

# Savings Practices of Selected Urban Families in Neyveli

By

Kanika . H

THESIS SUBMITTED TO THE AVINASHILINGAM INSTITUTE FOR HOME SCIENCE  
AND HIGHER EDUCATION FOR WOMEN (DEEMED UNIVERSITY) COIMBATORE - 43,  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
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CERTIFIED AS BONAFIDE RESEARCH WORK



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HOMEMAKERS VERSUS SAVINGS.

# Introduction

## I N T R O D U C T I O N

Family is the basic unit of any society. It consists of two or more persons living in the same household who are related to each other by blood, marriage or adoption. It is a unit where we intensify the members more than any other social organisation (Varghese, Ogale and Srinivasan, 1989).

Family as a unit can be based on several interrelated factors. In common terms it is referred to as a household (The Great Lifco Dictionary, 1990). The term 'household' is a broader, more inclusive term than a family. 'A household consists of all the persons who occupy a housing unit' quotes, Saluter (1983). Household in general is defined as consisting of group of persons living under the same roof and sharing a common purse (Agan, 1970 and Adrian and Daniel, 1976). The American Home Economics Association (1983) defines families as households involving two or more persons with perceived long term commitments.

Deacon and Firebaugh (1981) consider family as a system of individuals who are independently responsible for themselves, or of individuals, related or unrelated, who share atleast some portion of their day-to-day interests and necessities through mutual interaction. Family is the interaction of husband and wife and the production and socialization of children (Kephart, 1977). Glick (1984) refers to the family as the cultural cornerstone of any society transmitting its cultural history, instilling its prevailing value systems, and socializing the next generation into effective citizens and human beings. Some family specialists ascribe to the family the functions of socialization of adults, as well as children and the structuring of commitment and life exploration for all members too (Frankena, 1970).

According to Mullick (1981) family is defined as that social group or unit of people living intimately together in one abode and dependent upon the same income. This group commonly consists of husband and wife or father and mother with child or children (modern unitary family) or joint families with dependent relatives.

Family fulfills certain functions for man and society. As an institution it performs the major functions of a social unit. Among the various functions, the economic function is of utmost importance (Stephen, 1990). In a hierarchy or continuum of needs, physical survival and financial security come first. Other needs are not even activated until these basic needs are satisfied. The International Federation for Home Economics in its policy statement for 1994 - year of the family - also has identified as one of its priority issues the ways to strengthen family's ability to meet its own needs.

The balance of power and influence belongs to the spouse, most often the breadwinner who brings the most economic and educational resources into marriage (Oppong, 1970; and Scanzoni, 1972). The Exchange Theory (Heer, 1963 and Spiro, 1983) and Resource Theory (Blood and Wolfe, 1960; O'Connor, 1963; Rodman, 1972; and Davis, 1976) also emphasize these facts.

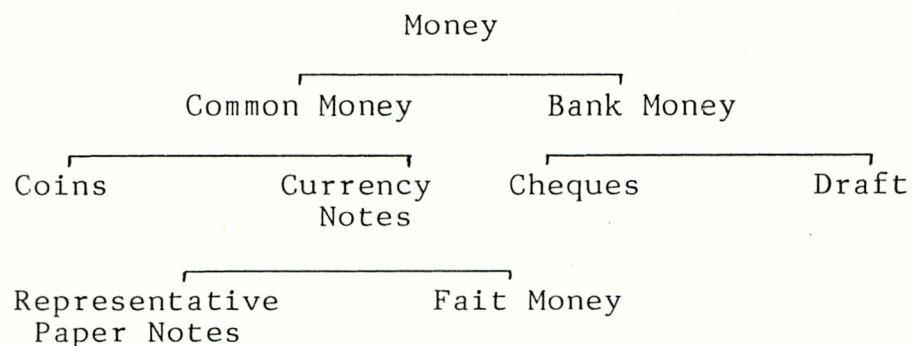
A great deal of family unhappiness undoubtedly arises from financial problems and worries related too often to

the inability or disinclination of the housewife to keep track of her spending opines, Whitlow (1967). This may be true because money represents the prose of life expresses, Wonnacott and Wonnacott (1984).

Money is something, that everybody is prepared to accept in exchange for goods or services (Benham, 1977). It is very essential in one's life as all exchange occurs through the medium of money. Money is anything that is widely and readily acceptable in payment and is very essential for the happiness of any family. As Horace (1977) poetically explains

"All things, human and divine, renown honour and worth,  
at money's shrine, goes down"

Newlyn (1971) classifies money under various forms, wherein payments can be made if necessary using any form of money.



While money receives such great recognition, Whitlow (1967) worries over the fact that great majority of people spend their income without a definite plan and without thought for leaner days that may come. Whatever may be the income, the efficient management of money is an indispensable requisite for a happy, successful and peaceful family life as economic security is basic to one's opportunity to do much in other dimensions, (Nickel and Dorsey, 1991). Economic security is absolutely necessary to meet one's needs (Covey, 1990). So account keeping or budgeting acts as a backbone to strengthen the will to manage within the income and even to put by regular amounts of savings.

A budget is a comprehensive and co-ordinated plan, expressed in financial terms for the operations of resources for some specific period in the future explains, Fremgen (1973). Welsch (1976) goes one step further by stating that, a comprehensive profit planning and controlling or budgeting is a systematic and formalised approach for stating and communicating the expectations and accomplishing the planning, co-ordination and control responsibilities of management in such a way as to maximise the use of given resources.

In simple terms a budget is a plan for spending and saving within a given income for a definite period. It is an integral part of management and helps the household to spend money carefully since 'a paisa wisely spent is a paisa saved'. Therefore it is felt that budgeting is very essential as it is an intelligent guide to spending. It balances the future and the present wants, it helps a person to save with ease, helps in better distribution of funds and enables the family to live within its income.

A meticulously planned budget along with provisions for the basic needs should include savings too and all efforts should be promoted to maintain regular savings. Savings are a means of providing for future wants. They consist of money put aside for future spending, and is an essential item in budgeting (Pennock, 1970 and Devadas, 1970). Feelings for thrift should also be encouraged since one does save when one:

- \* does not spend
- \* is not extravagant
- \* spends only on what is essential and not on what is fanciful.
- \* does not buy two when one could do with one
- \* uses with great care, what one has and makes it last longer.

To add to these facts Rajarathanam (1987) rightly directs man to take care of the pence, because the pounds are sure to take care of him. This tendency to save is activated by the various modes of savings which act as catalysts. Apart from compulsory savings like provident fund, general insurance etc., other modes include savings accounts, current account and fixed deposits in banks, post office savings, chit funds, life annuities, lottery chits, auction chits and insurance. It is also a known fact that one cannot turn the pages of a daily or a magazine without advertisements luring savings intention.

There are various reasons for individuals developing savings habits and for the upcoming of various modes of savings. The major motives of savings are to provide for known future needs such as oldage, education and marriage of children, the desire to own property, to buy high - value consumer durables or simply to satisfy the urge to grow wealthy. It may also be to meet uncertain future needs such as loss by fire, robbery, sickness of any member of family, and special health expenditures like surgical operations, unusual repair to one's own house, death and funeral expenses. The major reason for present day savings is to avoid remittance on income tax. This

being the status government reports identify that personal savings constitute the largest portion of national wealth. According to the available estimates of the Central Statistical Organisation and the RBI, the largest part of domestic savings which reflects the savings of government sector originated only from household sectors.

These facts project the present trend in savings practices. Whatever the motive for saving it is clear that the total value of the savings is intended for use on tangible investments or intangible commitments.

There have been many researches preceding this study picturing the savings practices of households. Savings practices were not studied in terms of systems approach before. The influence of measurable individual variables like income, family size or stage in family life cycle or personal variables of the homemaker on savings practices have never been studied too. Since there is paucity of information on these lines and in addition the investigator wished to analyse savings pattern and behaviour in an integrated, non-empirical but contextual manner, the study on "Savings Practices of Selected Urban Families in Neyveli" was launched with the following

objectives to:

1. Find out the monthly income and expenditure pattern of the selected families.
2. Understand their savings pattern.
3. Discuss their savings pattern on a systems approach.
4. Analyse the complexity of factors that affect individual behaviour and choice related to savings.
5. Study their savings behaviour in terms of personal variables like age, educational status and employment status of the homemaker.
6. Identify the values realised and goals envisaged and fulfilled through savings.
7. Comprehend the problems encountered with savings.

The investigator intends that the study would picture the savings scenario among a small group of our society. While highlighting the thrust areas of research in Home Science, Devadas (1977) has suggested effort in terms of periodical assessment of the financial management practices of families with fluctuating income thereby analysing effect of family size on its management, savings practices and account keeping. It is hoped that the study would help implement better living by developing skills in planning the use of economic resources available to the family for the optimum achievement of aspirations and expressions of human values.

# Review of Literature

## II REVIEW OF LITERATURE

The review pertaining to the study on "Savings Practices of Selected Urban Families in Neyveli" is presented under the following aspects:

- A. Functions of Money
- B. Concept of Savings
- C. Motives and Objectives of Savings
- D. Factors Affecting Savings
- E. Modes of Savings

### A. Functions of Money

"Money is a matter of function four,  
A medium, a measure, a standard, a store"  
(Venugopalan and Balasubramaniam, 1977).

Money as a medium of exchange and as a store of value has an important function to perform in an economy, (Newlyn, 1971). It lubricates the economy and as the saying goes explains, Rangarajan (1991), it keeps the wheels of agriculture, industry and commerce going. Money is a facilitating device opines, Saraf (1991). Cargill (1977) refers money as a unit by which people value

commodities and sources, measure wealth and express debts. Money serves as a measuring rod and as a unit of account. Money is also considered as a standard of deferred payments (Crowther, 1977). A number of transactions involving payments in future are conducted through money (Jhingam, 1986).

All the four functions of money are inter-related with each other. Though money has been called "the root of all evil", it serves many positive functions in the economics of modern societies opine, Deacon and Firebaugh (1981). Rice and Tucker (1986) point out that money

- \* provides a basis for value comparisons
- \* serves as a medium for exchange with the general economy
- \* can be held as a claim against resource needs in the future.
- \* provides a medium for making inter-changes and transfers with government, private companies and individuals.

Since man runs his life on a cash basis, the pressures and troubles caused due to money are more for many people. Money will do anything reports the U.S. Department of Agriculture (1972) as one depends upon money

for food, clothing, shelter, recreation, education of children and for protection during oldage.

Money is not the most important thing in one's life, but the way one learns to manage it can affect future happiness opines, Crockett and Harper (1986). So financial management is very essential for a happy family life as, too little money can hinder the smooth functioning of the family life (Rangarajan, 1991 and Saraf, 1991).

#### **Management of Financial System**

George and Claude (1974) state that those elements that infuses plan and objective as well as cohesion to one's activities are called management. Jack (1975) and Gupta (1978) opine that management consists of all organizational activities that involve planning, directing and controlling human effort so as to accomplish the predetermined goals.

Money or financial management is essential to meet both the present and future wants observes, Cargill (1979) as spending is on things one enjoys, borrowing is for immediate use and savings is for future wants.

Nickel and Dorsey (1991) define money management as planning, controlling and evaluating the use of all types of income. In Gaur and Narang's (1984) point of view income is of such wide importance that it is difficult to define it precisely and they compare it to a fruit of a tree or crop from a plant.

Income is the monetary gain within a prescribed period of time (Rice and Tucker, 1986). Soundararaj (1974) states that family income may be what is earned by way of salary or wages by one or more members of the family. It may be supplemented by inherited landed property, rent from houses, interest from invested money or profits from business.

Income is composed of many aspects opines, Swanson (1981). Family income has been classified by Rice and Tucker (1986) and Nickel and Dorsey (1991) as gross, disposable, discretionary and psychic income and as money, real and psychic income respectively. Gupta (1984) reports that whatever may be the income, that finance must provide for three basic necessities - food, clothing and shelter. So planning in financial management explains Gupta, (1984) should guarantee four essential aspects

namely.

- \* providing for setting aside enough money to meet the regular, fixed items and provide something for emergencies
- \* guiding decisions about day-to-day spending after fixed obligations are met.
- \* showing how money can be accumulated
- \* providing for building up an income for later years.

Financial management is an integral part of every family's activities opine, James (1973) and Mann (1984). Though it involves planning, discipline, co-operation and plain hard work, it is very important for family security and happiness.

The various financial management principles to be borne in mind as enunciated by Rice and Tucker (1986) are to:

- \* prioritize goals and set standards
- \* analyse financial resources
- \* establish systematic financial management practices
- \* make a budget to control spending and saving
- \* keep adequate records
- \* set credit limits and use them responsibly

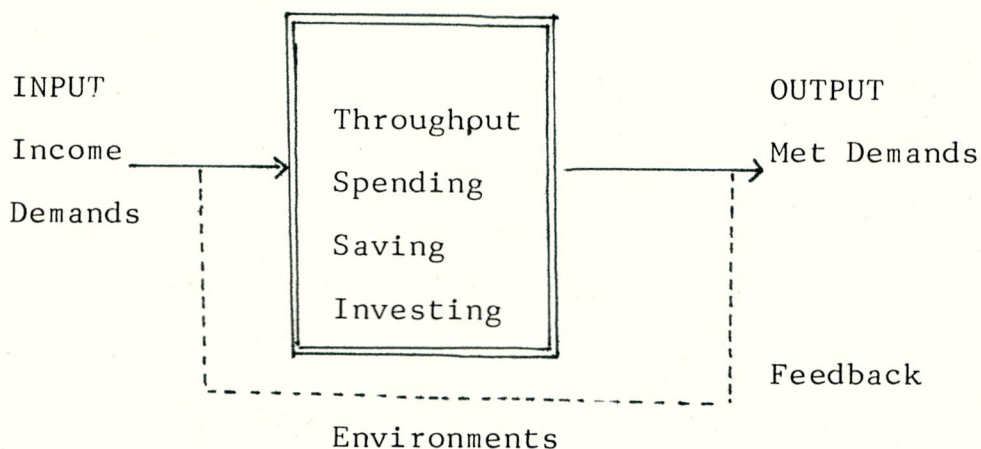
- \* use time to make savings multiply
- \* build wealth early and systematically
- \* protect assets adequately and reasonably
- \* use tax advantages to build for retirement
- \* plan for transfer of wealth
- \* check and adjust regularly

Whitlow (1967) opines that among the various principles, making a budget to control spending and saving is very essential as detailed accounts can and generally do act as a backbone to strengthen the will to manage within the income and even to put by regular amounts as savings. They make it possible to check where unjustified economy steps in without delay.

Families ignore normative or textbook recommended management approaches to manage their money opine, Winter (1986); Cue (1990) and Xiao and Olson (1993). Retting and Schulty (1991) state that financial management in general is often a mental process and savings for future. All these highlight proper and timely planning of resources. Harold and Donnel (1976) state that planning is an intellectual process, the conscious determination of

courses of action, the basing of decisions on purpose, facts and considered estimates.

Rice and Tucker (1986) classify resources under three types as human, economic and environmental where income, wealth, employee benefits and credit come under economic resources. The economic resource - income-enters the family system as an input, the function it performs is the throughput and its use emerges out as output.



Source: Framework of Deacon and Firebaugh (1981).

