreases simultaneously. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that pro-consumptive behaviour did not posture any financial stress upon household who use this financial tool. The third scale shows neutrality of respondents. It means that they think of that pro-consumptive behaviour may or may not be cause of financial stress. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that pro-consumptive behaviour can be cause of financial stress and worsen their financial matters. Moreover the responses also shows that how many respondents experience adverse effect of financial stress in their lives. The results of first item depicts that 56.8% of respondents are in favour of pro-saving methods of purchasing. Whereas 22.2 % of respondents didn't have clear tilt toward any side. 21 % of respondents experience pro-consumptive pattren of purchasing which ultimately lead to financial worries for those households. The second item's results indicates intentions of households to purchase

items on installments. 35.4 % of respondents are oftenly willing to use hire purchase scheme methods. 23.9 % of of respondents are remain neutral between hire purchase and purchase on cash. 40.7 % of repondents preffer cash purchasing instead of purchase on installments. The third item relate to behaviour of respondents while purchasing costly items. 56 % of respondents are in favour to purchase costly items on installments as the respondents belong to salaried class and they didn't afford to purchase costly items with limited financial resources. 18.5 % of repondents are remain neutral in case of purchasing of costly items. 25.5 % of respondents are not in favour of hire purchase method evenn in case of costly items. The fourth item indicates the mental conditions of households after purchasing items on installments. 46.9 % of respondents experience anxiety and fatigue after making monthly payments. As they consume a major share of disposable income. They are bound to pay such amount on regular intervals so that in result their income cut short to a remarkable extent. 22.2 % of respondents have no indication of such stress whereas 30.9 % of respondents remain neutral in this case. The fifth item's results shows the general perception of respondents in which 48.1 % of respondents claim that pro-consumptive behaviour leads to financial worries for households. 14.9 % of repsondents negates this fact and are of view that pro-consumption didn't have such odd effects. 37 % of respondents remain neutral and neither they claim that neither pro-consumption is distressing nor free of it. The overall result shows pro-consumption leads to reduce MPS along with curtail of disposable income of salaried class. On average 24.86 % respondents disagrees with the impact of pro-consumptive behaviour whereas 26.50 % of respondents are of view that there may or may not be impact of pro-consumptive behaviour on household behaviour. 48.64 % of respondents claims that pro-consumptive behaviour put adverse impacts on their lives and distort saving or consumption decisions.

Family Financial Support

Table 5.7 Family Financial Support Results

Family Financial Support	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Joint family system is a source of financial Support	3.7 %	9.9 %	18.5 %	46.5 %	21.4 %
2	I always get financial support from my relative when I need it	12.8 %	18.1 %	23.5 %	33.7 %	11.9 %
3	I often get Financial support in real	7 %	20.6 %	29.6 %	35.8 %	7 %
4	Financial support may reduce anxiety/depression	3.3 %	7.8 %	16.9 %	51 %	21 %
5	Personal contentment increases along with increased financial support	3.3 %	7.8 %	18.1 %	54.3 %	16.5 %

Family financial support is physical as well as percieved phenomenon. Either someone gets financial assistance from his friends and family in real or only percieve that he may get such assistance on the time of need. This table shows the responses of respondents about family financial support. It's a matter of fact a large family has more number of earners as compared to small. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that family financial suppourt did not give any relieve to under financially stressed households. The third scale shows neutrality of respondents. It means that they think of that family financial stress may or may not be beneficial against financial stress. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that family financial stress can remove financial stress and improve the financial matters of households of salaried class. Moreover the responses also shows that how many respondents experience positve effects of family financial support in their lives. The result of first item shows that 67.9 % respondents are of view that joint family is a source financial support upto greater extent. One may easily get financial support as a part of joint family. 13.6 % of respondents negates the fact of joint family system as a source of financial support. While 18.5 % of repondents

remain neutral about joint family source. The second item's result verify the result of first item with little variation. It indicates that how many respondents get such help when they are in need. 45.6 % of respondents get financial assistance at time of need while 30.9 % of respondents cannot get such assistance. 23.5 % of respondents remain neutral as they get such help some time and some time they don't get it. The third item's result indicate the real materialization of financial support from family. In this case 42.8 % get in real whereas 27.6 5 of respondents disagree with this. 29.6 % of respondents are remain neutral in this case. The fourth item is the key item of this variable as it clarify that whether family financial support either lessen the financial worries of household or not. The result shows, 72 % of respondents are of view that family financial support lessen the financial worries and reduce anxiety and depression factors. Only 11.1 % of respondents negates this fact and of view that it doesn't reduce the anxiety and depression factors. 16.9 % of respondents are neutral in this case as they may go either sides. The results of fifth item are re verfiy the results of fourth item. As 70.8 % of respondents are of view that increase in the level of family financial support, personal satifaction and contentment increases while depression and anxiety decreases. Only 11.1 % of respondents do not agree with this fact. 18.1 % of respondents remain neutral in this case. As they are not sure about the fact that either family financial support improve level of satisfaction or not. Overall Family financial support is a variable which is negatively correlate with Financial stress as it increases financial stress decreases. On average 18.86 % respondents disagrees with the impact on family finncial support whereas 21.32 % of respondents are of view that there may or may not be impact of family financial support on household behaviour. 59.82 % of respondents claims that family financial support put positive impacts on their lives and help to reduce financial stress.

Domestic Externalities

Table 5.8 Domestic Externalities Results

Domestic Externalities	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Domestic Externalities are source of depression	5.8 %	26.3 %	25.1 %	35.4 %	7.4 %
2	I feel our consumption is according to our locality	2.1 %	8.2 %	21 %	59.3 %	9.5 %
3	I often compare myself with other people of my locality	10.3 %	33.3 %	22.3 %	29.2 %	4.9 %
4	Demonstration effect may distort consumption pattern	4.9 %	6.2 %	14 %	54.3 %	20.6 %
5	Negative domestic externalities increase the level of stress.	11.1 %	23 %	13.2 %	35 %	17.7 %

Domestic externalities has a vital role in reshaping behaviours of households residing in a specfic society. Demonstration effect also plays its role in effecting overall behaviours of households. This table shows the result of responses of respondents about such factors. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that domestic externalities did not posture any financial stress upon household. The third scale shows neutrality of respondents. It means that they think of that domestic externalities may or may not be cause of financial stress. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that domestic externalities can be cause of financial stress and worsen their financial matters. Moreover the responses also shows that how many respondents experience adverse effect of financial stress in their lives which caused due to domestic externalities. The first item indicates that domestic externalities put a negative impact on behaviours in the form of depression. 42.8 % of respondents feels that domestic externalities are source of depression while 32.1 % of repondents refute the negative effects of domestic externalities. 25.1 % respondents remain impartial in this case. The second item's result verify the existance of demonstration effect in our societies. 68.8 % of respondents are in favour that their consumption pattren change according to their locality. Only 10.3 % of

respondents find no locality effect on overall consumption behaviour of household. 21 % of respondents remain neutral in this case. The result of third item indicates that 34.1 % of respondents compare themselves with the other residents of locality which further lead to reshaping of their conumption behaviours. While 43.6 % of respondents do not experience such type of comparison. 22.3 % of respondents neither agree nor disagree with the fact of comparison while residing in a specific society. Almost ¾ % of respondents are of view that demonstration effect play a vital role and put a strong impact on consumption pattren of households. 11.1 % of respondents disagree with the effects of demonstration effect on household consumption behaviour. 14 % of repondents are remain neutral and are of view that demonstration effect either distort the consumption pattren or not. 52.7 % respondents feels that domestic externalities can be a source of finanacial worries and with the increase in impact of negative domestic externalities, the level of depression increases. 34.1 % of repondents refute this fact that negative domestic externalities can cause depression. 13.2 % of repondents are remain impartial about the effects of negative domestic externalities. The results shows that domestic externalities distort consumption pattren and negative domestic externalities can cause depression, anxiety and increase financial worries for households who belongs to salaried class. On average 26.24 % respondents disagrees with the impact of domestic externalities whereas 19.12 % of respondents are of view that there may or may not be impact of domestic externalities on household behaviour. 54.64 % of respondents claims that domestic externalities pose adverse effects on their lives and distort saving or consumption decisions.

Saving Behaviour

Table 5.9 Saving Behaviour Results

Saving Behaviour	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Pro consumption results in little savings of salaried class	3.7 %	9.9 %	27.6 %	50.6 %	8.2 %
2	Impulsive buying often leads to early utilization of monthly income	1.6 %	4.1 %	15.6 %	63 %	15.6 %
3	Pro - saving behaviour reduce financial stress	2.1 %	4.4 %	14 %	56 %	23.5 %
4	Savings increase with increase in number of earners	2.5 %	5.7 %	11.9 %	49 %	30.9 %
5	Financial stress reduce the rate of savings	0.4 %	7.4 %	20.6 %	56.4 %	15.2 %

Saving is a vital variable for a household as well as for an economy. A household either consume his disposable income or save some part of it for future and unseen needs. This tables shows the responses of salaried class households about savings. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that pro-consumptive behaviour, impusivity and financial stress did not pose any impact on households saving behaviour of salaried class. The third scale shows neutrality of respondents. It means that they think of that pro-consumptive behaviour, impusivity and financial stress may or may not effect saving behaviour. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that pro-consumptive behaviour, impusivity and financial stress can deterirate saving pattrens and their financial matters. Moreover the responses also shows that how many respondents experience positive effect of pro-saving behaviour in their lives. The result of first item potrays that 58.8 % of repondents are of view that pro-consumption behaviour of households reduce the cahnces of savings. As household satisfy their wants without having requisite financial resources. Only 13.6 % of repondents disagree with this fact. 27.6 % of respondents are of view that pro-consumption either decrease savings or donot has any significant impact on savings. The

second item relate to impulsivity factor which pose odd effect on household belongs to salaried class. 78.6 % of repondents claim that impulsive behaviour is a great cause of early utilization of financial resources of household and this lead to low or even nill savings by households. Only 5.6 % of respondents disagree with the effects of impulsivity on salaried class. 15.6 % of respondents are remains disinterested about the effects of impulsivity. The result of third item indicates that saving may reduces the chances of depression and financial worries and pro-saving behaviour leads to freedom from financial worries. 79.5 % of respondents verify this fact that pro-saving behaviour lessen financial worries and level of depression. Merely 6.5 % of respondents are against pro-saving behaviour and its positive impact on salaried class household. 14 % of respondents are remain impartial in making their verdict about pro- saving benefits. It is a proven economic fact that level of saving increases with increases in number of earners. The same has reverify with the results of fouth item. 79.9 % of respondents are of view that rate of saving increase with the increase in the number of earners. 8.2 % of respondents disagree with this fact while 11.9 % of respondents remain neutral in this case. One of the key question of this study is that whether financial stress reduces the level of savings or not. The result of fifth item shows that 71.6 % of respondents think that financial stress reduces the level of saving in household belongs to salaried class. A very minute number disagree with this fact with mere 7.8 % of respondents while 20.6 % of respondents are remain detached from the raltionship between financial stress and level of savings. The result of responses verify that rate of saving increases with increase in the number of earners and pro-saving behaviour lessen the financial worries and level depression. Responses also prove that financial stress reduce the rate of saving in household of salaried class. On average 11.45 % respondents disagrees that saving behaviour changes due to pro-consumptive behaviour, impulsive buying and financial stress. Whereas 17.94 % of respondents are of view that there may or may not be any change occurs due to pro-consumptive behaviour, impulsive buying and financial strss. A large number of respondents with 73.68 % of respondents agrees that financial stress distort saving behaviour. Impulsive buying and pro-consumption also effect household saving behaviour. The results reveal that pro-saving behaviour reduce the chances of financial stress.

Financial Stress

Table 5.10 Financial Stress Results

Financial Stress	Item Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I often worried about payments (e.g. Bills)	7.8 %	19.3 %	21.4 %	42.8 %	8.6 %
2	I manage monthly expenses efficiently	2.5 %	5.8 %	23 %	53.1 %	15.6 %
3	I often do extra work to manage my expenditures	7.8 %	30 %	25.6 %	29.6 %	7 %
4	I often do not participate in any social activity due to financial crises	7.4 %	40.3 %	19.4 %	27.6 %	5.3 %
5	I often argued with family members due to financial problems	10.7 %	32.9 %	22.3 %	29.2 %	4.9 %

Financial stress is the pivotal variable of this study. It is the inability to meet financial obligations by someone. This table shows the result about financial stress base on responses of 243 respondents who represents an independent household in a specific society. The table contains five items with % of respondents against each likert scale. The respondents who choose strongly disagree and disagree, are of view that they didn't experience any sign of financial stress in their lives. The third scale shows neutrality of respondents. It means that they think of that signs of financial stress may or may not be present in their day to day financial matters. The fourth and fifith scales are agree and strongly agree. The % of respondents who comes under these categories have clear verdict that they have positive sign of financial stress and it worsen their financial matters. Moreover the responses also shows that how many respondents experience adverse effect of financial stress in their lives which caused due to different variables. The result of first item shows that 51.4 % of respondents are worried about their monthly bills. It indicates that more then half of the respondents have symptoms of financial stress.

27.1 % of respondents never worries about their monthly dues and they manage their financial resources efficiently. While 21.4 % of respondents are remain neutral about payments of bills and dono't have such type of worries regarding bill payments. The

second item's result indicates that how many households efficiently manage their financial resources. The result shows that 68.7 % of respondents able to manage their expenditures within the limits of financial reources. Whereas 8.3 % fails to manage their expenditures while 23 % of respondents are remain neutral in this case. 36.6 % of respondents do extra work to manage their expenditures while 37.8 % of repondents can manage their expenditures without doing extra work. 25.6 % of respondents are impartial in doing work or enjoying their leaisure timing. A large number of partcipants don't participate in social events due to financial constraints. 32.9 % of respondents agree that they avoid social activity where as 47.7 % of respondents disagree and they have no financial constraints to participate in social activities. 19.4 % of respondents remain neutral as they may either participate or avoid social activities. The fifth item relate to financial stress as when any individual is under financial stress, he may argue unnecessarily with family members. The result of fifth items shows that 34.1 % of respondents argue with their family members about financial resources where as 43.6 % of espondents disagree with this fact and 22.3 % of respondents are remain neutral in this case. The results of this variable shows that when households become worries about bill payments, arguing with family members and try to avoid social activities and feel a need to do extra work, they trap by financial stress which may increase with the passage of time. On average 32.90 % respondents disagrees with the impact on financial stress on household behaviour. While 22.34 % of respondents are of view that there may or may not be adverse impact of financial stress on household behaviour in the shape of financial worries. 44.74 % of respondents agrees that financial stress is the root cause of financial worries, distubing factor among family members and reduction in leisure hours of household. Respondents under financial stress avoid to participate in domestic and family events.

Ordered Logit Estimations Model 1

Table 5.11 Ordered Logit Estimations Model 1

Ordered logistic regression			**Number of obs**			**243**
			LR chi2(6)			**77.32**
Log likelihood = -532.28871			**Prob > chi2**			**0.0000**
			Pseudo R2			**0.0677**
FS	**Coef**	**Std . Err**	**Z**	**p> lzl**	**95% Conf. Interval**	
IB	.2691539	.1966141	1.37	0.171	-.1162026	.6545104
CL	1.088652 *	.2063541	5.28	0.000	.6842055	1.493099
CFI	.3259193 *	.1882719	1.73	0.083	-.0430868	.6949255
PCB	.2259183	.2488055	0.91	0.364	-2617315	.7135681
FFS	.5624336 *	.1686256	3.34	0.001	.2319335	.8929336
DE	.6382744 *	.1983494	3.22	0.001	.2495167	1.027032

This tables shows the estimate results of our first model in which Financial stress is dependent variable while the other variables : Impulsive behaviour, Consumer loan, Consumer financing instruments, Pro-Consumptive behaviour, Family financial support and Domestic externalities are the independent ordinal variables. The model focus to explore the determinants of financial stress. Ordered Logit model use to determine the variables which have significant impact in determination of Financial stress. The Log liklihood value is a measure of goodness of Fit for the understudy model. As much as the value is large, the model is supposed to be better fir. The final Log Liklihood value of our model is -532.28871. At this value the difference between log Liklihood values of consective ittrations are sufficiently small. The table shows that the estimations is base on 243 observations. The P value is 0.0000 indicates that the model is statistically significant. While the Pseudo R square may use for comparison batween two models which are estimated on same data and to find better predicted model.

The estimation results shows that three variables out of six are statistically significant in the model. The significant variables are : Consumer loan, Family financial support and

Domestic externalities as their P values are 0.00 whereas Impulsive behaviour and Pro-Consumptive behaviour and Consumer financing instruments are insignificant variables according to estimated data because their P values are greater thenequal to 0.1. The Coefficient values of significant variables indicate that one unit increase in the significant variables brings how much change in probability of determinig the financial stress which is dependent variable. To find out how likeli the explanatory variables determine the dependent variable, we estimate marginal effects of the model after the estimation of the overall model.

Marginal Effects of Ordered Logit Model 1

Table 5.12 Marginal Effects (At 1.2) of Ordered Logit Model 1

FS	Coef	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0005945	.0007291	-0.82	0.415	-.0020234	.0008345
CL	-.0024044	.0024325	-0.99	0.323	-.007172	.0023632
CFI	-.0007198	.0008305	-0.87	0.386	-.0023475	.0009079
PCB	-.000499	.0007407	-0.67	0.501	-.0019508	.0009529
FFS	-.0012422	.0012915	-0.96	0.336	-.0037736	.0012892
DE	-.0014097	.0014678	-0.96	0.337	-.0042866	.0014672

This table shows the marginal effect at first cut (1.2) automatically selected by software. This cut point indicates the strong disagreement of respondents with regard to variables under discussion. At this point, all the coefficient values have negative signs. The negative sign implies two facts, one there are rare chances of occurance of financial stress among the salaried class and secondly the respondents are strongly disagree with the phenomenon that explanatory variable may put any significant impact on dependent variable. The value of impulsive behaviour at this level is -0.0006. It indicates that one unit change in impulsive behaviour reduce the probability of financial stress by only 0.06 %. The impact is so little which lead to negate any significant impact on financial stress. Moreover 0.06 % respondents are strongly disagree with the fact that impulsive behaviour can cause financial stress. At first cut, Consumer loan take maximum value of -0.0024 %. So when there is unit change in Consumer loan by household there is chance

of change in probability of financial stress by 0.24 %. This value indicates, the probability to determine the financial stress by 24 % and also it infers that 24 % of respondents are strongly disagree with the role of consumer loan to cause financial stress. The value of Consumer financing instruments is -0.0007. It shows one unit increase in the uses of these instruments the probability of change in financial stress decrease by 0.07 % . It is also indication of number of respondents who are strongly disagree with the impact of consumer loan on financial stress. The value of pro-consumptive behaviour is -0.0005. So one unit change in pro-consumption behaviour, the probability of impact on financial stress is 0.05 %. Moreover it indicates that there 0.05 % of respondents are strongly disagree with this fact. The third largest value take by family financial support. Results shows that one unit change in family financial support bring change in the probability of occurance of financial stress by 0.12 %. As family financial support negatively correlate with financial stress so there is 0.12 % chances of reduction in financial stress by unit change in family financial stress. It also inferes that 0.12 % of respondents are strongly negate that family financial support don't reduce the chances of financial stress. The value of domestic externalities is the second larger value i.e -0.0014 at first cut point. One unit change in domestic externalities, the probability of financial stress change by 0.14 %. It also indicates the less chances of change in probability of household goes under financial stress as 0.14 % of respondents strongly disagree with this fact at this level. This cut point verify that all the independent variables take minor values which have no remarkable impact on the determination of financial stress. Moreover "P" values indicates that all variables are insignificant at this cut point.

Table 5.13 Marginal Effects (At 2.4) of Ordered Logit Model 1

FS	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0012206	.0012248	-1.00	0.319	-.0036212	.00118
CL	-.004937	.0035678	-1.38	0.166	-.0119297	.0020557
CFI	-.001478	.0013512	-1.09	0.274	-.0041263	.0011703
PCB	-.0010245	.0013304	-0.77	0.441	-.0036322	.0015831
FFS	-.0025506	.0019477	-1.31	0.190	-.006368	.0012667
DE	-.0028946	.0022154	-1.31	0.191	-.0072367	.0014476

This table shows the marginal effects at cut point (2.4) mark by the software. This cut point indicates the disagreement of respondents with regard to variables under discussion. At this point, all the coefficient values have negative signs. The negative sign implies two facts, one is there less chances of financial stress among the respondent's households and secondly the respondents are disagree with the phenomenon that explanatory variable may put any significant impact on dependent variable. Impulsive behaviour come up with3 value of -0.0012 which indicates that one unit change in it, there are less probability to change in financial stress by 12 %. It also indicate that 0.12 % of repondents disagree that Impulsive behaviour may cause of financial stress. Consumer loan value is -0.0049. It indicate that one unit change in consumer loan, the probability of occuring financial stress by 0.49 %. Similarly there are 49 % of respondents are disagree with fact that consumer loan can cause financial stress. The value of consumer financing instruments is -0.001478. By holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of financial stress by 0.15 % and the same % of respondents are disagree that consumer financing instruments cause financial stress among household of salaried class. At cut point 2.4, the value of pro-consumptive behaviour is -0.001025 which indicates that one unit change in pro-consumptive behaviour, the probability of occuring change in financial stress is 0.10 %. It also implies that 0.10 % of respondents are disagree with the impact of pro consumption on financial stress. Family financial support value is -0.002551. It infers that the chance of change in probability of financial stress is 0.26 % upon one unit change in family financial support. It also implies that 0.26 % of respondents are disagree with the fact that family financial support reduce the chance of financial stress. The value of domestic externalities is -0.002895. when there is one unit change in effect of domestic externalities, the probability to change in financial stress is 0.29 % and also inferes that the same % of respondents are disagree with the fact, domestic externalities can cause financial stress among households of salaried class. This cut point also reassure that all the independent variables take minor values which have no extraordinary impact on the determination of financial stress. Moreover "P" values indicates that all variables are insignificant at this cut point at 0.05 level of significance.