Input is the entrance of resources and demands into the family sphere. Throughput is the activity inside the system boundary and the satisfaction derived from the

### C. Motives and Objectives of Savings

Motives are the causes which make people to save and objectives are the purpose for which people save. The major causes which influence the people to save are their goals. As O'Connor, Sullivan and Pogoryelski opine, (1983) people save more regularly if they have specific goals. Deacon and Firebaugh (1975) consider goals as value based objectives. According to Gross, Crandall and Knoll (1973) values are general guidelines for evaluation of one's goal. Values are ideals and tradition held by the family opine, Goldfeld and Chandler (1981). Some of the most important values for successful running of family include love, health, comfort, knowledge, technological interest, play, art and religion reports, Park (1982). The goals based on these values may be either for immediate future gifts, vacation funs, extra expenses or to save for a down payment on a house, a car or a new appliance. A young parent may simultaneously plan long range savings for their children and for personal financial security after retirement.

According to the survey on consumer finances conducted by Avery and Kennikill (1988) the common motives to save

demands is the output. Eyell, Paolucci and Buboly (1984) state that the final output is the satisfaction or dissatisfaction with the quality of life produced by the solutions generated in response to demands and resource inputs.

### **B. Concept of Savings**

The great Lifco Dictionary (1990) defines savings as 'amount put by'. According to Growther (1950) savings is the tendency or propensity to save some part of income unconsumed.

Israney (1970) and Sastry (1972) explain savings as the difference between income and expenditure upon current consumption. On the contrary spending less than one's income is what economists call as savings. Baumol, Blinder and Scarth (1985) review savings as the difference between disposable income and consumer expenditure. Savings is defined as the excess of income over consumption expenditure.

$$S = Y - C$$

Where S = savings, Y = total income, C = the amount of consumption expenditure (Jhingam, 1986).

Dolan (1980) and Millward et. al., (1983) state that savings is found by subtracting consumption from disposable income. Therefore as rightly put by Feldstein (1978) savings is expenditure on future consumption.

Savings can be defined as abstinence from present consumption for the purpose of future consumption (Varghese, Ogale and Srinivasan, 1989). Pennock (1970) refers to savings as a process of keeping some amount from current income for the purpose of taking care of future needs and wants. Unger and Wolf (1972) refer to savings as an essential item in budgeting.

In Soundararaj's (1974) view point savings is a means of providing for future wants but Bryant, (1990) calls savings as an activity in which resources are used in the current period and yield satisfactions in future periods.

Many families cannot predict what the savings in a particular month will be because they tend to spend impulsively and savings is what remains after deducting consumption expenditure from income opines, Mukli and Srivastava (1990).

included security for retirement, emergencies, children's education, ordinary living expenses, purchase, travel plans, marriage of children, the desire to own property, to buy high-value consumer durables or simply to satisfy the urge to grow wealthy and achieve better living standard.

The survey on attitudes towards and, motives for savings (1966) have identified nine categories for which people save, which included savings for emergencies, old age, gifts, donations and pilgrimages, for dowries, weddings, ceremonies, to buy large consumer goods, to improve/enlarge business, for education of children, to build a house and to help the nation.

According to Simha (1975) the most common objectives for savings are:

- \* to make expensive purchases like car or a stereo
- \* to meet recurring expenses like annual insurance premiums, property taxes, fuel bills.
- \* to establish an emergency fund to meet unanticipated costs of large car repairs, medical bills or runaway inflation, and
- \* retirement.

#### **D. Factors Affecting Savings**

According to Rao (1988) ability to save and willingness to save are the two major factors which affect savings. Ability to save depends upon the level of income and its nature of distribution opines, Stillman (1984). Willingness to save depends upon the people's desire to restrict their consumption and augment their savings. Israney (1970) and Lindauer (1976) list five factors which affect willingness to save as nature and characteristic of a person, political stability, banking facilities, taxation and rate of interest.

The amount of money each person puts aside for savings is affected by income of the family, present living circumstances, size and composition of the family, occupation of the family members, stage in family life cycle, family goals, gainful employment and educational status of the homemaker explain, Hill and Hill (1981); Duncan and Morgan (1981); Varghese, Ogale and Srinivasan (1986) and Hang, Chang and Fan (1991).

### **Family Income**

Soundararaj (1974) opines that poor families spend most of all their income on basic necessities like, food, clothing and shelter due to which they have very little or no money to save. Magrabi (1991) hypothesized that as income increase consumers increase their expenditure but the rate of increase in expenditure is lower than the rate of increase in income.

### **Family Size**

Expenditure is directly proportional to number of mouths to feed, leading to diminished savings. It will also depend upon the number of earning members report, Varghese, Ogale and Srinivasan (1986). If the number of earning members are more, the per cent of amount spent will be less, with a good savings amount.

### **Family Goals**

Family goals have a greater influence on savings. The families make their decision that relate to daily living, needs and goals (Paolucci, 1978). Some families value social status and others financial security. The former

will have acquisition and exhibition of status symbol as their goal while the latter will have accumulation of physical assets which affect the expenditure and savings pattern.

### **Education**

Hafstrom and Dunsins (1972) opine that education influences the present or future consumption of families. Education broadens, possible occupational choices and has an impressive ability to explain the difference between people's earnings over a life time. Duncan (1984) reports that 20 per cent of the variance in a person's income is due to his or her years of education which in turn affects the savings percentage.

### **E. Modes of Savings**

Leavill way back in 1950 had mentioned the following means by which an individual could invest his funds:

- \* purchase of co-operative stocks and bonds
- \* purchase of government bonds
- \* investment in home
- \* direct loan to small businessmen and others.

Venkatapadmavathy (1983) and Monimozhi (1987) report that the major purpose why people save are to meet non-recurring expenditure as building a house for the family and marriage of children.

In Varghese, Ogale and Srinivasan's (1989) view the major objectives of savings are, to:

- \* reduce economic insecurity especially in old age
- \* help in period of physical inability
- \* use during emergency
- \* use for fixed obligations
- \* use in making big purchases
- \* enhance the socio-economic status of the family
- \* help in securing loans
- \* act as a supplementary source of income
- \* maintain good standard of living

Franklin (1985) states that there are two certainties in this world-death and taxes. So the major objectives of many, at present is avoidance of tax remittance through savings.

All India Rural Household Survey (1966) in its report stated that the financial investment of rural households included bank deposits, shares and securities, small savings and investment in gold and silver.

The various modes of saving listed by Soundararaj (1974) are savings accounts, current accounts and fixed deposits in banks, post office savings, co-operative societies, chit funds, life annuities, lottery chits, auction chits, nidhis and insurance.

The various savings institutions are credit unions, commercial banks, savings and loan associations, savings banks and post office. Horne (1982) reports that savings and loan associations are financial institutions which provide a source of mortgage credit to households.

Mullick (1984) lists life insurance, banks, post office, nidhis, chit funds, provident fund, cumulative time deposit and recurring deposit as some modes to

save money for future. She includes investment in promisory notes, mortgage, bonds, stocks and shares also as other modes.

Singh (1986) views investment as the allocation of monthly resources to assets that are exposed to yield some gain or positive return over a given period of time. Investment can be in physical or financial assets. The physical assets include agricultural and non-agricultural assets while financial assets are value of shares and securities, amounts deposited in postal savings, co-operative or commercial banks, amounts invested in small savings, defence certificates, bonds, installments of cumulative time deposits and paid up loans reports, Giriappa (1984).

Pillai (1981) in his study reports that household savings comprise of both financial and physical assets. Financial assets are in the form of bank deposits, insurance policies, provident fund, corporate and co-operative shares and securities. Physical assets include farm investment, residential constructions and non-corporate business investment.

# Methodology

### III METHODOLOGY

The study pertaining to "Savings Practices of Selected Urban Families in Neyveli" comprised of a household survey.

Survey is a process of collecting data from existing units with no particular control over factors that may affect the population (Gupta, 1991).

#### A. Plan and Procedure of the Study

The procedure followed in the conduct of the study included the following steps:

1. Selection of Area
2. Selection of Sample
3. Selection of Method and Tool
4. Formulating the Interview Schedule
5. Pre-testing the Schedule
6. Conducting the Study
7. Consolidating the Data

#### 1. Selection of Area

The area selected for the study was Neyveli (South Arcot District) in Tamil Nadu. This area was selected

because of the nature of the topic. In general, individuals are reluctant to disclose any information regarding money matters. Therefore the investigator's familiarity with the people and easy accessibility, since she belonged to that place, were taken advantage of.

## **2. Selection of Sample**

Sample is a subject of cases from the population chosen to represent it. It refers to the investigation of a part of the whole population or universe (Sidhu, 1989). Sampling may be defined as the selection of some part of an aggregate or totality on the basis of which a judgement or inference about the aggregate or totality is made. In other words it is the process of obtaining information about an entire population by examining only a part of it (Kothari, 1992).

One hundred and fifty families consisting of 50 per cent each of full time and gainfully employed homemakers respectively were selected for the survey. The families were selected based on purposive sampling. In purposive sampling items for the sample are selected deliberately by

the researcher when his choice concerning the item remains supreme (Kothari, 1990). Purposive sampling involves good judgement and appropriate strategy in hand picking the cases to be included in the sample that are satisfactory in relation to one's research needs as it often gives better information about a particular aspect of the universe (Sharma, Prasad and Satyanarayana, 1989).

### **3. Selection of Method and Tool**

The method followed was direct personal interview. Gupta (1982) states that this method consists of collection of data personally by the investigator from the sources concerned. Direct personal interview was selected as it permits great depth, flexibility, clarity, greater support and stimulates the respondent to give more complete and valid answers (Bhandarkar, 1982 and Sidhu, 1987).

Rangaswamy (1976), Wilkinson and Bhandarkar (1982) and Gupta (1991) highlight the merits of direct personal interview as that it yields high percentage of returns and increased response, relevant and correct information and also offers chances of collecting supplementary information.

Interview schedule was the tool selected for the conduct of the study. It is a list of queries designed to elicit the required information in the form of short answers filled into the blank spaces besides the questions either by the interviewer or by the informant (Gupta, 1983).

#### **4. Formulating the Interview Schedule**

To elicit necessary information a schedule was formulated incorporating details on general family background, budgeting, expenditure pattern, savings pattern, systems approach to savings, savings behaviour and problems encountered.

#### **5. Pre-testing**

Tindel (1978) states that pretesting is a means of correcting any possible omission, elimination, non-clarity and insufficiency in the prepared schedule. A preliminary study was conducted choosing 25 families in Coimbatore city. This study enabled the investigator to identify the major issues on savings, which could not resume willing responses. Hence the schedule framed for the pilot study

was modified so as to ensure relevant information coupled with adequate response. A sample of the schedule used for the study is presented under Appendix I.

## **6. Conducting the Study**

The investigator personally approached the respondents and established good rapport through friendly conversation and requested their kind participation and co-operation for the conduct of the study. The necessary details were collected as per the schedule and entries made then and there.

## **7. Consolidating and Analysing**

The data was tabulated and was analysed based on the following aspects:

### **a. Budgeting**

An attempt was made to understand the participation of family members namely the homemaker and head of the family in decision making especially with regard to budgeting. This study enabled establishing the dependence of homemakers participation in budgeting decisions, upon personal measurable variables like age, employment status and income.

### **b. Savings Pattern**

The information collected was classified to get insight into the frequency of savings, mode adopted, source of information and reasons for choosing the same.

### **c. Savings Behaviour**

Savings behaviour of the family is influenced by the general variables like income, size and stage in the family life cycle and also by variables like age, educational status and employment status of the homemaker in particular.

Since regression is the method to find out the relationship between two or more variables that are related causally, the savings behaviour of the selected families were analysed on the following guidelines:

- i. Establishing savings as a function of family income through regression analysis.
- ii. Assessing the dispersion of families with regard to savings based on parameters like size of the family and stage in the family life cycle through standard deviation.

- iii. Determining the correlation between family savings and parameters like age, education and employment status of the homemakers using chi-square.

#### **d. A Systems Approach to Savings**

The available information was classified under input towards savings, throughput in savings and output realised through savings. The values identified and goals envisaged and realised were also studied.

The findings of the study are presented under Chapter IV, Results and Discussion.

## Results and Discussion

#### IV. RESULTS AND DISCUSSION

The results pertaining to the study on "Savings Practices of Selected Urban Families in Neyveli" are discussed under the following broad heads:

- A. Socio-economic Background
- B. Budgeting
- C. Expenditure Pattern
- D. Savings Pattern
- E. Systems Approach to Savings
- F. Savings Behaviour
- G. Problems Encountered with Savings

##### A. Socio-economic Background

The socio-economic background of the selected families is discussed under the following heads:

1. Family size and stage in the family life cycle.
2. Age of homemakers and heads of families.
3. Educational status of homemakers and heads of families.
4. Employment status of homemakers and heads of families.
5. Monthly family income
6. Source of family income
7. Ownership of property.

### 1. Family size and stage in the family life cycle

Table I presents the details regarding family size and stage in the family life cycle.

**TABLE I**  
**FAMILY SIZE AND STAGE IN THE FAMILY LIFE CYCLE**

Family Details	Percentage of Families (n = 150)
<b>Family Size</b>	
Small (n = 52)	34.67
Medium (n = 98)	65.33
<b>Stage in Family Life Cycle</b>	
Beginning (n = 11)	7.33
Expanding (n = 82)	54.67
Contracting (n = 57)	38.00

According to Devadas (1985) small family is one which comprises of 1 - 3 members, medium family 4 - 6 members and large family 7 - 9 members. Incidentally a significant percentage of the selected families were of the medium size.