Table 5.14 Marginal Effects (At 3.0) of Ordered Logit Model 1

FS	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0113147	.0087111	-1.30	0.194	-.0283881	.0057588
CL	-.0457647*	.0138405	-3.31	0.001	-.0728915	-.0186379
CFI	-.013701	.0085533	-1.60	0.109	-.0304652	.0030632
PCB	-.0094971	.0106474	-0.89	0.372	-.0303656	.0113713
FFS	-.0236435*	.0089484	-2.64	0.008	-.041182	-.0061051
DE	-.0268317*	.0104045	-2.58	0.010	-.0472242	-.0064393

This table shows the marginal effects at cut point (3.0) mark by the software. This cut point indicates the respondents with neutral response about variables under discussion. At this point, all the coefficient values have negative signs. The negative sign implies two facts, one is there less chances of financial stress among the respondent's households and secondly the respondents are neutral in making their decision about the phenomenon that explanatory variable may put any significant impact on dependent variable. At this middle cut point, Impulsive behaviour take value of -0.01131 which indicates that one unit change in it, there are less probability to change in financial stress by 1.1 %. It also indicate that 11 % of repondents have neutral stance about impact of Impulsive behaviour on financial stress. Consumer loan value is -0.04576. It indicate that one unit change in consumer loan, there is less probability of occuring financial stress by 4.5 %. Similarly there are 4.5 % of respondents are neutral about the fact that consumer loan can cause financial stress. The value of consumer financing instruments is -0.013701. By holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of financial stress by 1.4 % and the same % of respondents are neutral about the fact that consumer financing instruments cause financial stress among household of salaried class. At middle cut point 3.0, the value of pro-consumptive behaviour is -0.009497 which indicates that one unit change in pro-consumptive behaviour, there are less chance of change in probability of occuring

financial stress is 95 %. It also implies that 9.5 % of respondents are neutral about the impact of pro consumption on financial stress. Family financial support value is -0.02364. It infers that the chance of change in probability of financial stress is 2.4 % upon one unit change in family financial support. It also implies that 2.4 % of respondents are neutral with the fact that family financial support may put any impact on financial stress. The value of domestic externalities is -0.02683. when there is one unit change in effect of domestic externalities, the probability to change in financial stress is 2.7 % and also inferes that the same % of respondents are neutral about the fact, domestic externalities can cause financial stress among households of salaried class. This cut point verify that all the independent variables take minor values which have no remarkable impact on the determination of financial stress. At this cut point "P" values of three variables indicates that consumer loan, family financial stress and domestic externalities are significant and other three variables insignificant at this cut point.

Table 5.15 Marginal Effects (At 4.0) of Ordered Logit Model 1

FS	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]	
IB	.0181277	.0140228	1.29	0.196	-.0093565	.0456118
CL	.0733213*	.0230408	3.18	0.001	.0281622	.1184804
CFI	.0219508	.0138602	1.58	0.113	-.0052146	.0491163
PCB	.0152157	.0170134	0.89	0.371	-.01813	.0485614
FFS	.0378802*	.0152221	2.49	0.013	.0080454	.067715
DE	.0429881*	.0169872	2.53	0.011	.0096938	.0762824

This table shows the marginal effects at cut point (4.0) mark by the software. This cut point indicates those % of those respondents who are agree with the fact that variables under discussion have a significant imapct on dependent variable. At this point, all the coefficient values have positive signs. The positive sign implies two facts, one is there is chance of financial stress among the respondent's households and secondly the respondents are agree about the phenomenon that explanatory variables may put significant impact on financial stress. At this cut point, Impulsive behaviour take value

of 0.01813 which indicates that one unit change in it, there are probability of positive change in financial stress by 1.8 %. It also indicate that 1.8 % of repondents are agree that there is an impact of Impulsive behaviour on financial stress. Consumer loan value is 0.07332. It indicate that one unit change in consumer loan, there is probability of occuring financial stress by 7.3 %. Similarly there are 7.3 % of respondents are of view that consumer loan can cause financial stress. The value of consumer financing instruments is 0.02195. By holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of financial stress by 2.2 % and the same % of respondents are agree about the fact that consumer financing instruments cause financial stress among household of salaried class. At cut point 4.0, the value of pro-consumptive behaviour is 0.01522 which indicates that one unit change in pro-consumptive behaviour, there are positive chance of change in probability of occuring financial stress is 1.5 %. It also implies that 1.5 % of respondents are agree about the impact of pro consumption on financial stress. Family financial support value is 0.03788. It infers that the chance of change in probability of financial stress is 3.8 % upon one unit change in family financial support. It also implies that 3.8 % of respondents are agree with the fact that family financial support may put positive impact in reducing financial stress. The value of domestic externalities is 0.04299. when there is one unit change in effect of domestic externalities, the probability to change in financial stress is 4.3 % and also inferes that the same % of respondents are agree about the fact, domestic externalities can cause financial stress among households of salaried class. This cut point verify that coefficient of all the independent variables take large values which have remarkable impact on the determination of financial stress and it also confirms the accepted region where respondents are agree with mechanism of financial stress and its determinants. Moreover “P” values indicates consumer loan, family financial stress and domestic externalities are significant and other three variables insignificant at this cut point.

Table 5.16 Marginal Effects (At 5.0) of Ordered Logit Model 1

FS	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	.0025033	.0022149	1.13	0.258	-.0018377	.0068443
CL	.0101251*	.0052879	1.91	0.056	-.000239	.0204892
CFI	.0030312	.0022673	1.34	0.181	-.0014126	.0074751
PCB	.0021012	.0025552	0.82	0.411	-.002907	.0071093
FFS	.005231	.0029787	1.76	0.079	-.0006071	.0110691
DE	.0059363	.0034355	1.73	0.084	-.0007971	.0126698

This table shows the marginal effects at cut point (5.0) mark by the software. This cut point indicates the respondents are strongly agree with the response of independent variables under discussion. At this point, all the coefficient values have positive signs. The positive sign implies two facts, one is there greater chances of financial stress among the respondent's households and secondly the respondents are strongly agree in making their decision about the phenomenon that explanatory variable may put strong significant impact on dependent variable. At this cut point, Impulsive behaviour take value of 0.002503 which indicates that one unit change in it, there are probability to greater change in financial stress by 0.25 %. It also indicate that 0.25 % of repondents stongly agree about stance of impact of Impulsive behaviour on financial stress. Consumer loan value is 0.01013. It indicate that one unit change in consumer loan, there is higher probability of occuring financial stress by 1.01 %. Similarly there are 1.0 % of respondents are strongly agree about the fact that consumer loan can cause financial stress. The value of consumer financing instruments is 0.003031. By holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of financial stress by 0.30 % and the same % of respondents are strongly agree about the fact that consumer financing instruments cause financial stress among household of salaried class. At this cut point 5.0 the value of pro-consumptive behaviour is 0.002101 which indicates that one unit change in pro-consumptive behaviour, there are chance of change in probability of occuring financial stress is 0.21 %. It also implies that 0.21 % of respondents are strongly agree that the pro consumptive behaviour have strong impact on financial stress among salaried

class. Family financial support value is 0.005231. It infers that the chance of change in probability of financial stress is 0.52 % upon one unit change in family financial support. It also implies that 0.52 % of respondents are of view that the family financial support may put strong impact on financial stress. The value of domestic externalities is 0.005936. when there is one unit change in effect of domestic externalities, the probability to change in financial stress is 0.59 % and also inferes that the same % of respondents are strongly agree about the fact, domestic externalities can cause financial stress among households of salaried class. This cut point verify that coefficient of all the independent variables take large values but less then the previous one. It confirms the percentage of respondents who are strongly agree with the mechanism of financial stress and independent variables have remarkable impact in the determination of financial stress and it also confirms the accepted region. Moreover at this cut point "P" values indicates consumer loan, family financial stress and domestic externalities are significant and other three variables insignificant.

Ordered Logit estimations Model 2

Table 5.17 Ordered Logit estimations Model 2

Ordered logistic regression			**Number of obs**			**243**
			LR chi2(6)			**30.18**
Log likelihood = -594.15007			**Prob > chi2**			**0.0001**
			Pseudo R2			**0.0248**
SAV	**Coef**	**Std . Err**	**Z**	**p> lzl**	**95% Conf. Interval**	
IB	.2337383	.2026765	1.15	0.249	-.1635004	.630977
CL	-.7671951 *	.2099407	-3.65	0.000	-1.178671	-.3557189
CFI	-.0086986	.193853	-0.04	0.964	-.3886436	.3712463
PCB	.8022282 *	.2670161	3.00	0.003	.2788862	1.32557
FFS	-.0334639	.161558	-0.21	0.836	-.3501117	.2831838
DE	.4188182 *	.2093017	2.00	0.045	.0085944	.829042

This tables shows the estimate results of our second model in which Saving is dependent variable while the other variables : Impulsive behaviour, Consumer loan, Consumer financing instruments, Pro-Consumptive behaviour, Family financial support and

Domestic externalities are the independent ordinal variables. The model focus to estimate whether the determinants of financial stress have significant impact on saving behaviour of households. Ordered Logit model use to determine the variables which have significant impact on saving behaviours. The Log liklihood value is a measure of goodness of Fit for the understudy model. As much as the value is large, the model is supposed to be better fir. The final Log Liklihood value of our second model is -594.15007. At this value the difference between log Liklihood values of consective ittrations are sufficiently small. The table shows that the estimations is base on 243 observations. The P value is 0.0001 indicates that the model is statistically significant. While the Pseudo R square may use for comparison batween two models which are estimated on same data and to find better predicted model.

The estimation results shows that three variables out of six are statistically significant in the second model. The significant variables are : Consumer loan, Pro-Consumptive behaviour, and Domestic externalities as their P values are 0.00 whereas Impulsive behaviour, Consumer financing instruments and Family financial support are insignificant variables according to estimated data because their P values are greater then or equal to 0.1. The Coefficient values of significant variables indicate that one unit increase in the significant variables brings how much change in probability of determinig the saving behaviour of households which is dependent variable. To find out how likli the explanatory variables determine the dependent variable, we estimate marginal effects of the model after the estimation of the overall model.