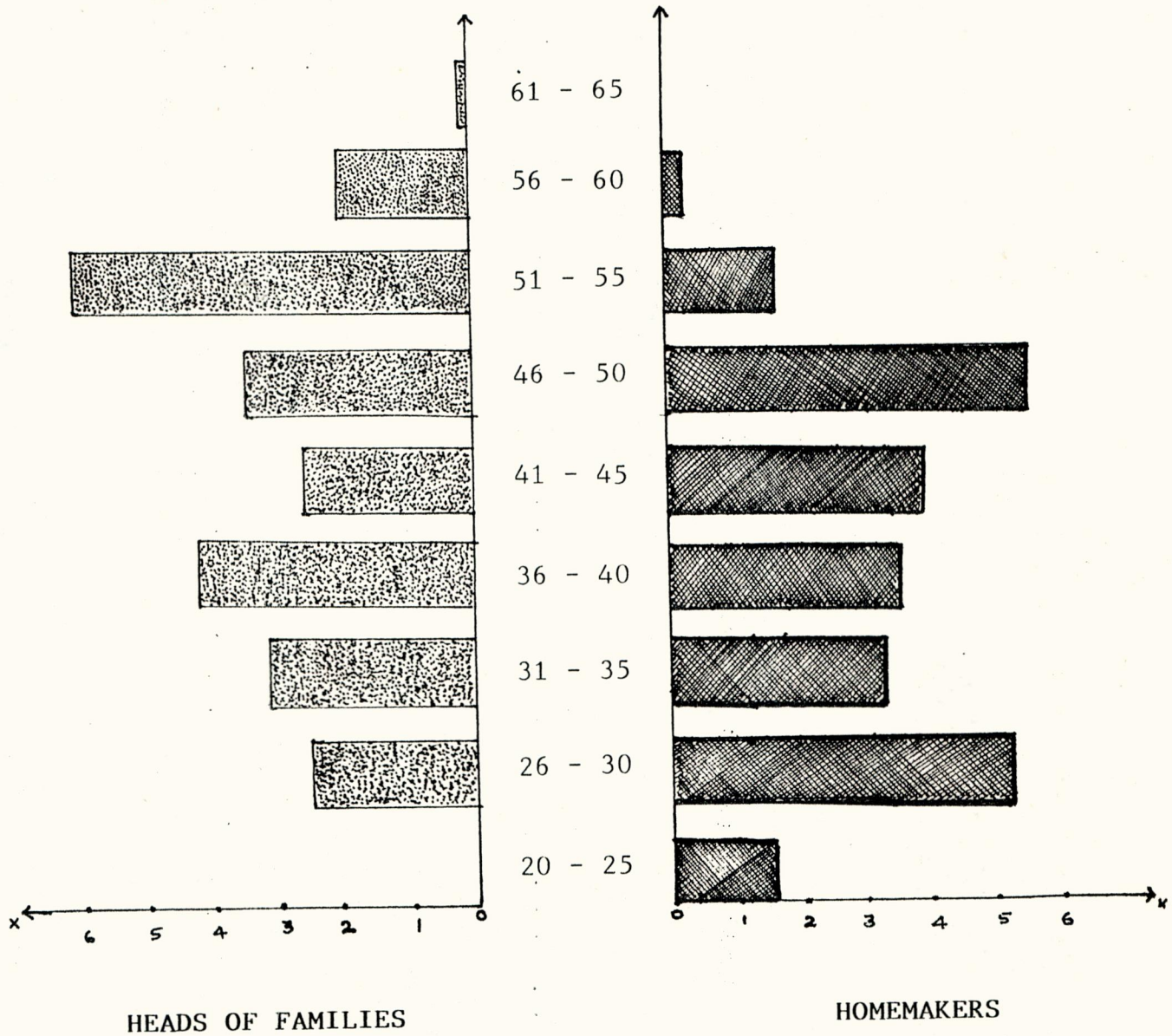
A majority of the selected families were in their expanding stage while 38 per cent had reached the contracting stage.

## 2. Age range of homemakers and heads of families

The age range of selected homemakers and heads of families are presented under Table II and depicted in Figure - 1.

**TABLE II**  
**AGE RANGE OF HOMEMAKERS AND HEADS OF FAMILIES**

Age Range (in years)	Percentage of Families	
	Homemakers (n = 150)	Heads of Families (n = 150)
20 - 25	6.00	...
26 - 30	20.67	10.00
31 - 35	13.33	12.67
36 - 40	14.00	17.33
41 - 45	16.00	10.67
46 - 50	22.00	14.00
51 - 55	6.67	24.67
56 - 60	1.33	10.00
61 - 65	...	0.67



AGE RANGE OF HOMEMAKERS AND HEADS OF FAMILIES

Figure - 1

Considering the maximum distribution of the families on the expanding and contracting (54.67 and 38 per cent each) stages of family life cycle it was not surprising to note one quarter of the heads to be in the age range between 50 - 55 years. A majority of the homemakers were found to be distributed between 45 - 50 years (22 per cent) followed by 20.67 per cent between 26 - 30 years. The data also revealed 64 and 50.67 per cent of homemakers and heads of families to be in their productive age range between 26 - 45 years.

### **3. Educational status of the homemakers and heads of families**

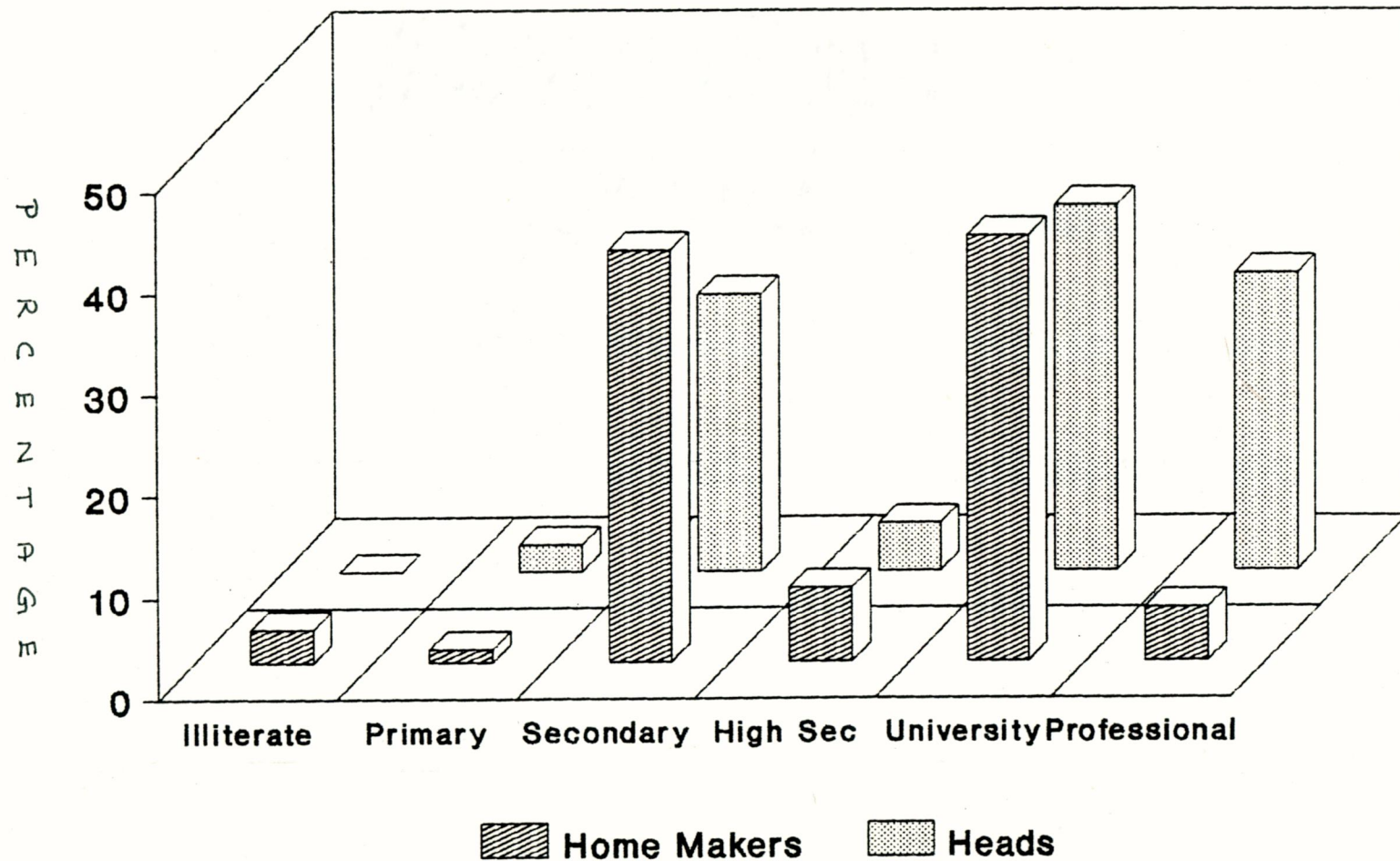
The educational status of the homemakers and heads of families is presented under Table III and illustrated through Figure - 2.

TABLE III

## EDUCATIONAL STATUS OF THE HOMEMAKERS AND HEADS OF FAMILIES

Educational Status	Percentage of Families	
	Homemakers (n = 150)	Heads of Families (n = 150)
Illiterate	3.33	...
Primary	1.33	2.66
Secondary	40.67	27.33
Higher Secondary	7.33	4.67
Graduate and Post Graduate	41.99	36.00
Professional	5.33	29.33

It was very heartening to note that all the heads of families were well educated and the homemakers had a reasonable level of education, depicting 47.32 and 65.33 per cent of homemakers and heads of families respectively to have received university education. These data reflect the significance attached to education during the post independence era. To vie with these facts a meagre 3.3 per cent of the homemakers were found to be illiterate.



**Educational Status of Homemakers and Heads of the Families**

Figure 2

#### 4. Employment status of the homemakers and heads of families

The employment status of the homemakers and heads of selected families is presented under Table IV.

TABLE IV

#### EMPLOYMENT STATUS OF HOMEMAKERS AND HEADS OF FAMILIES

Employment status	Percentage of Families	
	Homemakers (n = 75)	Heads of Families (n = 150)
Administrators	22	42
Technicians	15	26
Clerks	22	14
Accountants	4	11
Government Officials	4	4
Teachers	32	1
Nurses	1	..
Retired Persons	..	2

The distribution of the homemakers 50 per cent of the total sample, had settled in remunerative vocations as teachers (32 per cent) administrators and clerks (22 per cent each) and technicians (15 per cent). On the contrary

a majority of the heads of families were administrators (42 per cent) followed by teachers (28 per cent) and clerks (14 per cent). This information also highlighted the fact that with regard to acceptance of employment avenues, women were on par with men.

### 5. Monthly family income

The monthly income of the selected families with employed and full time homemakers is presented under Table V.

TABLE V

#### MONTHLY FAMILY INCOME

Monthly Family Income (in Rupees)	Percentage of Families	
	With Employed Homemakers (n = 75)	With Fulltime Homemakers (n = 75)
1000 - 2650/-	2.67	12.00
2651 - 4450/-	16.00	26.67
4451/- and above	81.33	61.33

According to HUDCO (1994) those individuals whose monthly income is below Rs. 2650/- are considered as belonging to low income group. Middle and high income families reportedly earned between Rs. 2651 - 4450/- per month and Rs. 4451/- and above respectively.

The study brought to surface 12 per cent of the selected families with full time homemakers to belong to low income, 26.67 per cent to belong to middle income group and 61.33 per cent to belong to high income group. Among the families with employed homemakers 2.67 per cent, 16 per cent and 81.33 per cent belonged to low, middle and high income group respectively. It justifies the fact that the employment status of the homemaker directly helps to augment family income.

## **6. Sources of family income**

Table VI shows the sources of monthly income for the selected families.

TABLE VI  
SOURCES OF FAMILY INCOME

Source	Percentage of Families *		
	LIG (n=11)	MIG (n=32)	HIG (n=107)
Salary/Wages/Pension	100.00	100.00	100.00
Rent-House/Land	9.09	33.33	26.21
Interest from savings	9.09	16.67	14.56
Financial help from in-laws	...	8.83	9.71
Business	36.36	19.44	0.97
Agriculture	...	5.56	5.56
Interest from lendings	...	5.56	...
Livestock	9.09	...	...

\* multiple response

Irrespective of the economic bracket, income in the form of salary, wages or pension posed an assured source. Among the other sources rent received from land or house took precedence over others for the middle and high income groups while 36.36 per cent of low income families had reported to have also been deriving income through business

enterprises. It was a noteworthy feature that a few families also were enjoying fruitful dividends from their savings endeavours.

## 7. Ownership of property

Table VII presents the details on ownership of property.

**TABLE VII**  
**OWNERSHIP OF PROPERTY**

Property	Percentage of Families *		
	LIG (n=11)	MIG (n=32)	HIG (n=107)
Vehicles	...	87.5	100
Consumer durables	100	72.0	100
House	...	41.0	100
Plot (Site)	...	37.5	100

\* multiple response

Consumer durables include those household equipments like mixer, grinder, television etc. It was evident from

the study that the middle and high income families had procured tangible assets reasonably well when compared to the low income families.

## **B. Budgeting**

The budgeting patterns of the selected 150 families is discussed under two major headings:

1. Details on budgeting
2. Outcomes of budgeting

### **1. Details on budgeting**

This aspect of the study is dealt under:

- a. Habit of planning
- b. Person responsible for budgeting

#### **a. Habit of planning**

The study indicated that a majority of 92 per cent were practicing and framing monthly budgets since they were knowledgeable about the merits of planning their

income. A meagre eight per cent reported to be using their income without any preconceived plan of expenditure.

**b. Person responsible for budgeting**

Family income and its efficient use depends largely upon the decisions made as to how it should be utilised to secure maximum satisfaction. Hence an inventory made to elicit information about involvement of homemakers as one of the major decision makers with respect to income brought forth the following details as presented under Table VIII.

TABLE VIII

## PERSONS RESPONSIBLE FOR BUDGETING

Measurable Variables	Percentage of Families		X <sup>2</sup> Value	Inference
	Husband	Both		
Family income				
LIG	6.9	8.65		not significant
MIG	24.14	16.35	0.989	at 5% level
HIG	68.97	75.00		(t value = 3.84)
Employment status of homemakers				
Employed	34.21	53.68		Significant at 5%
			4.13	level
Fulltime	65.79	46.32		(t value = 3.84)
Age range of homemakers				
20 - 40	52.78	50.52		not significant
			0.064	at 5% level
41 - 60	47.22	49.48		(t value = 5.99)

Park (1982) reports that some important decisions that appear to involve both husband and wife are not made jointly at all. Strategies of decision making are either husband dominant, wife dominant or joint.

The results of the study revealed that decision on cash economy which is to be made jointly, was reportedly a joint endeavour only in 78.2 per cent of the selected families while it was found to be husband dominant in the rest. The research in Social Psychology and Social Exchange Theory (1983) have put forth, that such difference may be mainly due to variations sought in measurable variables like family income and age and occupational status of the homemakers.

Therefore  $X^2$  tests were done to find out if the decision making practices with regard to involvement of homemakers and heads of families on money management was dependent upon the measurable variables like age of homemakers, family income and occupational status of homemakers. The calculations revealed that employment status of the homemakers alone influenced their

participation, while the other two variables were found to be insignificant. Appendix II gives details on the calculations done.

## 2. Outcomes of budgeting

Table IX presents the details on outcomes of budgeting.

TABLE IX

### OUTCOMES OF BUDGETING

Outcomes of Budget	Percentage of Families (n = 150)
Adequate	74
Deficit	19
Surplus	7

A majority of 74 per cent of the families reported to be evolving a budget that was adequate while 19 per cent complained of framing a deficit budget. Only a

meagre seven per cent enjoyed the satisfaction of deriving a surplus budget. Reasons cited for deficit budget were because they had to meet emergencies in the form of family expenses, children's education, travel, festival, functions etc. Such emergencies were meted only by procuring loans and getting financial help from in-laws.

### **C. Expenditure Pattern**

The expenditure pattern of the selected families is dealt under the following two aspects:

1. Expenditure pattern
2. Monthly savings

#### **1. Expenditure pattern**

It is well known that any information pertaining to money and especially savings will be disclosed only with suspicion and apprehension. In order to countercheck if the details revealed pertaining to savings was relevant, it was found essential to enquire about the expenditure pattern of the selected families. The data obtained is tabulated under, Table X.