Table 5.18 Marginal Effects (At 1.6) of Ordered Logit Model 2

SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0007932	.0010429	-0.76	0.447	-.0028372	.0012508
CL	.0026036	.0026693	0.98	0.329	-.0026282	.0078353
CFI	.0000295	.0006585	0.04	0.964	-.0012611	.0013201
PCB	-.0027224	.0028369	-0.96	0.337	-.0082826	.0028377
FFS	.0001136	.0005593	0.20	0.839	-.0009826	.0012097
DE	-.0014213	.0015727	-0.90	0.366	-.0045037	.0016611

This table shows the marginal effect at first cut (1.6) automatically selected by software. This cut point indicates the strong disagreement of respondents with regard to variables under discussion. At this point, the coefficient values of Impulsive behaviour, Pro-consumptive behaviour and Domestic Externalities have negative signs while Consumer loan, Consumer financing instruments and Family financial support have positive signs. The positive sign implies two facts, there is chances of impact of variable on saving behaviour among the salaried class and secondly the strong disagreement of respondents. The negative sign implies two facts, there is less chances of any impact of explanatory variables on probability of saving behaviour of household of the salaried class and secondly the respondents are strongly disagree with the phenomenon that explanatory variable may put any significant impact on dependent variable. The value of impulsive behaviour at this level is -0.00079. It indicates that one unit change in impulsive behaviour reduce the probability of saving behaviour by only 0.08 %. The impact is so little which lead to negate any significant impact on saving behaviour. Moreover 0.08 % respondents are strongly disagree with the fact that impulsive behaviour can distort saving behaviour. At first cut, Consumer loan take maximum value of 0.0026. So when there is unit change in Consumer loan by household there is chance of change in probability of financial stress by 0.26 %. This value infers that 0.26 % of respondents are strongly disagree with the role of consumer loan to distort saving behaviour. The value of Consumer financing instruments is 0.00003. It shows one unit increase in the uses of these instruments the probability of change in saving behaviour increase by 0.003 %. It is also indication of number of respondents who are strongly disagree with the impact of consumer financing instrument on saving behaviour. The value of pro-consumptive behaviour is -0.002722. So one unit change in pro-consumption behaviour, the probability of impact on saving behaviour is 0.3 %. Moreover it indicates that there 0.3 % of respondents are strongly disagree with this fact. The value of family financial support is 0.00011. Results shows that one unit change in family financial support bring change in the probability of saving behaviour by 0.01 %. It also infers that 0.01 % of respondents are strongly negate that family financial support put any impact on saving behaviour of salaried class. The value of domestic externalities is -0.0014 at first cut point. One unit change in domestic externalities, the probability of saving behaviour change by 0.14 %. It

also indicates the less chances of change in probability of household saving behaviour as 0.14 % of respondents strongly disagree with this fact at this level. This cut point verify that coefficient of all the independent variables take minor values which have no remarkable impact on the determination of saving behaviour and it also confirms the rejected region where respondents are strongly disagree with mechanism of saving behaviour and its determinants. Moreover "P" values indicates all variables are insignificant at this cut point.

Table 5.19 Marginal Effects (At 2.0) of Ordered Logit Model 2

SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0055226	.0051578	-1.07	0.284	-.0156317	.0045865
CL	.0181268 *	.0080922	2.24	0.025	.0022664	.0339872
CFI	.0002055	.0045796	0.04	0.964	-.0087703	.0091813
PCB	-.0189545 *	.0090949	-2.08	0.037	-.0367802	-.0011289
FFS	.0007907	.003826	0.21	0.836	-.0067081	.0082894
DE	-.0098956	.0059938	-1.65	0.099	-.0216431	.001852

This table shows the marginal effects at cut point (2.0) mark by the software. This cut point indicates the disagreement of respondents with regard to variables under discussion. At this point, the coefficient values of Impulsive behaviour, Pro-consumptive behaviour and Domestic Externalities have negative signs while Consumer loan, Consumer financing instruments and Family financial support have positive signs. The positive sign implies two facts, there is chances of impact of variable on saving behaviour among the salaried class and secondly the strong disagreement of respondents. The negative sign implies two facts, there is less chances of any impact of explanatory variables on probability of saving behaviour of household of the salaried class and secondly the respondents are disagree with the phenomenon that explanatory variable may put any significant impact on dependent variable. Impulsive behaviour come up with value of -0.005522 which indicates that one unit change in it, there are less probability to change in saving behaviour by 0.55 %. It also indicate that 0.55 % of repondents disagree that Impulsive behaviour may impact saving behaviour. Consumer loan value is 0.01813. It indicate that one unit change in consumer loan, the probability of occuring change in

saving behaviour by 0.1.8 %. Similarly there are 1.8 % of respondents are disagree with fact that consumer loan can effect saving behaviour. The value of consumer financing instruments is 0.00021. By holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of saving behaviour by 0.02 % and the same % of respondents are disagree that consumer financing instruments cause change in saving behaviour among household of salaried class. At cut point 2.0, the value of pro-consumptive behaviour is 0.001895 which indicates that one unit change in pro-consumptive behaviour, the probability of occuring change in saving behaviour by 0.19 %. It also implies that 0.19 % of respondents are disagree with the impact of pro consumption on saving behaviour of household of salaried class. Family financial support value is 0.00079. It infers that the chance of change in probability of saving behaviour is 0.08 % upon one unit change in family financial support. It also implies that 0.08 % of respondents are disagree with the fact that family financial support reduce the chance of savings. The value of domestic externalities is -0.009896. when there is one unit change in effect of domestic externalities, the probability to change in saving behaviour is 0.99 % and also inferes that the same % of respondents are disagree with the fact, domestic externalities can cause change in saving behaviour among households of salaried class. This cut point verify that coefficient of all the independent variables take minor values which have no remarkable impact on the determination of saving behaviour and it also confirms the rejected region where respondents are disagree with mechanism of saving behaviour and its determinants. However “P” values indicates that consumer loan and pro-consumptive behaviour are significant at 95 % confidence interval while other variables are insignificant at this cut point.

Table 5.20 Marginal Effects (At 3.0) of Ordered Logit Model 2

SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	-.0055886	.0053083	-1.05	0.292	-.0159928	.0048156
CL	.0183433 *	.0085245	2.15	0.031	.0016357	.035051
CFI	.000208	.0046395	0.04	0.964	-.0088852	.0093012
PCB	-.019181 *	.0098892	-1.94	0.052	-.0385634	.0002015
FFS	.0008001	.0038803	0.21	0.837	-.0068052	.0084054
DE	-.0100138	.0064243	-1.56	0.119	-.0226053	.0025777

This table shows the marginal effects at cut point (3.0) mark by the software. This cut point indicates the respondents with neutral response about variables under discussion. At this point, the coefficient values of Impulsive behaviour, Pro-consumptive behaviour and Domestic Externalities have negative signs while Consumer loan, Consumer financing instruments and Family financial support have positive signs. The both signs implies two facts, there is either positive or negative chances of impact of variables on saving behaviour among the salaried class and secondly the agreement or disagreement of respondents. At this middle cut point, Impulsive behaviour take value of -0.005589, which indicates that one unit change in it, there are less probability to change in saving behaviour by 0.56 %. It also indicate that 0.56 % of repondents have neutral attitude about impact of Impulsive behaviour on saving behaviour. Consumer loan value is 0.01834. It indicate that one unit change in consumer loan, there is probability of occuring change in saving behaviour by 1.8 %. Similarly there are 1.8 % of respondents are neutral about the fact that consumer loan can cause any impact on saving decision of salaried class household. The value of consumer financing instruments is 0.00021, by holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of saving decision by 0.02 % and the same % of respondents are neutral about the fact that consumer financing instruments cause variation in saving decision among household of salaried class. At middle cut point 3.0, the value of pro-consumptive behaviour is -0.01918, which indicates that one unit change in pro-consumptive behaviour, there are less chance of change in probability of changing saving decision by

households by 1.9 %. It also implies that 1.9 % of respondents are neutral about the impact of pro consumption on saving decision. Family financial support value is 0.00080. It infers that the chance of change in probability of saving behaviour is 0.08 % upon one unit change in family financial support. It also implies that 0.08 % of respondents are neutral with the fact that family financial support may put any impact on saving attitudes of salaried class households. The value of domestic externalities is -0.01001. when there is one unit change in effect of domestic externalities, the probability to change in saving behaviour is 1.0 % and also inferes that the same % of respondents are neutral about the fact, domestic externalities can cause changing in saving decisions among households of salaried class. This cut point verify that coefficient of all the independent variables take moderate values which may have impact on the determination of saving behaviour and it also confirms the neutral region where respondents are neutral with mechanism of saving behaviour and its determinants. However "P" values indicates that consumer loan and pro-consumptive behaviour are significant at 95 % confidence interval while other variables are insignificant at this cut point.

Table 5.21 Marginal Effects (At 4.0) of Ordered Logit Model 2

SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	.0105965	.009526	1.11	0.266	-.0080741	.0292672
CL	-.0347809 *	.0125237	-2.78	0.005	-.0593269	-.0102349
CFI	-.0003944	.0087888	-0.04	0.964	-.01762	.0168313
PCB	.0363691 *	.0147999	2.46	0.014	.0073619	.0653763
FFS	-.0015171	.0073257	-0.21	0.836	-.0158752	.012841
DE	.0189872	.0104923	1.81	0.070	-.0015773	.0395516

This table shows the marginal effects at cut point (4.0) mark by the software. This cut point indicates % of those respondents who are agree with the fact that variables under discussion have a significant imapct on dependent variable. At this point, the coefficient values of Impulsive behaviour, Pro-consumptive behaviour and Domestic Externalities have positive signs while Consumer loan, Consumer financing instruments and Family financial support have negative signs. The signs of coefficients implies two facts, there is either positive or negative chances of impact of variables on saving behaviour among the

salaried class and secondly indicate % of those respondents who are agree with the facts of saving behaviour. At this cut point, Impulsive behaviour take value of 0.01060. which indicates that one unit change in it, there are probability to change in saving behaviour by 1.1 %. It also indicate that 1.1 % of repondents have are agree about impact of Impulsive behaviour on saving behaviour. Consumer loan value is -0.03478. It indicate that one unit change in consumer loan, there is probability of occuring change in saving behaviour by 3.5 %. Similarly there are 3.5 % of respondents are agree about the fact that consumer loan can cause negative impact on saving decision of salaried class household. The value of consumer financing instruments is 0.00039, by holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of saving decision by 0.04 % and the same % of respondents are agree about the fact that consumer financing instruments cause variation in saving decision among household of salaried class. At cut point 4.0, the value of pro-consumptive behaviour is 0.03637, which indicates that one unit change in pro-consumptive behaviour, there are chance of change in probability of changing saving decision by households by 3.6 %. It also implies that 3.6 % of respondents are agree about the impact of pro consumption on saving decision. Family financial support value is -0.001517. It infers that the chance of change in probability of saving behaviour is 0.15 % upon one unit change in family financial support. It also implies that 0.15 % of respondents are agree with the fact that family financial support may put any impact on saving attitudes of salaried class households. The value of domestic externalities is 0.01899. when there is one unit change in effect of domestic externalities, the probability to change in saving behaviour is 1.9 % and also inferes that the same % of respondents are agree about the fact, domestic externalities can cause changing in saving decisions among households of salaried class. This cut point verify that coefficient of all the independent variables take moderate values which have impact on the determination of saving behaviour and it also confirms the accepted region where respondents are agree with mechanism of saving behaviour and its determinants. However “P” values indicates

that consumer loan, pro-consumptive behaviour and domestic externalities are significant at 95 % confidence interval while other variables are insignificant at this cut point.

Table 5.22 Marginal Effects (At 5.0) of Ordered Logit Model 2

SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
IB	.0007797	.0010224	0.76	0.446	-.0012243	.0027836
CL	-.0025592	.0026254	-0.97	0.330	-.0077049	.0025866
CFI	-.000029	.0006472	-0.04	0.964	-.0012976	.0012395
PCB	.002676	.0027831	0.96	0.336	-.0027787	.0081307
FFS	-.0001116	.0005509	-0.20	0.839	-.0011913	.0009681
DE	.0013971	.0015474	0.90	0.367	-.0016357	.0044298

This table shows the marginal effects at cut point (5.0) mark by the software. This cut point indicates % of those respondents who are strongly agree with the fact that variables under discussion have a significant impact on dependent variable. At this point, the coefficient values of Impulsive behaviour, and Domestic Externalities have positive signs while Consumer loan, Consumer financing instruments, and Family financial support have negative signs. The signs of coefficients implies two facts, there is either positive or negative chances of impact of variables on saving behaviour among the salaried class and secondly indicate % of those respondents who are strongly agree with the impact of explanatory variables upon saving behaviour. At this cut point, Impulsive behaviour take value of 0.00078. Which indicates that one unit change in it, there are probability to change in saving behaviour by 0.08 %. It also indicate that 0.08 % of respondents are strongly agree about impact of Impulsive behaviour on saving behaviour. Consumer loan value is -0.0026. It indicate that one unit change in consumer loan, there is probability of occurring change in saving behaviour by 2.6 %. Similarly there are 2.6 % of respondents are strongly agree about the fact that consumer loan can cause negative impact on saving decision of salaried class household. The value of consumer financing instruments is -0.00003, by holding all other variables constant, this value indicate that one unit change in the use of consumer financing instruments may change the probability of saving decision by 0.003 % and the same % of respondents are strongly agree about the fact that consumer financing instruments cause variation in saving decision among household of

salaried class. At cut point 5.0, the value of pro-consumptive behaviour is 0.02676, which indicates that one unit change in pro-consumptive behaviour, there are chance of change in probability of changing saving decision by households by 2.7 %. It also implies that 2.7 % of respondents are strongly agree about the impact of pro consumption on saving decision. Family financial support value is -0.00011. It infers that the chance of change in probability of saving behaviour is 0.01 % upon one unit change in family financial support. It also implies that 0.01 % of respondents are strongly agree with the fact that family financial support may put any impact on saving attitudes of salaried class households. The value of domestic externalities is 0.001397. when there is one unit change in effect of domestic externalities, the probability to change in saving behaviour is 0.14 % and also infers that the same % of respondents are strongly agree about the fact, domestic externalities can cause changing in saving decisions among households of salaried class. This cut point verify that coefficient of all the independent variables take moderate values which have impact on the determination of saving behaviour and it also confirms the accepted region where respondents are agree with mechanism of saving behaviour and its determinants. Moreover "P" values indicates that all variables are insignificant at 95 % confidence interval at this cut point.

Summary

This chapter discuss the demographics results, descriptive analysis of dependent and independent variables and ordered Logit estimation of model 1 and 2. In demographics, different economic like number of earners, nature of job and saving per month by households and non-economic factors like age, gender, number of family members and education of respondents presented and classifies into different groups according to set parameters. A comprehensive descriptive analysis carries out on primary data. Primary data was collected through snow ball sampling and Likert scale use to record responses of respondents about each variables ranging from strongly disagree to strong agree category. The results presented in the form of percentage of total sample. Those % categorizes the respondents according to their day to day behaviour about variables under discussion in the study. Descriptive analysis discloses that the variables which are chosen to determine the financial stress among households of salaried class, have a significant role on

financial stress. After descriptive analysis, ordered logit estimations interpret and the result shows that three variables i.e. consumer loan, family financial support and domestic externalities have significant impact in determining the impact of financial stress on household behaviours. In second model of ordered logit, the result shows that consumer loan, pro-consumptive behaviour and domestic externalities have a significant impact on household saving decision. In both models all other variables, though emerge as statistically non- significant but their values shows that they also have a reasonable impact in determining financial stress as well as shaping saving decision by households of salaried class respectively.

CHAPTER 6

CONCLSION, LIMITATIONS, ROCOMMENDATIONS AND FUTURE RESEARCH

This chapter covers the conclusion based on data collected through questionnaire from specified locality. Descriptive statistics, percentage analysis and ordered logit technique used to obtain results. The chapter also unveil the policy recommendation which should be implemented in the society to save the households from undergone financial stress. It also covers the limitation which attach with this explorative study and might squeeze the results of study. Future recommendations also pointed out at the end for exploring new horizon in the field of Behavioural economics.

6.1 CONCLUSION

This study is mainly focusing on the household economic behaviours and the factors which may affect those behaviours of household of salaried class. The Behavioural aspect is generally concern with psychology. Stress, a psychological phenomenon, is one of the key variable which effect human behaviours. In this explorative study the stress is use within the parameters of economics to analyze its impact on household economic behaviours. For this purpose, this variable is rename as "Financial Stress" and theoretically hypothesize that financial stress and its determinants may effect household economic Behaviours. The core variable of this study is financial stress and is an effort to find determinants of financial stress and their roles in household economic decision making. The main variables which select for the determination of financial stress are: Impulsive behaviour, Consumer loan, Consumer financial instruments, Pro-consumptive behaviour, Family financial support and Domestic externalities. The aggregate of responses shows all of the variables put their impact in determining financial stress. The main objectives are; to explore the impact of explanatory variables in the determination of financial stress and their role on household economic behaviour.

The study is based on primary data and the responses collected from 243 respondents belongs to salaried class of the society. Google survey form and snow ball sampling

method employed to collect data for this study. Each variable contain five items which cover different dimensions of that variable. Likert scale ranging from strongly disagree to strongly agree use to classify responses of respondents. The data is in ordinal form. Therefore two type of operations carried out for analyses purpose; descriptive analysis and ordered logit estimations.

At first step of the study, the data analyze by descriptive analyses. Descriptive statistics describe the features of all variables in detail. The overall result shows that all the explanatory variables have significant role in determining financial stress as well as saving behaviour of salaried class. Results of impulsive behaviour shows that it does not put a sound impact in normal condition as 28 % of respondents intends to buy more than required things. But when the situation changes their behaviours towards shopping changes. Individuals show increase tendency of impulsive buying when they like something as result shows that 63 % intend to buy more than required thing in this situation while this behaviour shows by 35 % of respondents when they know about promotions or sales. A large number of respondents are agree that consumer loan is a bad tool to make purchases for daily life usages. 66 % of respondents are of view that it makes life worse rather better and it further reassures by respondents with 76 % households are agree that it is an expensive way to fulfil needs. 69 % of respondents reports that they feel anxiety when they avail any type of loan which is vital symptoms of financial stress.

Consumer financing instruments includes credit card, flexi cards etc. Most of the respondents are unaware about these products as majority of them become neutral in this case. 28 % of respondents feel distress after using such instruments. While 40 % of respondents report that it is a suitable tool for making household purchases. Pro consumptive behaviours are purchasing without require financial resources in one's hand. Hire purchase is one of the form of pro-consumption. 35 % of the respondents are willing to purchases household item on installment. The main adverse effects of such purchases is that people becomes fed up by making continuous payments at regular interval. It results in reduction in their disposable income for a certain period. Any unforeseen expenditure may bring respondents under financial stress. 47 % of respondents report that

they become fed up by making regular payments. While 48 % of respondents are of view that pro-consumption leads to distress. Which is a sign of financial stress.

Family financial support is negatively correlate with financial stress. As increase in family financial support decrease the level of stress in household. 70 % of respondents reports that personal contentment increase with increase in the level of family financial support. It further lead to decrease financial stress for households. 72 % of respondents verify this fact that increase family financial support decrease the level of depression among households. 42 % of report that domestic externalities are source of depression among household of salaried class. Economics confers that households try to maintain consumption according to their locality under demonstration effect, this fact recertify from responses of respondents as 69 % are of view that consumption are according to locality. 75 % of respondents report that demonstration effect distort the consumption pattern which further leads to early utilization of financial resources. As early utilization of financial resources cause stress and depression. The same phenomenon is recertify as 52 % of respondents are of view that negative domestic externalities increase the level of stress.

The result of saving behaviour shows that 58 % of respondents are of view that pro-consumption leads to little saving by the household of salaried class. 78 % reports that impulsive behaviour is the cause of early utilization of financial resources. 79 % of respondents admit that pro saving behaviour reduces the chances of stress. An economics phenomenon that along with increase in the numbers of earners the rate of saving increase. The same is re-verify as 80 % of respondents admit this fact. 71 % of respondents respond that due to financial stress the rate of saving decreases. One of the key factor is, households becomes worried about payments of utility bills and other liabilities. 51 % of households are worried due to payments of bills. To manage their financial resources, 36 % of respondents do extra work which confirms the presence of financial stress among the household of salaried class.

After descriptive analysis, Ordered Logit estimations carried out. Two independent model of ordered logit estimated. The first ordered logit model is about determination of financial stress. The result of first ordered logit model shows that three variables among

six; Consumer loan, family financial support and domestic externalities are statistically significant. Marginal effects of model also re ascertain the same results as we move forward form systematically generated cuts 3.0, again these three variables shows its significance. However other three variables also shows their impact in estimation of financial stress. The marginal effects of accepted region (i.e cut point 4.0) shows that significant variables have stronger role in determination of financial stress. At cut 4.0 of marginal effects consumer loan has 7.5 % while family financial support has 3.8 % and domestic externalities has 4.3 % impact in determination of financial stress. The non-significant variables; impulsive behaviour has 1.8 % while consumer financing instruments has 2.2 % and pro-consumptive behaviour has 1.5 % impact in determination of financial stress among household of salaried class.

The second ordered logit model is about the impact of all explanatory variables of first model and their effects in determination of saving behaviour of household of salaried class. The result of second ordered logit model shows that three variables among six; Consumer loan, pro-consumptive behaviour and domestic externalities are statistically significant. Marginal effects of model also re verify the same results as we move towards acceptance region form systematically generated cuts 3.0 to 4.0, again these three variables shows its significance, Though other three variables also shows their impact in estimation of saving behaviour. The marginal effects of accepted region (i.e cut point 4.0) shows that significant variables have stronger role in determination of saving behaviour. At cut 4.0 of marginal effects consumer loan has 3.5 % while pro-consumptive behaviour has 3.6 % and domestic externalities has 1.9 % impact in determination of saving behaviours. The non-significant variables; impulsive behaviour has 1.1 % while consumer financing instruments has 0.04 % and family financial support has 0.15 % impact in determination of financial stress among household of salaried class.

In general, the most important conclusion is that financial stress prevails in household of salaried class and the variables choose for determination of financial stress and saving behaviour have a remarkable impact. The results determine that financial stress has effect on the household behaviours as they gone under stress when they become unable to financial obligation and they often intend to indulge themselves in extra working which

reduces their leisure. All the statistically significant variables have their specific role in determination of financial stress according to their characteristics. In the same pattern, the determinants of financial stress also play a role in determining saving behaviour of salaried class households. Consumer loan, pro-consumptive behaviour and domestic externalities play their role in household's decision regarding savings. All three factors are negatively correlated with saving behaviour as their impact rises the decision to save by households of salaried class reduces.