TABLE X  
EXPENDITURE PATTERN

Items of Expenditure	Expenditure incurred (in percentage)	Percentage of Families		
		LIG (n=11)	MIG (n=32)	HIG (n=107)
Food	11 - 20	18.18	9.38	21.5
	21 - 30	...	25.00	35.5
	31 - 40	...	40.62	42.99
	41 - 50	27.27	25.00	...
	51 - 60	54.54	...	...
Housing	1 - 10	100.00	100.00	100.00
Clothing	1 - 10	100.00	100.00	100.00
Housekeeping	1 - 10	100.00	100.00	100.00
Sundries	1 - 10	100.00	100.00	100.00
Education	Nil	54.54	21.88	18.7
	1 - 10	36.37	65.63	70.9
	11 - 20	9.09	12.5	11.21
Savings	Nil	18.00	6.00	1.00
	1 - 10	64.00	28.00	16.00
	11 - 20	9.00	44.00	39.00
	21 - 30	...	19.00	24.00
	31 - 40	9.00	3.00	17.00
	41 - 50	...	...	3.00

As expected food emerged as the major item of expenditure followed by education. Other items like housing, clothing, housekeeping, sundries etc., consumed only between 1 - 10 per cent of the income. Since free medical services were assured to all the Neyveli employees, the question of including health as an expenditure item never arose. It was found that percent expenditure towards savings increased with family income.

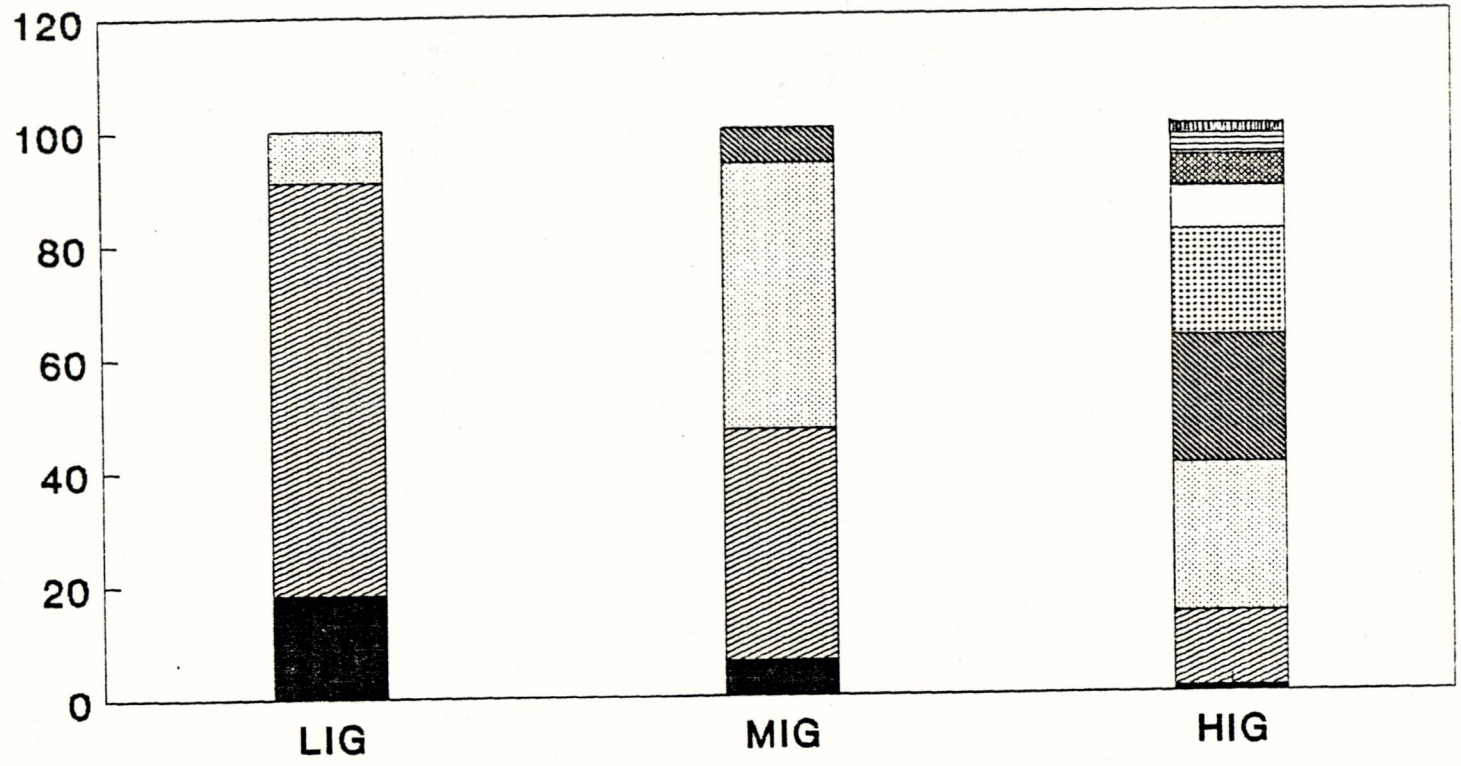
## **2. Monthly savings**

Table XI and XII represent the amount saved per month by the selected families and the changes prudential to savings since the past five years.

TABLE XI  
MONTHLY SAVINGS

Amount Saved (in Rupees)	Percentage of Families		
	LIG (n = 11)	MIG (n = 32)	HIG (n = 107)
Nil	18.18	6.25	0.93
1 - 500	72.73	40.63	13.08
501 - 1000	9.09	46.88	26.17
1001 - 1500	...	6.25	22.43
1501 - 2000	...	...	18.70
2001 - 2500	...	...	7.47
2501 - 3000	...	...	5.61
3001 - 3500	...	...	3.74
3501 - 4000	...	...	...
4001 - 4500	...	...	...
4501 - 5000	...	...	1.87

Totally five families from among the 150 selected, reported not to be practicing savings. The responses received regarding savings highlighted that there was a



- Nil
- ▨ 1-500
- ▩ 501-1000
- ▧ 1001-1500
- ▤ 1501-2000
- 2001-2500
- ▦ 2501-3000
- ▧ 3001-3500
- ▩ 4501 - 5000

**MONTHLY SAVINGS**  
(in Rs.)  
Figure 3

parallel increase in the proportion saved with corresponding increase in income which is on par with Magrabi's (1991) report which indicated that high income consumers saved a larger portion than the low income consumers. The break up of savings ranged upto Rs. 500/- for a maximum of 72.73 per cent of low income families, upto Rs. 1000/- for middle income families (87.51 per cent) and upto Rs. 2000/- for 80.38 per cent of high income families. Figure 3 illustrates the monthly deposit on savings incurred by the three income groups.

The selected families were requested to recall and enter details regarding their savings pattern for the last five years.

TABLE XII

CHANGES PRUDENTIAL TO SAVINGS SINCE PAST FIVE YEARS

Total Savings	Percentage of Families (n = 145)
Constant	60.00
Increased	30.34
Decreased	9.66

For 60 per cent of the 145 families who saved, the savings amount happened to be constant for the past five years. But 30.34 per cent reported to have increased the amount due to reasons stated such as increase in income (72.72 per cent), savings on tax remittance (31 per cent) and efficient planning (11.36 per cent). On the contrary 9.66 per cent repented that their savings amount has decreased within the last five years because of reasons attributed such as education of children, marriage and other financial commitments, inflation and the unavoidable retirement levying a heavy toll on their expenditure pattern.

#### **D. Savings Pattern**

The following headings focus on the savings pattern of the selected families.

1. Source of information
2. Mode of savings
3. Benefits incremental with various institutions
4. Savings for children
5. Goals envisaged through savings

### 1. Source of information

An enquiry made to elicit information on the source which motivated savings practices pointed to the following means of information presented under Table XIII.

**TABLE XIII**  
**SOURCE OF INFORMATION**

Source of Information	Percentage of Families (n = 145)
Advertisements	43
Friends	41
Contacts with savings institutions	37
Agents	23
Relatives	8
Lectures and public meetings	8

Advertisement (43 per cent) in leading newspapers, magazines and pamphlets provided the major source of information followed by friends (41 per cent) who were

on the habit of savings. Contact with savings institutions guided 37 per cent to save. Agents, relatives, lectures and meetings on savings also posed as sources of information.

## 2. Mode of savings

The interview helped to elicit information on the mode of savings adopted by the selected families. Table XIV pictures the modes adopted.

TABLE XIV  
MODE OF SAVINGS

Mode of savings	Percentage of Families (n = 145)
Compulsory savings	100
Deposits in banks	100
Life insurance corporation	82
Post Office savings	81
Chit funds	39
Shares and stocks	10
Co-operative societies	4
Unit Trust of India	1
Tree Magnum	0.7

Next to compulsory savings, cent per cent of the families opted for savings in banks followed by payment to L.I.C. in the form of premium (82 per cent). Savings schemes offered by postal department was sought by 81 per cent while 39 per cent resorted to finance and chit funds. It is evident from the data that all the selected families were very shrewd in selecting the institutions for savings since all the major institutions selected offer cent per cent security and guarantee to the amount saved.

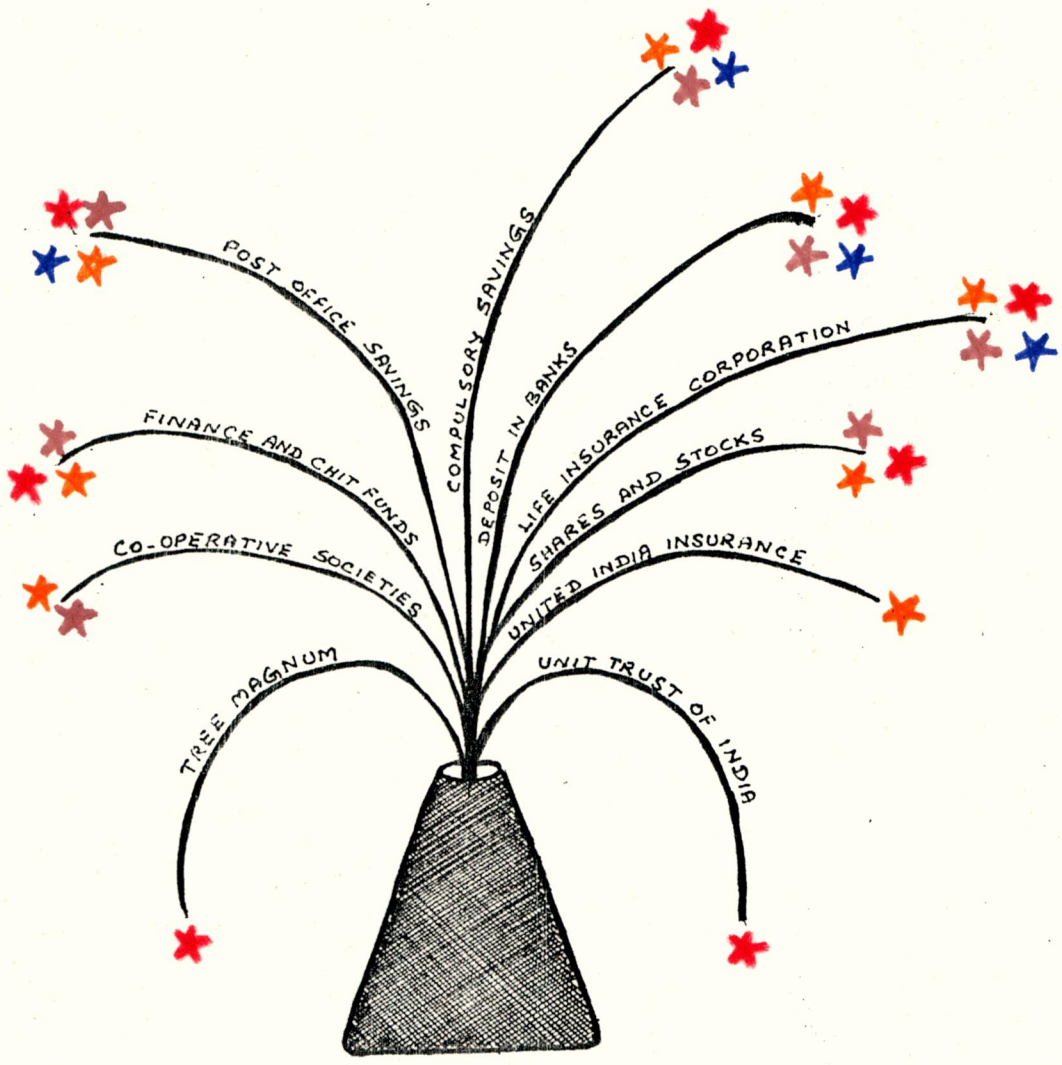
### **3. Benefits incremental with various institutions**

The benefits identified by the selected families with the adopted savings institutions are presented empirically and diagrammatically through Table XV and Figure - 4.

**TABLE XV**  
**BENEFITS INCREMENTAL WITH VARIOUS INSTITUTIONS**

Mode of savings	Percentage of families *			
	High Rate of interest	Safety	Liquidity	Tax saving
Compulsory savings (n = 145)	100.00	100.00	100.00	100.00
Deposit in banks (n = 145)	15.86	51.03	19.31	13.79
Life insurance corporation (n = 119)	14.30	34.45	0.84	50.42
Post office savings (n = 117)	28.21	35.89	3.42	32.45
Finance and chit funds (n = 57)	59.65	15.79	24.79	...
Shares and stocks (n = 14)	100.00	14.29	14.29	...
United India Insurance (n = 12)	...	100.00	...	...
Co-operative societies (n = 6)	...	66.67	83.33	...
Tree magnum (n = 1)	100.00	...	...	...
Unit Trust of India (n = 1)	100.00	...	...	...

\* multiple response



- ★ High Rate of Interest
- ★ Liquidity
- ★ Tax Saving
- ★ Safety

BENEFITS INCREMENTAL WITH VARIOUS INSTITUTIONS

Figure 4.

Only compulsory savings in the form of provident fund and general insurance were identified as offering the major benefits of enhanced interest rate, security, liquidity and tax benefits. Deposits in banks and post offices were mainly preferred because of safety for deposits, while LIC helped to save remittance on tax. Though opted only by negligible number of families, chits, shares and stocks, tree magnum and Unit Trust of India were appreciated for their high returns offered in terms of interest.

#### 4. Savings for children

Specific savings practices adopted for the welfare of the children of the selected families are presented in Table XVI.

TABLE XVI  
SAVINGS FOR CHILDREN

Mode of Savings Adopted	Percentage of Families (n = 54)
Post office savings	33
Commercial banks	26
Life insurance corporation	22
Co-operative societies	11
Chit funds	6
Shares	2

Among the families selected for the study only 54 families (36 per cent) saved specially and specifically for the children. Incidentally savings scheme offered by postal departments ranked first in preference (33 per cent) followed by deposits in commercial banks (26 per cent). Life insurance and co-operative societies were preferred by 22 and 11 per cent respectively. A minority of six and two per cent of the families saved through chits and shares.

#### 5. Goals envisaged through savings

Table XVII represents the goals envisaged by the selected families through savings.

**TABLE XVII**  
**GOALS ENVISAGED THROUGH SAVINGS**

Goals sought	Percentage of Families (n = 145)
Children's education	68
Oldage protection	63
Tackle emergencies	55
Improve standard of living	49
Marriage of children	48
Purchase/construct house	18
Purchase vehicle	18
Purchase land	15
Purchase equipment	10
Start/expand business	4

Goals are nothing more than the ends that individuals or families are willing to work for opine, Nickell and Dorsey (1991). Education of children and oldage protection from the angle of financial stability took precedence over all the other goals sought. Savings to safeguard invincible expenditures on future emergencies, improvement of standard of living and marriage of children and settling them were the other goals dreamt about by 55, 49 and 48 per cent of the families respectively, Goals of a materialistic nature like ownership of a home, vehicle, land and equipment were the others mentioned by selected families.