6.2 Policy Recommendations

Result of the study reflect the fact that the variables which are choose for determination of financial stress among households of salaried class have reasonable impact individually as well as collectively. Percentage analysis clearly shows that every explanatory variable put its impact on households' behaviour. As all of the variables are Behavioural in nature, therefore the policy recommendation for this explorative study are as follows:

Impulsivity is purely depends upon human nature and a psychological phenomenon so it can be control by counseling session. Financial literacy in this respect may contribute to some extent. Government should arrange awareness programs and training which enhance household's financial knowledge.

Consumer loan is a way to fulfil households need. So it should be available on need to need basis and awareness session should be conduct on organizational level to enhance the proper and lucrative usage of this financial tool. Government should facilitate the consumers through availability of financial experts who guides applicants about optimal usage of financial resources.

Consumer financial instruments are latest financial tools which provide ease of purchasing to salaried class but put a financial obligation burden on the consumers. There should be a national level policy by state bank of Pakistan about issuance and limit provided on these financial tools and quantity to hold limited number of card by one individual. Only in this way, household can save themselves from un-manageable financial burden.

Pro-consumptive behaviour should be replace by pro-saving behaviour. In this regard, special awareness programs should be arranged by organizations. Government should offer different promotions to pro-saver households. Government can facilitate people by offering costly items on 0 % rate of interest in case of hire purchasing.

Family financial support is purely a domestic phenomenon. It should also be encouraged among employees through motivational sessions. Organization may arrange savings programs in which employees can save money and take it at time of need.

Domestic externalities are proven phenomenon in the literature of economics. It should also be control by awareness programs and financial literacy programs among employees. Government may devise an accommodation policy to accommodate people of same level in the society.

6.3 Limitations

This is an explorative study in which efforts is made to explore the Behavioural factors which affect households decisions. There are many other factors which may determine the financial stress and pose any adverse effect on household decisions about saving and consumption. The data constitute of 243 respondents. Which may squeeze the overall results of all variables which determine the financial stress among households of salaried class. The primary data collected for this study pertains to only households of salaried class but there are chances that financial stress pose impact on households of lower and medium business class.

6.4 Future Research Dimensions

The study is an initiative to incorporate Behavioural aspects regarding analyses of household behaviour and their decisions about saving and consumption. It open the horizons of economics literature about saving and consumption pattern of households and in future researchers may explain, estimate and interpret the economic literature by incorporating Behavioural factors. In future researchers may estimate and determine

consumption side of households' behaviours, find the impact of chosen variables on demand and supply side behaviours by incorporating Behavioural factors.

References

Agrigoroaei, S., Lee-Attardo, A., & Lachman, M. E. (2017). Stress and subjective age: those with greater financial stress look older. *Research on aging*, 39(10), 1075-1099.

Ajzen, I. (1991). The theory of planned behaviour. Organizational Behaviour and Human Decision Processes, 50, 179-211. *De Young*, 50(2), 509-526.

Aniola-Mikolajczak, P., & Golas, Z. (2014). The socioeconomic conditions of saving behaviours in Polish households. *Acta Scientiarum Polonorum. Oeconomia*, 13(4).

Antony, J. (2018). A Study on Consumer Debt Stress Caused by Credit Cards. *Arabian J Bus Manag Review*, 8(336), 2.

Angamuthu, r. (2020). A Study on Household Saving Behaviour. *A Journal of Composition Theory*, 403-409, 0731-6755

Ammad, S., & Ahmed, Q. M. (2020). Comparative Efficacy of Life-Cycle and Absolute Income Hypothesis in Pakistan. *The Journal of Developing Areas*, 54(1).

Beard, G. M. (1972). American Nervousness: Its Causes and Consequences [1881]. New York, 65-67.

Britt, S. L., Canale, A., Fernatt, F., Stutz, K., & Tibbetts, R. (2015). Financial Stress and Financial Counseling: Helping College Students. *Journal of Financial Counseling and Planning*, 26(2), 172-186.

Bevilacqua, L., & Goldman, D. (2013). Genetics of impulsive behaviour. Philosophical Transactions of the Royal Society B: *Biological Sciences*, 368(1615), 20120380.

Bertaut, C. C., & Haliassos, M. (2006). Credit cards: facts and theories. *The economics of consumer credit*, 181-237.

Cronqvist, H., & Siegel, S. (2015). The origins of savings Behaviour. *Journal of Political Economy*, 123(1), 123-169.

Cook, A. J., Kerr, G. N., & Moore, K. (2002). Attitudes and intentions towards purchasing GM food. *Journal of Economic Psychology*, 23(5), 557-572.

Delafrooz, N., & Paim, L. H. (2011). Determinants of financial wellness among Malaysia workers. *African Journal of Business Management*, 5(24), 10092-10100.

Drentea, P., & Lavrakas, P. J. (2000). Over the limit: the association among health, race and debt. *Social science & medicine*, 50(4), 517-529.

Durante, K. M., & Laran, J. (2016). The effect of stress on consumer saving and spending. *Journal of Marketing Research*, 53(5), 814-828.

Davis, C. G., & Mantler, J. (2004). The consequences of financial stress for individuals, families, and society. *Centre for Research on Stress, Coping and Well-being*. Carleton University, Ottawa: Department of Psychology.

Frączek, B. (2011, September). The factors affecting the level of household savings and their influence on economy development. *In Proceedings of the 8th International Scientific Conference Financial Management of Firms and Financial Institutions Ostrava VŠB-TU Ostrava, Faculty of Economics, Finance Department, Ostrava, Czech Republic* (pp. 6-7).

Farmer, R. F., & Golden, J. A. (2009). The forms and functions of impulsive actions: Implications for Behavioural assessment and therapy. *International Journal of Behavioural Consultation and Therapy*, 5(1), 12.

Gedela, S. P. R. (2012). Determinants of saving behaviour in rural and tribal households (An empirical analysis of Visakhapatnam District). *International Journal of Research in Social Sciences*, 2(3), 108.

Gujarati, D. N. (2015). Basic Econometrics, International Edition, Ed 4th, 561-605

Njenga, G., Onuonga, S. M., & Sichei, M. M. (2018). Institutions effect on households savings in Kenya: A ranked ordered multinomial/conditional probit model approach. *Journal of Economics and International Finance*, 10(5), 43-57.

Hakkio, C. S., & Keeton, W. R. (2009). Financial stress: what is it, how can it be measured, and why does it matter? *Economic Review*, 94(2), 5-50.

Ismail, S., Khairuddin, N. S., Alias, N. E., Loon-Koe, W., & Othman, R. (2018). An empirical analysis of saving Behaviour among Malaysian employees. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 1070-1080.

Jilani, S., Sheikh, S. A., Cheema, F.-E., & Shaik, A.-u.-H. (2013). Determinants of national savings in Pakistan: an exploratory study. *Asian Social Science*, 9(5), 254.

Khan, T., Gill, A. R., & Haneef, S. (2013). Determinants of Private Saving: A Case of Pakistan. Asian *Journal of Economic Modelling*, 1(1), 1-7.

Kreps, D. M. (1990). *A course in microeconomic theory*. Princeton university press.

Lim, H., Heckman, S., Montalto, C. P., & Letkiewicz, J. (2014). Financial stress, self-efficacy, and financial help-seeking Behaviour of college students. *Journal of Financial Counseling and Planning*, 25(2), 148-160.

Mann, R. J. (2002). Credit cards and debit cards in the United States and Japan. *Vand. L. Rev.*, 55, 1055.

Mensahkla, E., Kornu, D. D., & Dom, B. (2017). An empirical analysis of the determinants of saving behaviour by households in Ho, Ghana: A case study of Ho municipality, an individual level analysis. *Journal of Economics and Sustainable Development*, 8(6), 7-17. ISSN 2222-1700

Mwangi, I. W. (2020). Household Saving Behaviour in Kenya: A discrete choice approach. *Journal of Economics and Sustainable Development*, 11(4). ISSN 2222-1700

Northern, J. J., O'Brien, W. H., & Goetz, P. W. (2010). The development, evaluation, and validation of a financial stress scale for undergraduate students. *Journal of College Student Development*, 51(1), 79-92.

Ponnet, K. (2016). Financial stress. In *Encyclopedia of adolescenc*e (pp. 1-4). Springer International Publishing.

Rossi-Hansberg, E., & Sarte, P. D. (2012). Economics of housing externalities. *International Encyclopedia of Housing and Home*, 2, 47-50.

Rehman, H.-u., Bashir, F., & Faridi, M. Z. (2011). Saving Behaviour among different income groups in Pakistan: a micro study. *International Journal of Humanities and Social Science*, 1(10), 268-277.

Rikwentishe, R., Pulka, B. M., & Yamta, H. A. (2015). Analysis of Socioeconomic Factors Affecting Savings Habits in Jalingo Taraba State. *Journal of Business and Management*, 17(8), 01-06.

Syed, H., Nigar, S., & Ullah, S. (2017). An Analysis of Household Saving and Investment Behaviour among Different Income Groups in Urban Area of District Peshawar. *iBusiness*, 9(04), 188.

Siddiqui, R., Siddiqui, R., & Niazi, M. K. (1993). Household Saving Behaviour in Pakistan [with Comments]. *The Pakistan Development Review*, 32(4), 1281-1292.

Soharwardi, M. A., Khan, A. S., & Sheran, M. (2015). Determinants of household savings. A case study of Yazman-Pakistan. *International Journal of Scientific and Engineering*, 5(12), 1624-1630.

Satsios, N., & Hadjidakis, S. (2018). Applying the Theory of Planned Behaviour (TPB) in saving behaviour of Pomak households. *International Journal of Financial Research*, 9(2), 122-133.

Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., &Tinghög, G. (2017). Does self-control predict financial Behaviour and financial well-being?. *Journal of Behavioural and Experimental Finance*, 14, 30-38.

Tran, A. G., Lam, C. K., & Legg, E. (2018). Financial stress, social supports, gender, and anxiety during college: A stress-buffering perspective. *The Counseling Psychologist*, 46(7), 846-869.

Uher, J. (2016). What is behaviour? And (when) is language behaviour? A metatheoretical definition. *Journal for the Theory of Social Behaviour*, 46(4), 475-501.

Worthington, A. C. (2006). Debt as a source of financial stress in Australian households. *International Journal of Consumer Studies*, 30(1), 2-15.