#### **E. Systems Approach to Financial Management**

Management is the process of organising, directing and controlling human effort so as to accomplish the predetermined goals (Gupta, 1978). This in a way can be called as a system because like management, systems are directed towards a common purpose. A system may be defined as a group of interrelated and interdependent parts operating in a logical manner or sequence according to a predetermined plan, in order to achieve a goal (Littlefield, Rachel and Caruth, 1970).

Therefore an attempt was made to illustrate the savings behaviour of the selected families in the framework of a systems approach. This aspect of the study is discussed under the following heads:

1. Motivational factors
2. A systems approach to savings
3. Values realised through savings
4. Goals realised through savings

#### 1. Motivational factors

An inventory into the factors which motivated the families to save brought forth the following data as presented under Table XVIII.

**TABLE XVIII**  
**MOTIVATIONAL FACTORS**

Motivational factors	Percentage of families (n = 145)
Improve quality of living	55
Realise personal goals	43
Reduce remittance on income tax	31
Save for progeny	26

Savings as a method to improve quality of living motivated 55 per cent of the families to save, while achieving personal desires through savings lured 43 per cent. Savings as a measure to reduce annual remittance on income tax had inspired 31 per cent of the families. Twenty six per cent of the families reported to have had a potent desire to save to enable them to leave financial asset to their progeny.

## **2. A systems approach to savings**

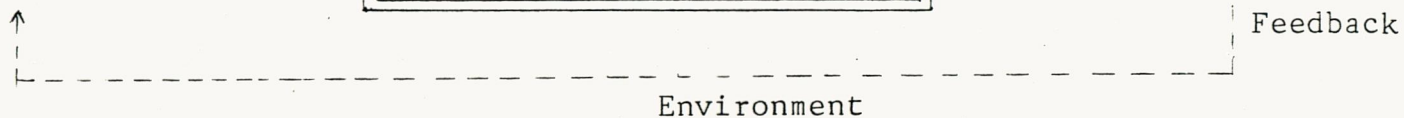
The systems approach framework pertaining to savings is depicted overleaf.

**BOUNDARY**

- INPUT**
- Demands
    - Personal
    - Social
  - Resources
    - Human
  - Motivation
    - improve quality of living (55)
    - achieve personal desires (43)
    - reduce remittance on income tax (31)
    - save for progeny (26)
  - Information (145)
    - decision making

THROUGHPUT	
Compulsory savings	(100)
Deposits in banks	(100)
Life insurance corporation	(82)
Post office savings	(81)
Chit funds	(39)
Shares and stocks	(10)
United India Insurance	(8)
Co-operative societies	(4)
Unit Trust of India	(1)
Tree magnum	(.7)

- OUTPUT**
- Life style (55)
  - Life goal achievements (48)
  - Security (63)
  - Financial independence (55)
  - Comfort (90)
  - Wealth (45)
  - Personal possessions (43)



Numbers in parenthesis indicates families stating in percentage.

**Source:** Framework of Rice and Tucker (1986).

It was evident from the study that inadvertently a significant percentage of the selected families were following a systems approach to savings. Though the families were not at all aware of such an approach to management, the classification of their resources and objectives sought indicate that they were managing quite well through their savings behaviour and were on the right path to self-actualisation.

### **3. Values realised through savings**

Values are important for individuals. They are human in that they are created, evaluated and enjoyed by persons. It is a known fact that family values direct goals. The following table presents the various values realised by the selected families.

TABLE XIX  
VALUES REALISED THROUGH SAVINGS

Values	Percentage of Families * (n = 145)
Resourcefulness	100.00
Tactfulness	100.00
Good health	100.00
Thrift	100.00
Love and affection	100.00
Prudence	100.00
Self-control	100.00
Responsibility	100.00
Contentment	100.00
Business acumen	100.00
Education	68.01
Security	63.26
Enhanced income	55.34
Comfort	44.7

\* multiple response

The major values realised through savings as listed, by the selected families are reasonable level of education, enjoyment of good health, promotion of love and affection among family members, needed security, comfortable living, income augmentation, resourcefulness, prudence and self-control. It also enabled them to develop values of thrift, business acumen and responsibility.

#### **4. Goals realised through savings**

Goals are value based objectives, which are nothing more than the ends towards which the policies and proceedings of a programme are fashioned and towards which the individuals or families are willing to work for (Deacon and Firebaugh, 1975; Varghese, Ogale and Srinivasan, 1989 and Nickell and Dorsey, 1991). All goals when realised accrue certain benefits.

Table XX and XXI present the goals realised by the selected families through savings and the benefits accrual with the realised goals respectively.

TABLE XX  
GOALS REALISED THROUGH SAVINGS

Goals Realised	Percentage of Families * (n = 145)
Purchase of equipment	84.33
Purchase of vehicle	77.24
Education of children	68.01
Construction/purchase of house	39.31
Purchase of plot/site	25.52
Marriage of children	10.34

\* multiple response

It is stated that one major function of money is as a store of value. But in a barter economy acquisition of wealth (savings) becomes simple because savings is that part of the income which is not spent on consumer goods (investments). There are, infact, a variety of things that one can do with savings, and spending money on durables goods (investments) is only one of them. Hence his goals will include both savings and investments.

The goals realised were found to be more prominent with acquisition of tangible possessions like equipments, vehicle and construction/purchasing of house or site. Education and marriage of children were the other goals found predominant among 68.01 and 10.34 per cent of families respectively.

**TABLE XXI**  
**BENEFITS ACCRUAL WITH THE REALISED GOALS**

Benefits Accrued	Percentage of families (n = 145)
Save time	100.00
Worthy investment	100.00
Help practice thrift on other expenses like paid help, house rent, bus fare etc.	100.00
Mental satisfaction	100.00
Handy/timely financial help	86.67
Travelling made comfortable	67.86
Pride of possession	65.05
Enhanced work output	48.78
Improved standard of living	36.84
Prestige value	13.01
Feeling of independence	10.53

The benefits accrual with the realisation of goals pointed indirectly to enhanced quality of living, security, accumulation of wealth and pride of possession. The data clearly indicated that system's approach to savings is in vogue in all the selected families, since they were able to specify their goals and identify the outputs.

#### **F. Savings Behaviour**

The savings behaviour of selected families was analysed in terms of the family variables like family income, size of the family and stage in family life cycle, and through personal variables like age, educational status and employment status of the homemakers. Hence this part included:

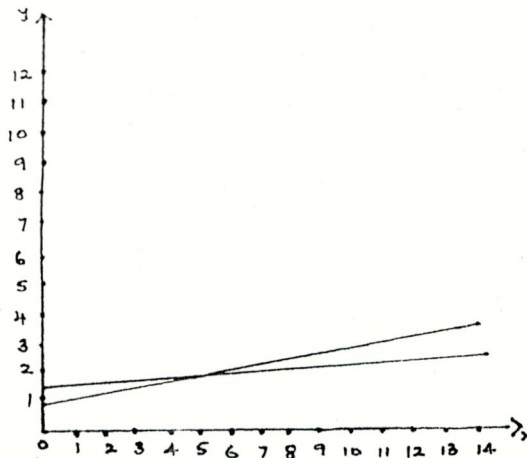
1. Savings - a function of family income
2. Analysis for dispersion of savings based on family life cycle.
3. Analysis for distribution of savings based on family size.
4. Personal variables of homemakers versus savings.

### 1. Savings - a function of family income

Though it is clear that, the savings of a family is dependent upon its income bracket, it was found necessary to establish savings as a function of family income. Through the present status of study one should be able to predict future savings behaviour. Hence the available data on family income and savings was statistically analysed using regression analysis. Table xxii overleaf presents the details on the tabulations for income and savings classified based on low, middle and high income group.

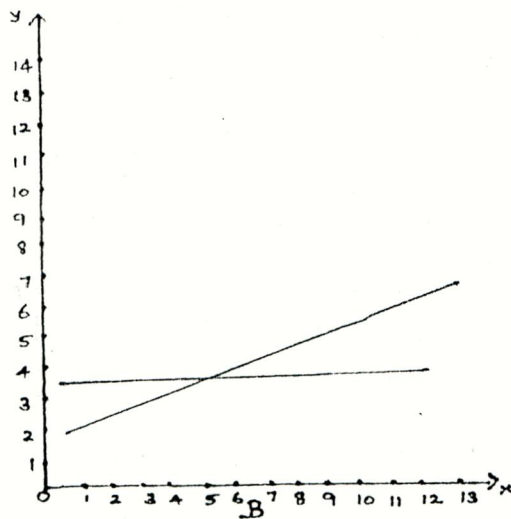
TABLE XXII  
SAVINGS - A FUNCTION OF FAMILY INCOME

Family income	Percentage of families										
	Percentage of savings										
	Nil	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50
LIG (n = 11)	18.18	18.18	45.45	9.09	...	...	...	9.09	...	...	...
MIG (n = 32)	6.25	9.375	18.75	15.63	28.13	12.5	6.25	3.13	...	...	...
HIG (n = 107)	.94	1.87	14.02	12.15	27.103	14.95	9.35	7.48	9.35	.94	1.87



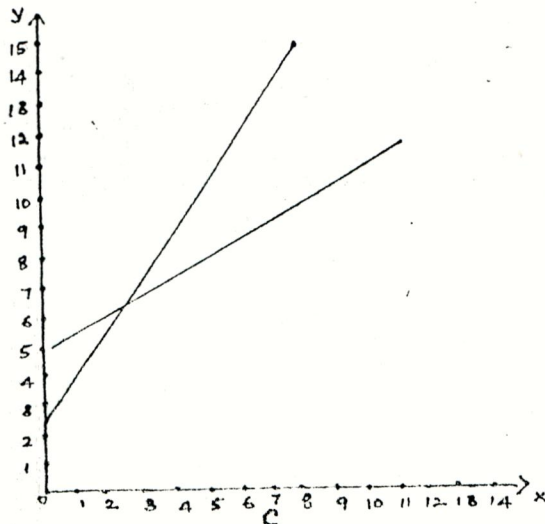
y axis 1cm = 1000/-  
 x axis 1cm = 50/-

A



y axis 1cm = 1000/-  
 x axis 1cm = 50/-

B



y axis 1cm = 1000/-  
 x axis 1cm = 500/-

C

Regression Lines  
 SAVINGS - A FUNCTION OF FAMILY INCOME

(A - low, B - middle, C - high income)

Figure - 5

It is evident from the table that though savings increases with income, the distribution is more, allocating between 6 - 25 per cent of their income, irrespective of the income group. Calculations done for regression analysis and the graphs (though spread on a wide range) indicate that there is a higher degree of correlation between income and savings for the low and middle income groups. The curve for high income groups indicated less degree of correlation pointing to the fact that the savings behaviour was not homogenous. Figure 5 presents the regression curves drawn to establish the association between the two variables of income and savings.

## **2. Analysis for dispersion of savings based on family life cycle**

The stage in the family life cycle might determine the amount allocated for savings. Hence the amount saved by the selected families were classified based on their stage in the family life cycle and were analysed for dispersion and consistency. Table XXIII gives details on the same.

TABLE XXIII

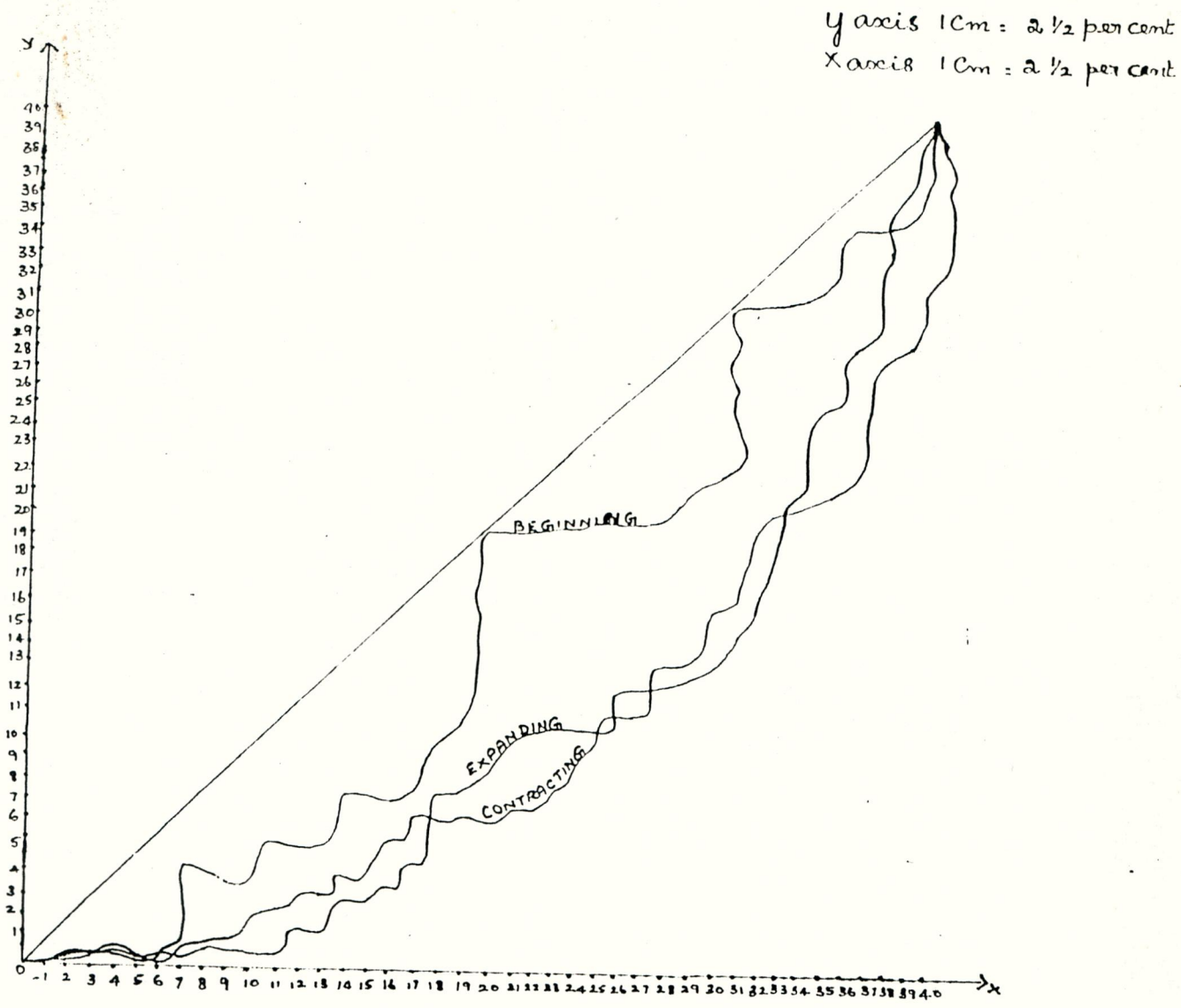
## ANALYSIS FOR DISPERSION OF SAVINGS BASED ON FAMILY LIFE CYCLE

Family life cycle	Percentage of families											Co-efficient of variation (cv.)
	Percentage of Savings											
	Nil	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	
B (n = 11)	...	...	18.18	9.09	18.18	18.18	...	18.18	9.09	...	9.09	60.7859
E (n = 82)	1.23	3.63	21.95	13.41	21.95	14.63	12.20	3.66	7.82	...	...	80.879
C (n = 57)	7.02	7.02	10.53	12.28	31.58	10.53	3.51	8.77	5.26	1.75	1.75	78.4156

B - Beginning stage

E - Expanding stage

C - Contracting stage



SAVINGS VERSUS STAGE IN FAMILY LIFE CYCLE

(Lorenz Curve)

Figure - 6

The analysis for co-efficient of variation indicated the savings behaviour of expanding families to be less consistent and less uniform compared to the other two stages. Figure - 6 diagrammatically (Lorenz curve) represents the data and proves that savings behaviour of the expanding families are less homogenous.

### **3. Analysis for distribution of savings based on family size**

There is a general assumption that as the number of members in the family increase, planning any strategy unless done very meticulously will end up in an unfavourable dimension since the contributions made by all family members are pooled together in an uncompromising manner. Therefore the likelihood of homogeneity is remote. Table XXIV presents the classification of savings behaviour based on family size.

TABLE XXIV

## ANALYSIS FOR DISTRIBUTION OF SAVINGS BASED ON FAMILY SIZE

Family size	Percentage of families											Co-efficient of variation (cv.)
	Percentage of Savings											
	Nil	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	
1 - 3	1.92	...	15.38	13.46	21.15	13.46	7.69	11.54	9.62	1.92	3.85	89.68
4 - 6	4.08	7.14	18.37	12.24	27.55	13.27	8.16	4.08	5.10	...	...	107.92

As expected, when the family size was reportedly medium their savings behaviour, tended to show more variation than that of the small families thereby, indicating their savings behaviour to be less consistent and showing wide dispersion (less correlation).

#### **4. Personal variables of homemakers versus savings**

Home management is a co-operative enterprise where every individual living as a family member has a shared responsibility. In this context a prudent homemaker is considered a gift to the family. Nevertheless her personal variables like age, educational status and employment status either, high or low might influence management decisions. This must be especially true with regard to savings behaviour. Table XXV presents the classification of savings behaviour based on personal variables of homemakers.

TABLE XXV

## PERSONAL VARIABLES OF HOMEMAKERS VERSUS SAVINGS

Personal variables	Number of families						$\chi^2$ value	Inference
	Nil	1-10	11-20	21-30	31-40	41-50		
Age								
21 - 40 (n = 81)	1	19	28	20	10	3	6.7	not significant at 5% level (t value = 11.1)
41 - 60 (n = 69)	4	14	29	12	10	..	...	
Education								
Illiterate (n = 5)	2	3	..	..	..	..	...	
Schooling (n = 74)	3	18	33	15	4	1	38.67	Significant at 5% level (t value = 18.3)
Graduation (n = 71)	..	11	25	17	16	2	...	
Employment fulltime homemaker (n = 75)	5	21	19	18	12	...	...	Significant at 5% level (t value = 11.1)
Gainfully employed homemaker (n = 75)	..	12	38	14	8	3	18.1	

The calculations revealed that the personal variables like educational and employment status of homemakers influenced savings while age of the homemaker was found to be insignificant.

### G. Problems Encountered with Savings

Among the 150 selected families a majority of 82.77 per cent reported that they did not face any problems in connection with savings while the rest contradicted it stating a few problems as presented under Table XXVI.

**TABLE XXVI**  
**PROBLEMS ENCOUNTERED WITH SAVINGS**

Problems	Percentage of families (n = 26)
inflation	19.23
unexpected expenditure	15.38
deficit budget	15.38
Supporting other family members	7.69
lack of liquidity	7.69
decline in money value	3.85

Inflation which in turn brings forth decline in money value was projected by 19.23 and 3.88 per cent of the families who encountered problems with savings. Unexpected expenditure leading to deficit budget posed as problems for 15.38 per cent each respectively. Supporting other family members warranting additional expenditure and lack of liquidity were also expressed.

## Summary and Conclusion

## V SUMMARY AND CONCLUSION

The family is appreciated for the important socio-economic functions it performs, thereby acting as a vital means of preserving and transmitting cultural values. It can and often does support its individual members, thereby investing in their future growth and acting as a vital resource for development. The household with its family members is viewed by home economists as the smallest unit of economic analysis, since they use and transform resources in order to meet their various needs. Analysis and discussion should project and focus on finding solutions to the interrelated and unresolved issues which have an impact on the family, like provision of basic human needs, improving productivity and sustainability and enhanced quality of life. In this context a systems approach to financial management will help management to define its boundaries and reduce the changes of oversight.

The study was conducted with 150 samples (75 each with full time and employed homemakers respectively)

identified from Neyveli town in Tamil Nadu. The study was conducted using an interview schedule requesting details on the income and savings practices. The highlights of the findings are summarised below:

**\* Socio-economic background**

A significant percentage of the selected families were medium sized and in the expanding stage of their family life cycle. The study revealed 64 and 50.67 per cent of the homemakers and heads of families to be in their productive age range between 26 - 45 years. Similarly a significant percentage (47.32 and 65.33 per cent of homemakers and heads of families respectively) had received university education. Among the employed homemakers teachers dominated while heads of families shone as administrators (42 per cent) and technicians (26 per cent). The study proved that employment status of homemakers helped to augment family income as only 18.67 per cent reported to be earning below Rs. 4450/- per month, as against 38.67 per cent of families with full time homemakers who reportedly earned below Rs. 4451/-. Salary/wages posed as the major source of income of the

selected families. The middle and high income families disclosed to be the proud owners of physical assets like vehicle, consumer durables, house and plots.

#### **\*Budgeting**

The study brought to surface a majority of 92 per cent of selected families as practicing and framing monthly budget. Statistical analysis using Chi-square highlighted employment status of the homemakers to be influential in their participation in budgeting. For 74 per cent of the families the budget framed was reportedly adequate.

#### **\* Expenditure pattern**

Food emerged as the major item of expenditure followed by education. Data also pointed to the fact that per cent expenditure towards savings increased with family income.

One hundred and forty five families practiced monthly savings. Among them 60 per cent were in the

habit of remitting a constant amount hence the past five years towards savings and 30.34 per cent stated to have increased allocation due to reasons attributed as increase in income, aversion of tax and efficient planning. The break up of savings ranged upto Rs. 500/- for a maximum of 72.73 per cent of low income families, upto Rs. 1000/- for middle income families (87.51 per cent) and upto Rs. 2000/- for 80.38 per cent of high income families.

#### **\* Savings pattern**

Advertisements and friends were mainly responsible for inculcating savings behaviour. Compulsory savings (provident fund and general insurance) and deposit in banks were found to take precedence over life insurance and post office savings (82 and 81 per cent respectively). The other modes adopted were chits, shares and stocks and UTI. High rate of interest, safety to the principal amount, liquidity and tax benefits were the major advantages identified with the various institutions or modes for savings, among which compulsory savings, deposit in banks, LIC and post office savings in an order ranked the list. Among the families selected

for the study only 36 per cent made specific remittance for children for which schemes offered by post office and commercial banks were preferred. Responses received for goals envisaged brought forth aspirations of a human nature like children's education, oldage protection, future emergencies, improved standard of living and marriage of children which predominated acquisition of physical assets.

**\* Systems approach to financial management**

Management of financial resources was viewed as a system which directed action towards a common purpose. The systems approach consisted of three principal steps namely, inputs in the form of demands and resources, throughput which included modes of savings adopted, and output reflected the goals realised. Trends in motivation focussed upon improvement in quality of living (55 per cent) achievement of personal desires (43 per cent) reduction in income tax remittance (31 per cent) and savings for progeny (26 per cent). Output was envisaged in terms of improved life style (55 per cent), life goal achievement (48 per cent), security (63 per cent), financial independence (55 per cent), comfort (90

per cent), wealth (45 per cent) and personal possessions (43 per cent).

Systems approach to financial management of selected families threw light upon the savings behaviour and their dreams for self-actualisation. The values which were identified as directive forces to savings were resourcefulness, tactfulness, thrift, self control, responsibility, prudence, education and security.

The major goals realised through savings were purchase of equipment and vehicle, education of children, procuring a house and plot and marriage of children among which the first two ranked well in accomplishment. The families stated that with the realisation of such goals the benefits accrued were saving of time, decision on worthy investment, enhanced quality of living, security, accumulation of wealth and pride of possession.

#### **\* Savings behaviour**

Savings behaviour is explained by analysing savings with family variables like family income, family size and stage in family life cycle. The findings indicated that

savings increased with increase in income. Calculations done using regression analysis indicated a higher degree of correlation between income and savings for low and middle income group, while the high income groups responded to a lesser degree of correlation.

Analysis for co-efficient of variation indicated the savings behaviour of expanding families to be less consistent and less uniform compared to other stages. Figurative description using Lorenz curve also proved the data. Similarly the trend of medium families towards savings behaviour showed wide dispersion.

The savings behaviour of the selected families were analysed based on the personal variables of the homemakers. The calculations (chi-square) revealed that the education and employment status of the homemakers influenced the savings behaviour while age of the homemaker proved insignificant.

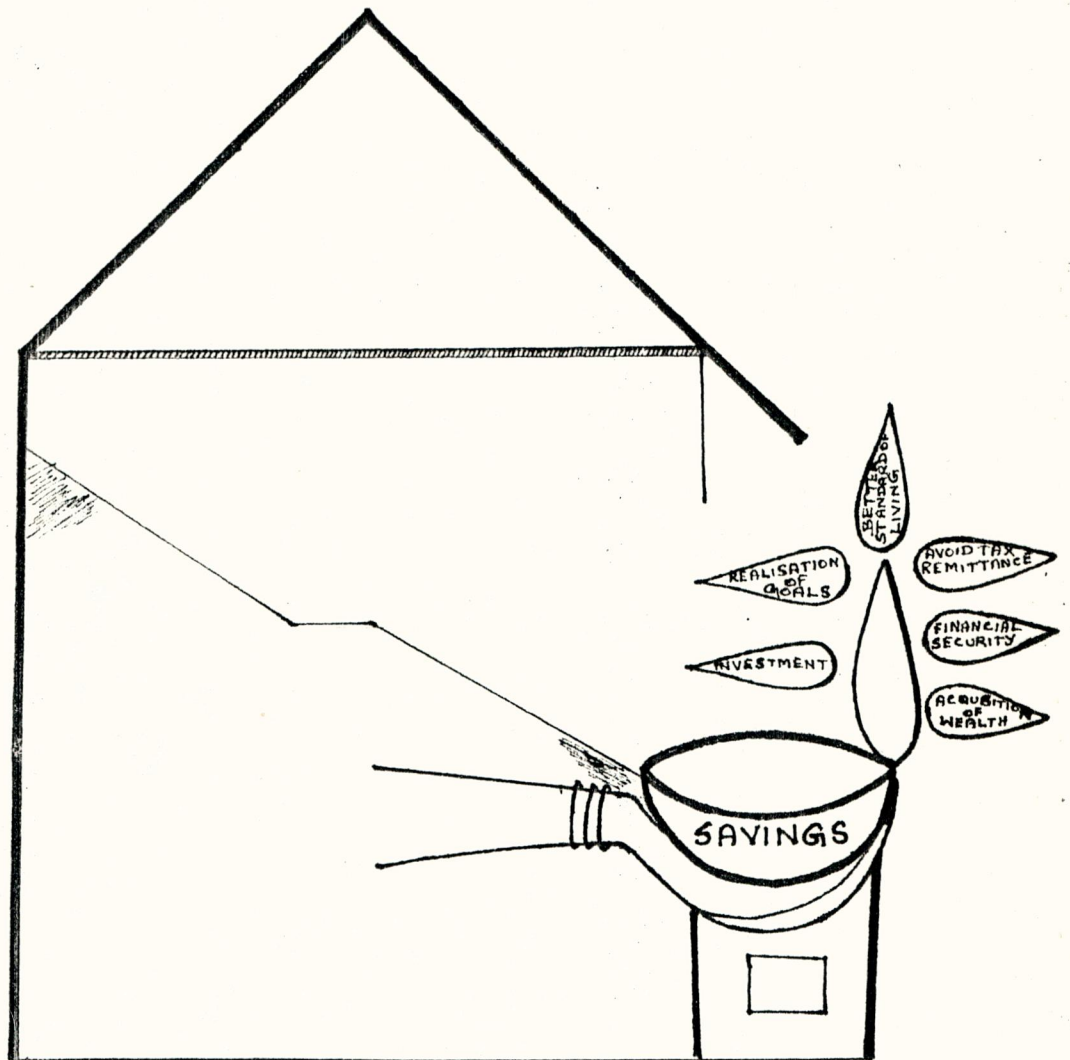
#### **\* Problems encountered with savings**

Inflation which in turn brings forth decline in money value was projected by 19.23 and 3.88 per cent of

families as problems. Unexpected expenditure leading to deficit budget, supporting other family members and lack of liquidity were also expressed as problems.

The study enabled identification of major issues impelling savings behaviour. It has acted as an eye opener for further research. The investigator puts forth the following recommendations:

- \* Indian families should make earnest and concerted efforts to improve their savings propensity.
- \* Families should develop prudence in management of financial resources.
- \* Children should be inculcated the values of thrift and frugality during developmental stages.
- \* Government should enforce compulsory savings for people working in unorganised sector. Efforts should be made to disseminate knowledge on small savings through proper communication media.



### SAVE FOR A BRIGHT FUTURE

Drops of water make the mighty ocean. Let future build up the heritage of prosperity through prodigality.

## Bibliography

## BIBLIOGRAPHY

- Adrian, J.  
and  
Daniel, R.  
1976
- "Impact of Socio-economic factors on selected Food Nutrients in the United States", American Journal of Agricultural Economics, P 31.
- Agan, M.S.  
1970
- The House, Oxford and IBH Publishing Co., Bombay, P 3.
- Avery, R.B.  
Ellihansen, G.E.  
and  
Kennickell, A.B.  
1987
- "Change in consumer installment debt", evidence from the 1983 and 1986 surveys of consumer finances, Federal Reserve Bulletin, Pp 261 - 278.
- Baumol, W.J.  
Blinder, A.S.  
and  
Scarth, W.M.  
1985
- Economics Principles and Policy, Academic Press, Canada, Pp 131-132.
- Bryant, K.W.  
1990
- The Economic Organisation of the Household, Cambridge University Press, Cambridge, Pp 1, 78.
- Cargill, T.F.  
1979
- Money, The Financial System and Monetary Policy, Prentice Hall International, Englewood Cliffs Pp 7, 153 - 154.

- Covey, S.R.  
1990  
"The seven habits of highly effective people", Powerful Lessons in Personal Change, Simon and Schuster, New York, P 113.
- Crockett, J.  
and  
Harper, C.  
1986  
Starting Home Economics, Macmillan Education, New York, Pp 69, 84 - 89.
- Crowther,  
1977  
Money and Banking, Umasugant Publications, Madurai, P 1.
- Davis,  
1976  
"Decision Making Within the Household", Journal of Consumer Research, 2, Pp 241 - 260
- Deacon, R.E.  
and  
Firebaugh, F.M.  
1981  
Family Resource Management, Principles and Applications, Allyn and Bacon, Boston, Pp 18 - 25.
- Devadas, R.P.  
1970  
Better Homes, Oxford University Press, Calcutta, Pp 250 - 271
- Devadas, R.P.  
1977  
Perspectives in Home Science, Published by the Home Science Association of India, Pp 8, 76, 152.
- Dolan, E.G.  
1980  
Basic Micro-economics, Second Edition, The Dryden Press, Hinsdale, P 132.