APPENDIX A QUESTIONNAIRE

VARIABLES	ITEM DESCRIPTION	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
IMPULSIVE BEHAVIOUR	I often buy more than required things					
	I often buy when knew about promotions/sale					
	I often tend to buy if something I like					
	I feel I have impulsive shopping Behaviour					
	I always shopping according to list					
CONSUMER LOAN	Consumer loans makes life worse rather better off					
	I easily manage my monthly expenditure after paying my instalments					
	I never failed to pay loan instalment					
	I think Loan is expensive way to fulfil needs					
	I feel anxiety while facing unexpected expenditures					
CREDIT FINANCING NSTRUMENT	Do you feel credit card/Flexi card is suitable tool for purchasing?					
	I always pay credit card bill without delay					
	I often avail credit card instalments plan					
	Credit card is a source of financial freedom					
	I feel any distress after using credit card					
PRO-CONSUMPTIVE BEHAVIOUR	I always save first then purchase item					
	I often purchase item on instalments					
	Instalments plan is reliable source of purchasing costly items					
	I feel fed up by making monthly payments					
	Pro Consumptive Behaviour leads to distress					
FAMILY FINANCIAL SUPPORT	Joint family system is a source of financial Support					
	I always get financial support from my relative when I need it					
	I often get Financial support in real					

	Financial support may reduce anxiety/depression					
	Personal contentment increases along with increased financial support					
DOMESTIC EXTERNALITIES	Domestic Externalities are source of depression					
	I feel our consumption is according to our locality					
	I often compare myself with other people of my locality					
	Demonstration effect may distort consumption pattern					
	Negative domestic externalities increase the level of stress.					
SAVINGS	Pro consumption results in little savings of salaried class					
	Impulsive buying often leads to early utilization of monthly income					
	Pro - saving behaviour reduce financial stress					
	Savings increase with increase in number of earners					
	Financial stress reduce the rate of savings					
FINANCIAL STRESS	I often worried about payments (e.g. Bills)					
	I manage monthly expenses efficiently					
	I often do extra work to manage my expenditures					
	I often do not participate in any social activity due to financial crises					
	I often argued with family members due to financial problems					

APPENDIX B Marginal Effects after OLOGIT Model 1

FS	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1_2						
IB	**-.0005945**	**.0007291**	**-0.82**	**0.415**	**-.0020234**	**.0008345**
CL	**-.0024044**	**.0024325**	**-0.99**	**0.323**	**-.007172**	**.0023632**
CFI	**-.0007198**	**.0008305**	**-0.87**	**0.386**	**-.0023475**	**.0009079**
PCB	**-.000499**	**.0007407**	**-0.67**	**0.501**	**-.0019508**	**.0009529**
FFS	**-.0012422**	**.0012915**	**-0.96**	**0.336**	**-.0037736**	**.0012892**
DE	**-.0014097**	**.0014678**	**-0.96**	**0.337**	**-.0042866**	**.0014672**
1_8						
IB	**-.0005926**	**.0007268**	**-0.82**	**0.415**	**-.0020171**	**.0008318**
CL	**-.0023971**	**.0024248**	**-0.99**	**0.323**	**-.0071496**	**.0023555**
CFI	**-.0007176**	**.0008282**	**-0.87**	**0.386**	**-.0023408**	**.0009056**
PCB	**-.0004974**	**.0007382**	**-0.67**	**0.500**	**-.0019443**	**.0009494**
FFS	**-.0012384**	**.0012878**	**-0.96**	**0.336**	**-.0037625**	**.0012857**
DE	**-.0014054**	**.0014633**	**-0.96**	**0.337**	**-.0042734**	**.0014627**
2_2						
IB	**-.000596**	**.0007313**	**-0.81**	**0.415**	**-.0020293**	**.0008374**
CL	**-.0024105**	**.0024377**	**-0.99**	**0.323**	**-.0071884**	**.0023674**
CFI	**-.0007217**	**.000833**	**-0.87**	**0.386**	**-.0023543**	**.000911**
PCB	**-.0005002**	**.0007416**	**-0.67**	**0.500**	**-.0019538**	**.0009533**
FFS	**-.0012453**	**.0012955**	**-0.96**	**0.336**	**-.0037844**	**.0012938**
DE	**-.0014133**	**.0014718**	**-0.96**	**0.337**	**-.0042979**	**.0014714**
2_4						
IB	**-.0012206**	**.0012248**	**-1.00**	**0.319**	**-.0036212**	**.00118**
CL	**-.004937**	**.0035678**	**-1.38**	**0.166**	**-.0119297**	**.0020557**
CFI	**-.001478**	**.0013512**	**-1.09**	**0.274**	**-.0041263**	**.0011703**
PCB	**-.0010245**	**.0013304**	**-0.77**	**0.441**	**-.0036322**	**.0015831**
FFS	**-.0025506**	**.0019477**	**-1.31**	**0.190**	**-.006368**	**.0012667**
DE	**-.0028946**	**.0022154**	**-1.31**	**0.191**	**-.0072367**	**.0014476**
2_6						
IB	**-.0025692**	**.0022319**	**-1.15**	**0.250**	**-.0069436**	**.0018052**
CL	**-.0103917**	**.0054225**	**-1.92**	**0.055**	**-.0210196**	**.0002362**
CFI	**-.0031111**	**.0023702**	**-1.31**	**0.189**	**-.0077566**	**.0015345**
PCB	**-.0021565**	**.0025816**	**-0.84**	**0.404**	**-.0072164**	**.0029034**
FFS	**-.0053687**	**.003097**	**-1.73**	**0.083**	**-.0114387**	**.0007013**
DE	**-.0060926**	**.003536**	**-1.72**	**0.085**	**-.0130231**	**.0008379**
2_8						
IB	**-.0033674**	**.0028383**	**-1.19**	**0.235**	**-.0089303**	**.0021956**
CL	**-.0136201**	**.0064353**	**-2.12**	**0.034**	**-.0262331**	**-.001007**
CFI	**-.0040776**	**.0029493**	**-1.38**	**0.167**	**-.0098582**	**.001703**
PCB	**-.0028264**	**.0033263**	**-0.85**	**0.395**	**-.009346**	**.0036931**
FFS	**-.0070366**	**.0037216**	**-1.89**	**0.059**	**-.0143307**	**.0002576**
DE	**-.0079854**	**.0042797**	**-1.87**	**0.062**	**-.0163734**	**.0004026**
3						
IB	**-.0113147**	**.0087111**	**-1.30**	**0.194**	**-.0283881**	**.0057588**
CL	**-.0457647**	**.0138405**	**-3.31**	**0.001**	**-.0728915**	**-.0186379**
CFI	**-.013701**	**.0085533**	**-1.60**	**0.109**	**-.0304652**	**.0030632**
PCB	**-.0094971**	**.0106474**	**-0.89**	**0.372**	**-.0303656**	**.0113713**
FFS	**-.0236435**	**.0089484**	**-2.64**	**0.008**	**-.041182**	**-.0061051**
DE	**-.0268317**	**.0104045**	**-2.58**	**0.010**	**-.0472242**	**-.0064393**
3_2						
IB	**-.0114211**	**.0088973**	**-1.28**	**0.199**	**-.0288595**	**.0060173**
CL	**-.0461951**	**.0146252**	**-3.16**	**0.002**	**-.0748599**	**-.0175302**

	CFI	-.0138298	.0086607	-1.60	0.110	-.0308046	.0031449
	PCB	-.0095864	.0108302	-0.89	0.376	-.0308133	.0116404
		-.0238659	.0093247	-2.56	0.010	-.042142	-.0055898
		-.0270841	.0106907	-2.53	0.011	-.0480374	-.0061307
3_4							
	IB	-.0057732	.0047557	-1.21	0.225	-.0150942	.0035479
	CL	-.0233509	.0097905	-2.39	0.017	-.04254	-.0041618
	CFI	-.0069908	.0047454	-1.47	0.141	-.0162915	.00231
	PCB	-.0048458	.0056482	-0.86	0.391	-.015916	.0062244
	FFS	-.0120638	.0057922	-2.08	0.037	-.0234163	-.0007114
	DE	-.0136906	.0066226	-2.07	0.039	-.0266705	-.0007106
3_6							
	IB	-.0208763	.015771	-1.32	0.186	-.051787	.0100343
	CL	-.084439	.0223337	-3.78	0.000	-.1282121	-.0406658
	CFI	-.0252792	.0152934	-1.65	0.098	-.0552538	.0046954
	PCB	-.0175229	.019577	-0.90	0.371	-.0558931	.0208474
	FFS	-.0436239	.0155088	-2.81	0.005	-.0740207	-.0132272
	DE	-.0495064	.0178969	-2.77	0.006	-.0845837	-.014429
3_8							
	IB	-.0089429	.0071755	-1.25	0.213	-.0230067	.0051209
	CL	-.0361715	.0143968	-2.51	0.012	-.0643886	-.0079543
	CFI	-.010829	.0074005	-1.46	0.143	-.0253336	.0036756
	PCB	-.0075063	.0087357	-0.86	0.390	-.0246279	.0096153
	FFS	-.0186874	.0084994	-2.20	0.028	-.0353458	-.002029
	DE	-.0212073	.0100813	-2.10	0.035	-.0409662	-.0014483
4							
	IB	.0181277	.0140228	1.29	0.196	-.0093565	.0456118
	CL	.0733213	.0230408	3.18	0.001	.0281622	.1184804
	CFI	.0219508	.0138602	1.58	0.113	-.0052146	.0491163
	PCB	.0152157	.0170134	0.89	0.371	-.01813	.0485614
	FFS	.0378802	.0152221	2.49	0.013	.0080454	.067715
	DE	.0429881	.0169872	2.53	0.011	.0096938	.0762824
4_2							
	IB	.0183604	.0137261	1.34	0.181	-.0085423	.0452631
	CL	.0742627	.0194896	3.81	0.000	.0360638	.1124616
	CFI	.0222327	.0135154	1.64	0.100	-.0042571	.0487224
	PCB	.0154111	.0172402	0.89	0.371	-.0183792	.0492013
	FFS	.0383666	.0134384	2.85	0.004	.0120278	.0647054
	DE	.0435401	.0156095	2.79	0.005	.0129459	.0741342
4_4							
	IB	.0127911	.0096978	1.32	0.187	-.0062163	.0317984
	CL	.0517363	.0150017	3.45	0.001	.0223336	.081139
	CFI	.0154887	.0095995	1.61	0.107	-.003326	.0343035
	PCB	.0107364	.0120895	0.89	0.375	-.0129586	.0344314
	FFS	.0267287	.0098371	2.72	0.007	.0074483	.046009
	DE	.0303329	.0116416	2.61	0.009	.0075157	.0531501
4_6							
	IB	.0108822	.0084043	1.29	0.195	-.0055899	.0273543
	CL	.0440156	.0132375	3.33	0.001	.0180705	.0699606
	CFI	.0131773	.0081741	1.61	0.107	-.0028435	.0291982
	PCB	.0091342	.0103177	0.89	0.376	-.0110881	.0293564
	FFS	.0227399	.0084059	2.71	0.007	.0062646	.0392152
	DE	.0258062	.0101212	2.55	0.011	.0059691	.0456434
4_8							
	IB	.0046037	.0038006	1.21	0.226	-.0028453	.0120527