Duncan, G.J.  
and  
Morgan, J.N.  
1980

"The Incidence and Some  
Consequences of Major Life  
Events", Patterns of Economic  
Progress, Volume VIII, Institute  
of Social Research, University  
of Michigan, Ann Arbor,  
Pp 183 - 212.

Duncan, G.J.  
1984

"Years of Poverty", Institute  
for Social Research, The  
University of Michigan, Ann  
Arbor, Pp 109 - 115.

Eyell, M.P.  
Paolucci, B.  
and  
Buboly, M.J.  
1984.

"Developing Family Properties",  
Home Economics Research Journal,  
P 12.

Feldstein, M.S.  
1978.

"The Welfare cost of Capital  
Income Taxation" Journal of  
Political Economy, Volume 86,  
P 529.

Fetterman  
1976..

Money Management, Choices  
Decisions, Houghton Mifflin  
Company, Attanta, Pp 185 - 197.

Frankena, W.  
1970 .

"Toward a Philosophy of the  
Family", in Family Values, paper  
presented at the Clara Brown  
Army Symposium in School of Home  
Economics, University of Minesota,  
Minneapolis, Pp 10 - 14.

- Franklin, B.  
1984  
Tips on Income Tax Saving, Ram Nivas Lakhotia, Asha Publishing House, P 85.
- Gaur, V.P.  
and  
Narang, D.B.  
1984.  
Income Tax Law and Practice, Kalyani Publishers, New Delhi, Pp 30 - 34.
- Geetha,  
1983  
"Money Management Practices of Selected Plantation Workers", Unpublished thesis submitted to Bharathiar University, P 49.
- George,  
and  
Claude, S.  
1974.  
Management for Business and Industry, Englewood Cliffs, Prentice Hall, New Jersey, P 4.
- Giriappa, S.  
1984  
Income, Saving and Investment Pattern in Rural India, Ashish Publishing Home, New Delhi, Pp 3 - 4, 47.
- Glick, P.C.  
1984.  
"Marriage, Divorce and Living Arrangements", Journal of Family Issues, P 5.
- Goldfeld, S.M.  
and  
Chandler, L.V.  
1981.  
The Economics of Money and Banking, Happer International, New Delhi, Pp 10 - 11.

- Gross, I.H.  
Crandall, E.W.  
and  
Knoll, M.M.  
1973. Management for Modern Families,  
Appleton - Century Crafts, New  
Jersey, Pp 112 - 140.
- Gross, I.H.  
Crandall, E.W.  
and  
Knoll, M.M.  
1980. Management for Modern Families,  
Prentice - Hall, New Jersey,  
Pp 26 - 29.
- Gupta, S.C.  
1982. Fundamentals of Statistics,  
Himalayan Publishing House,  
Bombay, P 16.
- Gupta, S.P.  
1978 Management, Concepts and  
Environment, S. Chand and  
Company Ltd., New Delhi, P 7.
- Gupta, S.P.  
1991 Statistical Methods, Sultan  
Chand and Sons Publications,  
New Delhi, P E - 47.
- Hafstrom, J.L.  
and  
Dunsing, M.M.  
1972. "Satisfaction and Education: A  
New Approach to Understanding  
Consumption Patterns", Home  
Economics Research Journal,  
Pp 8 - 12.

- Hanna, S.  
Chang, Y.R.  
and  
Fan, X.J.  
1991. "Prescribing Life Cycle Savings Patterns for Households" Paper presented at 37th Annual Conference of the American Council on Consumer Interests, Cincinnati, Pp 92 - 94.
- Harold, K.  
and  
Donnell, C.  
1976. Essentials of Management, Tata Mc Graw - Hill Publishing Co., New Delhi, P 53.
- Hempel, D.J.  
1974. "Family Buying Decisions: A Cross Cultural Perspective", Journal of Marketing Research, 11, Pp 295 - 302.
- Hill, M.S.  
and  
Hill, D.H.  
1981 "5000 American Families' Patterns of Economic Progress", Volume IX, Institute for Social Research, University of Michigan, Ann Arbor, P 110 - 114
- Horne, J.C.  
1982 Fundamentals of Financial Management, 4th Edition, Prentice Hall of India Private Ltd., New Delhi, Pp 31 - 32.
- Israney, S.M.  
1970 Principles of Economics, Kitab Mahal, Allahabad, P 530.

- Jack, D.W.  
1975  
Essentials of Management,  
Illinois, The Dryden Press, P 5.
- James, F.M.  
1973  
Accounting for Managerial  
Analysis, Homewood III: Richard  
D. Irwan, Inc., P 144.
- Jhingam, M.L.J.  
1986  
Money, Banking and International  
Trade, Konark Publications,  
New Delhi, Pp 87 - 91.
- Kephart,  
1977  
The Family, Society and the  
Individual, 4th Edition,  
Houghton Mifflin company, Boston,  
New Jersey, P 3.
- Kothari, C.R.  
1990  
Research Methodology - Methods  
and Techniques, Wiley Eastern  
Ltd., New Delhi, P 117.
- Lindauer, J.  
1976  
Macro-Economics, A Wiley/Hamilton  
Publications, Santa Barba, P 43
- Littlefield, C.L.  
Rachel, F.M.  
and  
Caruth, D.L.  
1970  
Office and Administrative  
Management, 3rd Edition,  
Englewood Cliffs, N.J. Prentice  
Hall, P 103.
- Magrabi, F.M.  
1991  
The Economics and Household  
Consumption, Praeger, New York,  
Pp 28 - 30.

- Manimozhi, K.  
1987 "Income and Expenditure Pattern of Selected Families in Coimbatore City, Unpublished thesis submitted to Bharathiar University, P 31.
- Mann, M.K.  
1984 Home Management for Indian Families, Kalyani Publishers, New Delhi, Pp 1 - 3.
- Millward, R.  
Parker, D.  
Rosenthal, L  
and  
Summer, M.T.  
1983 "Survey in Economics" Public Sector Economics, Longman, London, P 56.
- Mukli, H.R.  
and  
Srivastava, R.S.  
1990 An Introduction to Social Science, Satya Prakashan, New Delhi, P 337.
- Mullick, P.L.  
1984 Elements of Home Science, Kalyani Publishers, New Delhi, Pp 14 - 23.
- Nickell, P.  
and  
Dorsey, J.M.  
1991 Management in Family Living, 4th Edition, Wiley Eastern Ltd., New Delhi, Pp 340 - 365.
- Newlyn, W.T.  
1971 Theory of Money, Oxford University Press, New Delhi, P 1.
- O'Connor, P.J.  
Sullivan, G.L.  
and  
Pogoryelski, D.A.  
1983 "Cross Cultural Family Purchasing Decisions: A Literature Review" Advances in Consumer Research, 10: Pp 59 - 64.

- Oppong, C.  
1970 "Conjugal Power and Resources: An Urban African Example", Journal of Marriage and the Family, No: 32, Pp 676 - 680.
- Paolucci, B.  
1978 "Energy Decisions and Quality Living" Journal of Home Economics, Volume 70, Pp 22, 23.
- Park, C.  
1982 "Joint Decisions in Home Purchasing: A Muddling - Through Process", Journal of Consumer Research, No: 9, Pp 151 - 162.
- Pennock, J.L.  
1970 "Sources of Expenditure Data", Family Economics Review, United State Department of Agriculture, Pp 9 - 20.
- Pillai, K.G.  
1981 "An Overview of Savings Behaviour in India," Yojana, Volume 6, P 15.
- Rajarathanam,  
1987 "3000 Proverbs," Good Will Publishing House, New Delhi, P 45.
- Rangarajan, C.  
1991 Issues of Monetary Management, Anmol Publications, New Delhi, P 53.

- Rao, M.S.  
1980  
Development Issues of Indian Economy, Second Edition, Premier Book Company, New Delhi, P 132.
- Rice, A.S.  
and  
Tucker, S.M.  
1986  
Family Life Management, 6th Edition, Macmillan Publishing Company, New York, P 43, 181 - 213.
- Rodman, H.  
1972  
"Marital Power and the Theory of Resources in a Cross Cultural Context", Journal of Comparative Family Studies, No: 1, Pp 50-67.
- Saluter, A.F.  
1983  
"Marital Status and Living Arrangements: March, 1982", Bureau of the Census, Current Population Reports, No: 380, Washington, P. 20.
- Saraf, V.K.  
1991  
"Some Behavioural Issues", Trends in Management, Anmol Publications, New Delhi, P 53.
- Scanzoni, J.  
1972  
Sexual Bargaining: Power Politics in the American Marriage, University of Chicago Press, Chicago, P 30.

- Schweitzer, S.O.  
1971 "Occupation Choice, High School Graduation and Investment in Human Capital", The Journal of Human Resources, Pp 131 - 132.
- Sharma, B.A.V.  
Prasad, R.D.  
and  
Satyanarayana, P.  
1989 Research Methods in Social Sciences, Sterling Publishers Private Ltd., New Delhi, P 197.
- Sidhu,  
1987 Methodology of Research in Education, Sterling Publishers, New Delhi, P 38.
- Sidhu,  
1989 Methodology of Research Education, Sterling Publishers, New Delhi, P 36.
- Simha, S.L.N.  
1975 Economic and Social Change in India, The Jupiter Press Private Ltd., Madras, Pp 243 - 244.
- Singh, P.  
1986 Investment Management, Himalayan Publishing House, Bombay, P 112.
- Soundararaj, S.  
1974 A Text Book of Household Arts, Orient Longman Ltd., Madras, Pp 50 - 54.
- Spiro, R.  
1983 "Persuasion in Family Decision Making", Journal of Consumer Research, No: 9, Pp 393 - 402.

- Stillman, J.  
1984  
Guide to Personal Finance,  
Himalayan Publishing House,  
Bombay, P 110.
- Swanson, B.B.  
1981  
Introduction to Home Management,  
The English University Press  
Ltd., London, Pp 16 - 20.
- Unger, M.A.  
and  
Wolf, H.A.  
1972  
Personal Finance, 3rd Edition,  
Allyn and Bacon Inc., Boston,  
P 48.
- Varghese, M.A.  
Ogale, N.N.  
and  
Srinivasan, K.  
1989  
Home Management, Wiley Eastern  
Limited, New Delhi, Pp 17 - 20.
- Venkatapadmavathy, K.  
1982  
"A Comparative Study of the  
Managerial Practices of the Low,  
Middle and High Income Families,  
Unpublished thesis submitted to  
Bharathiar University, P 82.
- Venugopalan, N.  
and  
Balasubramaniam, N.S.  
1977  
Money and Banking, Uma Sugant  
Publications, Madurai, P 1.
- Welsh, G.  
1976  
Budgeting, Profit Planning and  
Control, Prentice - Hall of  
India Pvt. Ltd., P 3.

- Whitlow, H.  
1967  
"Keeping Household Accounts",  
Journal of Home Economics and  
Domestic Subjects, Volume XIII,  
Pp 40 - 41.
- Wilk, R.R.  
1989  
"Decision Making and Resource  
Flows within the Household:  
Beyond the Black Box", The  
Household Economy, West View  
Press, San Francisco, Pp 23 - 31.
- Wilkinson, T.S.  
and  
Bhandarkar  
1982  
Methodology and Techniques of  
Social Research, Himalayan  
Publishing House, Bombay,  
Pp 188 - 197.
- Wonnacott  
and  
Wonnacott  
1984  
Economics, 2nd Edition, Mc Graw-  
Hill International Book Company,  
Auckland, Pp 197 - 199.
- Xiao, J.J.  
and  
Olson, G.I.  
1993  
"Mental Accounting and Saving  
Behaviour", Home Economics  
Research Journal, Volume 22, No: 1  
Sage Periodicals Press, New Delhi,  
Pp 92 - 94.
- Young, P.V.  
1988  
Scientific Social Surveys and  
Research, 4th Edition, Prentice  
Hall of India Private Ltd.,  
New Delhi, P 190.

# Appendices

APPENDIX I

INTERVIEW SCHEDULE

SAVINGS PRACTICES OF SELECTED URBAN FAMILIES IN NEYVELI

I. Identification:

1. Household rating : Gainfully employed homemaker  
Full time homemaker
2. Sample number :
3. Type of family : Nuclear Joint
4. Family background :

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Sl. No.	Name	Relation- ship to the head	Age	Sex	Edn. Qfn.	Major Occupation	Minor Occupation
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- 
5. Are you : Employed Retired

6. Sources of family income

Sources	Amount	Rs.
Agriculture		
salary/wages		
Business		
House/land/rent		
Livestock		
Interest from lending		
Interest from savings		
Gifts		
Financial assistance from parents/in-laws		
Pension		
Others - specify		
<hr/>		
TOTAL		

7. Details of your vested interests (property)

II. Planning/Budgeting

1. Do you have the habit of planning your expenditure
- |               |        |         |
|---------------|--------|---------|
|               | Yes    | No      |
| If yes, it is | Mental | Written |

2. Do all your family members take part in planning the budget? Yes No

If no, who plans it? i. Husband  
ii. Wife  
iii. Both  
iv. Parents/in-laws  
v. Others specify

3. Are you all satisfied with your planning process? Give reasons. Yes No

Reasons:

4. Is your budget Surplus  
Adequate  
Deficit

If deficit, how do you manage?

5. In which area does this deficit normally occur?

### III. Expenditure

1. Indicate the total monthly family expenditure.

Expenditure	Amount	%
Food		
Housing		
Tax		
Debts repayment		
Household maintenance		
Fuel		
Electricity		
Water		
Telephone		
Replacement and repairs		
Household cleaning		
Correspondence		
Clothing		
Health		
Furnishing and equipment		
Transportation		
Education		
Recreation		
Books/Magazines		

Savings

Community obligations

Gifts

Others - specify

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Total

---

2. Do you save Yes No  
Regularly  
Occasionally

3. Mention if there has been an increase or decrease in your savings pattern for the last five years.

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Source	88-89	89-90	90-91	91-92	92-93
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- 
4. Reasons for this increase/decrease in savings?

5. Are you all satisfied with your mode of savings?

Yes

No

#### IV. Savings Pattern

1. What was the source of information for savings?

- i. Advertisement
  - a. Paper (Dailies)
  - b. Magazines
  - c. Pamphlets
- ii. Friends
- iii. Relatives
- iv. Public meetings
- v. Lectures
- vi. Agents
- vii. contacts with various savings institutions like chits funds, banks, finance agencies, etc.

2. Who takes decisions about savings?

- i. Husband
- ii. Wife
- iii. Both
- iv. In-laws/Parents
- v. Others - specify

3. What is your mode of savings?

- i. Hundis
- ii. Postal Savings
- iii. Life Insurance Corporation

- iv. Debentures
- v. Fixed Deposits in companies
- vi. Deposits in Co-operative Institutions
- vii. Deposits in Banks
- viii. Shares
- ix. Stock
- x. Finance/Chit Funds
- xi. Unit Trust of India
- xii. Tree magnum or investments in trees (specify)
- xiii. Insurance Companies

- a. Oriental Insurance
- b. United India Insurance
- c. New India Assurance Co.
- d. National Insurance Co.