CL	**.0186208**	**.0075988**	**2.45**	**0.014**	**.0037275**	**.0335141**
CFI	**.0055747**	**.0037466**	**1.49**	**0.137**	**-.0017685**	**.0129178**
PCB	**.0038642**	**.0045105**	**0.86**	**0.392**	**-.0049763**	**.0127047**
FFS	**.0096201**	**.0044577**	**2.16**	**0.031**	**.0008832**	**.018357**
DE	**.0109173**	**.0052236**	**2.09**	**0.037**	**.0006793**	**.0211553**
5						
IB	**.0025033**	**.0022149**	**1.13**	**0.258**	**-.0018377**	**.0068443**
CL	**.0101251**	**.0052879**	**1.91**	**0.056**	**-.000239**	**.0204892**
CFI	**.0030312**	**.0022673**	**1.34**	**0.181**	**-.0014126**	**.0074751**
PCB	**.0021012**	**.0025552**	**0.82**	**0.411**	**-.002907**	**.0071093**
FFS	**.005231**	**.0029787**	**1.76**	**0.079**	**-.0006071**	**.0110691**
DE	**.0059363**	**.0034355**	**1.73**	**0.084**	**-.0007971**	**.0126698**

APPENDIX C Marginal Effects after OLOGIT Model 2

	SAV	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1_6							
	IB	-.0007932	.0010429	-0.76	0.447	-.0028372	.0012508
	CL	.0026036	.0026693	0.98	0.329	-.0026282	.0078353
	CFI	.0000295	.0006585	0.04	0.964	-.0012611	.0013201
	PCB	-.0027224	.0028369	-0.96	0.337	-.0082826	.0028377
	FFS	.0001136	.0005593	0.20	0.839	-.0009826	.0012097
	DE	-.0014213	.0015727	-0.90	0.366	-.0045037	.0016611
1_8							
	IB	-.0023743	.0024479	-0.97	0.332	-.007172	.0024234
	CL	.0077932	.0048401	1.61	0.107	-.0016933	.0172797
	CFI	.0000884	.0019696	0.04	0.964	-.003772	.0039487
	PCB	-.0081491	.0052803	-1.54	0.123	-.0184983	.0022001
	FFS	.0003399	.0016508	0.21	0.837	-.0028956	.0035754
	DE	-.0042544	.0031741	-1.34	0.180	-.0104755	.0019667
2							
	IB	-.0055226	.0051578	-1.07	0.284	-.0156317	.0045865
	CL	.0181268	.0080922	2.24	0.025	.0022664	.0339872
	CFI	.0002055	.0045796	0.04	0.964	-.0087703	.0091813
	PCB	-.0189545	.0090949	-2.08	0.037	-.0367802	-.0011289
	FFS	.0007907	.003826	0.21	0.836	-.0067081	.0082894
	DE	-.0098956	.0059938	-1.65	0.099	-.0216431	.001852
2_2							
	IB	-.0098823	.0088855	-1.11	0.266	-.0272977	.007533
	CL	.0324366	.0120491	2.69	0.007	.0088208	.0560524
	CFI	.0003678	.0081931	0.04	0.964	-.0156904	.0164259
	PCB	-.0339178	.0139328	-2.43	0.015	-.0612256	-.00661
	FFS	.0014148	.0068407	0.21	0.836	-.0119927	.0148223
	DE	-.0177074	.0097607	-1.81	0.070	-.036838	.0014232
2_4							
	IB	-.00972	.0087464	-1.11	0.266	-.0268625	.0074226
	CL	.0319036	.0117636	2.71	0.007	.0088474	.0549599
	CFI	.0003617	.0080599	0.04	0.964	-.0154354	.0161589
	PCB	-.0333605	.0137601	-2.42	0.015	-.0603298	-.0063912
	FFS	.0013916	.0067265	0.21	0.836	-.011792	.0145752
	DE	-.0174165	.0096001	-1.81	0.070	-.0362322	.0013993
2_6							
	IB	-.0136174	.0121236	-1.12	0.261	-.0373791	.0101444
	CL	.0446961	.0151642	2.95	0.003	.0149749	.0744173
	CFI	.0005068	.0112938	0.04	0.964	-.0216287	.0226423
	PCB	-.0467371	.0181009	-2.58	0.010	-.0822142	-.01126
	FFS	.0019496	.0094157	0.21	0.836	-.0165049	.020404
	DE	-.0244	.0131289	-1.86	0.063	-.0501322	.0013323

2_8							
	IB	**-.0108242**	**.009725**	**-1.11**	**0.266**	**-.0298849**	**.0082365**
	CL	**.035528**	**.0125528**	**2.83**	**0.005**	**.0109249**	**.060131**
	CFI	**.0004028**	**.0089805**	**0.04**	**0.964**	**-.0171986**	**.0180043**
	PCB	**-.0371503**	**.0150055**	**-2.48**	**0.013**	**-.0665606**	**-.00774**
	FFS	**.0015497**	**.0074911**	**0.21**	**0.836**	**-.0131327**	**.016232**
	DE	**-.019395**	**.0107474**	**-1.80**	**0.071**	**-.0404594**	**.0016694**
3							
	IB	**-.0055886**	**.0053083**	**-1.05**	**0.292**	**-.0159928**	**.0048156**
	CL	**.0183433**	**.0085245**	**2.15**	**0.031**	**.0016357**	**.035051**
	CFI	**.000208**	**.0046395**	**0.04**	**0.964**	**-.0088852**	**.0093012**
	PCB	**-.019181**	**.0098892**	**-1.94**	**0.052**	**-.0385634**	**.0002015**
	FFS	**.0008001**	**.0038803**	**0.21**	**0.837**	**-.0068052**	**.0084054**
	DE	**-.0100138**	**.0064243**	**-1.56**	**0.119**	**-.0226053**	**.0025777**
3_2							
	IB	**.0010656**	**.001672**	**0.64**	**0.524**	**-.0022115**	**.0043428**
	CL	**-.0034977**	**.0046678**	**-0.75**	**0.454**	**-.0126464**	**.0056509**
	CFI	**-.0000397**	**.0008845**	**-0.04**	**0.964**	**-.0017733**	**.001694**
	PCB	**.0036575**	**.0048946**	**0.75**	**0.455**	**-.0059358**	**.0132507**
	FFS	**-.0001526**	**.0007658**	**-0.20**	**0.842**	**-.0016535**	**.0013483**
	DE	**.0019094**	**.0026256**	**0.73**	**0.467**	**-.0032365**	**.0070554**
3_4							
	IB	**.0098702**	**.0089396**	**1.10**	**0.270**	**-.0076512**	**.0273915**
	CL	**-.0323967**	**.0123182**	**-2.63**	**0.009**	**-.0565399**	**-.0082534**
	CFI	**-.0003673**	**.0081884**	**-0.04**	**0.964**	**-.0164162**	**.0156816**
	PCB	**.033876**	**.0144498**	**2.34**	**0.019**	**.005555**	**.062197**
	FFS	**-.0014131**	**.0068468**	**-0.21**	**0.836**	**-.0148326**	**.0120064**
	DE	**.0176856**	**.0099349**	**1.78**	**0.075**	**-.0017865**	**.0371577**
3_6							
	IB	**.0148761**	**.0132492**	**1.12**	**0.262**	**-.0110919**	**.0408441**
	CL	**-.0488277**	**.0163971**	**-2.98**	**0.003**	**-.0809654**	**-.01669**
	CFI	**-.0005536**	**.0123382**	**-0.04**	**0.964**	**-.024736**	**.0236288**
	PCB	**.0510573**	**.019825**	**2.58**	**0.010**	**.0122011**	**.0899136**
	FFS	**-.0021298**	**.010288**	**-0.21**	**0.836**	**-.0222939**	**.0180343**
	DE	**.0266554**	**.0143763**	**1.85**	**0.064**	**-.0015215**	**.0548324**
3_8							
	IB	**.0117966**	**.0105681**	**1.12**	**0.264**	**-.0089164**	**.0325097**
	CL	**-.0387198**	**.013652**	**-2.84**	**0.005**	**-.0654772**	**-.0119624**
	CFI	**-.000439**	**.009784**	**-0.04**	**0.964**	**-.0196152**	**.0187372**
	PCB	**.0404879**	**.0162316**	**2.49**	**0.013**	**.0086746**	**.0723012**
	FFS	**-.0016889**	**.0081516**	**-0.21**	**0.836**	**-.0176658**	**.014288**
	DE	**.0211375**	**.0115979**	**1.82**	**0.068**	**-.0015941**	**.043869**
4							
	IB	**.0105965**	**.009526**	**1.11**	**0.266**	**-.0080741**	**.0292672**
	CL	**-.0347809**	**.0125237**	**-2.78**	**0.005**	**-.0593269**	**-.0102349**
	CFI	**-.0003944**	**.0087888**	**-0.04**	**0.964**	**-.01762**	**.0168313**
	PCB	**.0363691**	**.0147999**	**2.46**	**0.014**	**.0073619**	**.0653763**
	FFS	**-.0015171**	**.0073257**	**-0.21**	**0.836**	**-.0158752**	**.012841**
	DE	**.0189872**	**.0104923**	**1.81**	**0.070**	**-.0015773**	**.0395516**
4_2							
	IB	**.0054417**	**.0050765**	**1.07**	**0.284**	**-.0045081**	**.0153915**
	CL	**-.0178611**	**.0079108**	**-2.26**	**0.024**	**-.033366**	**-.0023562**
	CFI	**-.0002025**	**.0045129**	**-0.04**	**0.964**	**-.0090477**	**.0086426**
	PCB	**.0186767**	**.0089784**	**2.08**	**0.038**	**.0010793**	**.0362742**
	FFS	**-.0007791**	**.003771**	**-0.21**	**0.836**	**-.0081701**	**.0066119**
	DE	**.0097505**	**.0059543**	**1.64**	**0.102**	**-.0019197**	**.0214207**
4_4							
	IB	**.0038961**	**.0037312**	**1.04**	**0.296**	**-.003417**	**.0112092**

	CL	**-.0127882**	**.0064346**	**-1.99**	**0.047**	**-.0253997**	**-.0001766**
	CFI	**-.000145**	**.0032314**	**-0.04**	**0.964**	**-.0064783**	**.0061884**
	PCB	**.0133721**	**.0071143**	**1.88**	**0.060**	**-.0005717**	**.0273159**
	FFS	**-.0005578**	**.0027056**	**-0.21**	**0.837**	**-.0058607**	**.0047451**
	DE	**.0069812**	**.0045678**	**1.53**	**0.126**	**-.0019716**	**.015934**
	FS	**-.0012635**	**.0036968**	**-0.34**	**0.733**	**-.0085091**	**.0059822**
5							
	IB	**.0007797**	**.0010224**	**0.76**	**0.446**	**-.0012243**	**.0027836**
	CL	**-.0025592**	**.0026254**	**-0.97**	**0.330**	**-.0077049**	**.0025866**
	CFI	**-.000029**	**.0006472**	**-0.04**	**0.964**	**-.0012976**	**.0012395**
	PCB	**.002676**	**.0027831**	**0.96**	**0.336**	**-.0027787**	**.0081307**
	FFS	**-.0001116**	**.0005509**	**-0.20**	**0.839**	**-.0011913**	**.0009681**
	DE	**.0013971**	**.0015474**	**0.90**	**0.367**	**-.0016357**	**.0044298**