- xiv. Traditional Savings
- xv. Others - specify

4. Details about savings

Securities	Amount Rs.	Reasons for preference				
		A	B	C	D	E

Post Office

Banks

Insurance

LIC

United India Insurance

Oriental Insurance

New India Assurance

National Insurance

Shares/Stocks

Finance/Chit Funds

Tree Magnum

---

5. Details about your nominee.  
Have you nominated anybody for the savings and policies?

Yes

No

If yes, whom have you nominated?

6. Are you saving anything specifically for your children?

Yes

No

If yes,

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Type of savings	Amount saved	Amount received at the time of maturity
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Bank

Insurance

Post office

Others - specify

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7. Apart from the above modes, do you have any compulsory savings?

Yes

No

If yes, what is it?

8. What are the desires you have fulfilled with your savings?

Desires	Amount used

9. State the benefits you have fulfilled by realising these desires.

V. Systems Approach to Savings

1. Indicate what motivated you to save

- i. Individual desires
- ii. Save to improve the quality of living
- iii. To leave financial assets to offspring
- iv. Reduce remittance on Income Tax

2. Values realised through savings.

3. Mention the benefits accrued with realisation of goals

VI. 1. Indicate the problems involved in savings.

APPENDIX - II

CHI-SQUARE TEST

Persons Responsible for Budgeting

Table of Original Values

Decision Making	21 - 40	41 - 60	Total
Husband	19	17	36
Both	49	48	97
Total	68	65	133

$$E_{11} = \frac{36 \times 68}{133} = 18.41 \quad E_{21} = \frac{97 \times 68}{133} = 49.59$$

$$E_{12} = \frac{36 \times 65}{133} = 17.59 \quad E_{22} = \frac{97 \times 65}{133} = 47.41$$

Table of Expected Values

18.41	17.59	36
49.59	47.41	97
68.00	65.00	133

O	E	$(O - E)^2$	$(O - E)^2/E$
19	18.41	.35	.02
42	49.59	.35	.007
17	17.59	.35	.03
48	47.41	.35	.007
			$E (O - E)^2/E = .064$

$$X^2 = .064$$

=====

$$V = (r - 1) (c - 1)$$

$$(2 - 1) (2 - 1)$$

$$= 1 \times 1$$

$$= 1$$

for  $V = 1$ ,  $X^2_{0.05} = 3.84$

The calculated value of  $X^2$  is lesser than the table value.

#### Table of Original Values

Decision Making	Employed Homemaker	Full time Homemaker	Total
Husband	13	25	38
Both	51	44	95
Total	64	69	133

$$E_{11} = \frac{38 \times 64}{133} = 18.29$$

$$E_{21} = \frac{95 \times 64}{133} = 45.71$$

$$E_{12} = \frac{38 \times 69}{133} = 19.7$$

$$E_{22} = \frac{95 \times 69}{133} = 49.29$$

**Table of Expected Values**

	18.29	19.71	38
	45.71	49.29	95
	64.00	69.00	133
O	E	$(O - E)^2$	$(O - E)^2/E$
13	18.29	27.98	1.53
51	45.71	27.98	.6
25	19.71	27.98	1.42
44	49.29	27.98	.58
			$\Sigma (O - E)^2/E = 4.13$

$$V = (r - 1) (c - 1)$$

$$= (2 - 1) (2 - 1)$$

$$= 1 \times 1$$

$$= 1$$

$$\text{for } V = 1, \chi^2_{0.05} = 3.84$$

The calculated value is greater than the table value.

**Table of Original Values**

Decision Making	HIG	MIG	LIG	TOTAL
Husband	2	7	20	29
Both	9	17	78	104
Total	11	24	98	133

$$E_{11} = \frac{29 \times 11}{133} = 2.4$$

$$E_{21} = \frac{104 \times 11}{133} = 8.6$$

$$E_{12} = \frac{29 \times 24}{133} = 5.2$$

$$E_{22} = \frac{104 \times 24}{133} = 18.8$$

$$E_{13} = \frac{29 \times 98}{133} = 21.37$$

$$E_{23} = \frac{104 \times 98}{133} = 76.63$$

**Table of Expected Values**

2.4	5.2	21.37	28.97
8.6	18.8	76.63	94.03
11.0	24.0	98.00	133.00

O	E	$(O - E)^2$	$(O - E)^2 / E$
2	2.4	.16	.067
9	8.6	.16	.019
7	5.2	3.24	.62
17	18.8	3.24	.17
20	21.37	1.88	.088
78	76.63	1.88	.025

$$\begin{aligned}
 V &= (r - 1) (c - 1) \\
 &= (2 - 1) (3 - 1) \\
 &= 1 \times 2 \\
 &= 2
 \end{aligned}$$

for  $V = 2$ ,  $\chi^2_{0.05} = 5.99$

The calculated value is less than the table value.

### APPENDIX III

#### Savings - A Function of Family Income Regression Equation of y on x and x on y for Low Income Group

$\sum X = 176.5$	$\sum Y = 16650$
$\bar{X} = 160.45$	$\bar{Y} = 1513.64$
$\sum x^2 = 412472.3$	$\sum y^2 = 2340454.6$
	$\sum xy = 779151.35$

Regression equation for y on x

$$Y - \bar{Y} = r \frac{\sigma_y}{\sigma_x} (X - \bar{X})$$

$$Y - 1513.64 = 1.89 (X - 160.45)$$

$$Y - 1513.64 = 1.89 x - 303.25$$

$$Y = 1.89 x - 303.35 + 1513.64$$

$$Y = 1.89 x + 1210.29$$

Regression equation for x on y

$$X - \bar{X} = r \frac{\sigma_x}{\sigma_y} (Y - \bar{Y})$$

$$X - 160.45 = .333 (Y - 1513.64)$$

$$X - 160.45 = .333 Y - 504.042$$

$$X = .333 Y - 343.59$$

The values of  $x$  and  $y$  for the regression equation  $y$  on  $x$  and  $x$  on  $y$  are

$x$	$y$	$y$	$x$
75	1352.04	1050	6.06
0	1210.29	1100	22.71
120	1437.09	1100	22.71
0	1210.29	1100	22.71
25	1257.54	1200	56.01
25	1257.54	1200	56.01
120	1437.09	1500	155.91
200	1588.29	2000	322.41
200	1588.29	2000	322.41
300	1777.29	2200	389.01
700	2533.29	2200	389.01

Regression Equation for Middle Income Group

$$\begin{aligned} \sum X &= 16489 & \sum Y &= 114600 \\ \bar{X} &= 515.28 & \bar{Y} &= 3581.25 \\ \sum x^2 &= 3323639 & \sum y^2 &= 8188599.9 \\ & & \sum xy &= 2215782.2 \end{aligned}$$

Regression Equation for y on x

$$Y - \bar{Y} = r \frac{\sigma_y}{\sigma_x} (x - \bar{x})$$

$$Y - 3581.25 = .67 (X - 515.28)$$

$$Y = .67 x - 345.24 + 3581.25$$

$$Y = .67x + 3236.01$$

Regression Equation for x on y

$$X - \bar{X} = r \frac{\sigma_x}{\sigma_y} (y - \bar{Y})$$

$$X - 515.28 = .27 (Y - 3581.25)$$

$$X - 515.28 = .27 Y - 966.94$$

$$X = .27 Y - 451.69$$

The values of x and y for the regression equations y on x and x on y are

X	y	Y	x
725	3721.76	2700	277.31
0	3236.01	3000	358.31
314	3446.39	3000	358.31

X	y	Y	x
200	3370.01	3000	358.31
500	3571.01	3000	358.31
200	3370.01	3000	358.31
250	3403.51	3000	358.31
250	3403.51	3000	358.31
600	3638.01	3000	358.31
250	3403.51	3200	412.31
250	3403.51	3260	428.51
730	3725.11	3300	439.31
700	3705.01	3300	439.31
150	3336.01	3450	479.81
1100	3973.01	3500	493.31
1000	3906.01	3500	493.31
400	3504.01	3500	493.31
650	3671.51	3500	493.31
100	3303.01	3655	535.16
750	3738.51	4000	628.31
0	3236.01	4000	628.31
600	3638.01	4000	628.31
700	3705.01	4000	628.31

X	y	Y	x
700	3705.01	4000	628.31
60	3276.21	4000	628.31
800	3772.01	4000	628.31
700	3705.01	4200	682.31
250	3403.51	4250	695.81
600	3638.01	4300	709.31
1000	3906.01	4300	709.31
860	3812.21	4300	709.31
1100	3973.01	4385	732.26

Regression Equation for High Income Group

$$\bar{X} = 1481.4766$$

$$\bar{Y} = 6651.01$$

$$\sum xy = 106456069.3$$

Regression Equation for y on x

$$y - \bar{Y} = r \frac{\sigma_y}{\sigma_x} (X - \bar{X})$$

$$y - 6651.01 = \frac{106456069.3}{91129304.98} (X - 1481.4766)$$

$$y - 6651.01 = 1.1682 (X - 1481.4766)$$

$$y = 1.1682X + 4920.349$$

Regression Equation for x on y

$$X - \bar{X} = r \frac{\sigma_x}{\sigma_y} (y - \bar{Y})$$

$$X - 1481.4766 = \frac{106456069.3}{324547328.8} (y - 6651.01)$$

$$X - 1481.4766 = .3280 y - 2181.6244$$

$$X = .3280 y - 700.1478$$

Values of x and y for regression equations y on x and x on y

Y	x	Y	x
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4500	775.85	5000	939.85
4800	874.25	5000	939.85

Y	x	Y	x
5000	939.85	5800	1202.25
5000	939.85	6000	1267.85
5000	939.85	6000	1267.85
5000	939.85	6000	1267.85
5000	939.85	6000	1267.85
5000	939.85	6000	1267.85
5100	972.65	6000	1267.85
5130	982.49	6000	1267.85
5130	982.49	6000	1267.85
5200	1000.55	6000	1267.85
5200	1000.55	6000	1267.85
5250	1021.85	6000	1267.85
5400	1071.05	6000	1267.85
5500	1103.85	6000	1267.85
5500	1103.85	6045	1282.61
5550	1120.25	6100	1300.65
5600	1136.65	6100	1300.65
5600	1136.65	6200	1333.45
5700	1169.45	6350	1382.65
5724	1177.32	6500	1431.85
5800	1202.25	6500	1431.85

Y	x	Y	x
6500	1431.85	7500	1759.85
6500	1431.85	7520	1766.41
6533	1442.68	7700	1825.45
6540	1444.97	7700	1825.45
6500	1431.85	7800	1858.25
6500	1431.85	7920	1897.61
6500	1431.85	8000	1923.85
6500	1431.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8000	1923.85
7000	1595.85	8200	1989.45
7000	1595.85	8500	2087.85
7000	1595.85	8800	2186.25
7000	1595.85	8800	2186.25
7100	1628.65	8800	2186.25
7200	1661.45	8836	2198.06
7500	1759.85	9000	2251.85

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Y	x
9066	2273.5
9600	2448.65
10000	2579.85
10000	2579.85
10200	2645.45
10500	2743.85
10564	2764.84
12500	3399.85
14000	3891.85

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X	Y	X	Y	X	Y
500	5504.45	750	5796.50	700	5738.09
300	5270.81	1550	6931.06	700	5738.09
300	5270.81	0	4920.35	615	5638.79
300	5270.81	550	5562.86	1930	7174.98
300	5270.81	1295	6433.17	2500	7840.85
250	5212.4	250	5212.40	2500	7840.85
1000	6088.55	500	5504.45	1000	6088.55
400	5387.63	1000	6088.55	1700	6906.29
2000	7256.75	1200	6322.19	500	5504.45
1000	6088.55	575	5592.06	500	5504.45
500	5504.45	1360	6509.1	1700	6906.29
833	5893.46	2000	7256.75	1700	6906.29
1000	6088.55	1360	6509.1	1200	6322.19
1650	6847.88	1000	6088.55	1900	7139.93
200	5153.94	1000	6088.55	1200	6322.19
830	5889.96	1200	6322.19	2000	7256.75
858	5922.66	2100	7373.57	2050	7315.16
1500	6672.65	1000	6088.55	1800	7023.11
1100	6205.37	1500	6672.65	3000	8424.95
1200	6322.19	1200	6322.19	3205	8664.43
1000	6088.55	1800	7023.11	2350	7665.62

X	Y	X	Y	X	Y
1500	6672.65	500	5504.45	2350	7665.62
1250	6380.60	2000	7256.75		
1000	6088.55	2800	8191.35		
1000	6088.55	3000	8424.95	3143	8592.00
950	6030.14	1200	6322.19	2000	7256.75
950	6030.14	2750	8132.90	1500	1672.65
2000	7256.75	900	5971.73	1800	7023.11
950	6030.14	956	6037.15	2000	7256.75
1100	6205.37	1928	7172.64	1000	6088.55
1000	6088.55	1500	6672.65	2000	7256.75
3000	8424.95	1500	6672.65	2000	7256.75
1500	6672.65	1400	6555.83	2500	7840.85
2400	7724.03	3500	9009.05	1160	6275.46
2700	8074.49	1500	6672.65	1170	6287.14
700	5738.09	3500	9009.05	5000	10761.35
				5000	10761.35

APPENDIX - IV

Analysis for Dispersion of Savings Based on Family Life Cycle

X <sub>1</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>3</sub>	X <sub>3</sub>
1000	393	1070	300	1700	120	1295	750	5000
750	250	1200	300	2000	200	1800	615	1100
2000	250	1250	200	500	120	2500	500	1550
858	60	1360	500	1200	0	650	400	25
1100	700	2400	300	950	150	1000	500	25
2100	700	2050	300	1000	500	1000	3500	0
2000	700	2000	3000	400	200	950	3143	250
3500	730	1900	2000	833	500	950	2350	0
2800	1200	1928	2100	833	600	1200	2350	800
75	1200	1500	700	600	300	1200	1000	700
300	1500	2150	725	1200		1500	1800	860
	1500	2500	1000	1100		1500	1140	1000
	400	2500	1800	1000		700	1000	1100
	600	2000	1930	1000		1400	1000	0
	1000	5000	1360	2000		0	900	600
	1700	575	1200	550		956	700	1500
	1700	250	1500	3000		700	500	250
	1160			1000		2750	250	
				2000		500	3000	
				200		1500	2000	

$$\begin{aligned} \sum X_1 &= 16483 & \sum X_2 &= 92347 & \sum X_3 &= 66209 \\ \bar{X}_1 &= 1498.45 & \bar{X}_2 &= 1126.1829 & \bar{X}_3 &= 1161.5614 \\ \sigma_1 &= 1018.2544 & \sigma_2 &= 852.21552 & \sigma_3 &= 956.41661 \end{aligned}$$

$$\begin{aligned} \bar{X}_{123} &= \frac{\bar{X}_1 N_1 + \bar{X}_2 N_2 + \bar{X}_3 N_3}{N_1 + N_2 + N_3} \\ &= \frac{1498.45 \times 11 + 1126.1829 \times 82 + 1161.5614 \times 57}{11 + 89 + 57} \\ &= 1166.9263 \\ & \text{=====} \end{aligned}$$

$$\sigma_{123} = \sqrt{\frac{\sigma_1^2 N_1 + N_2 \sigma_2^2 + N_3 \sigma_3^2 + N_1 d_1^2 + N_2 d_2^2 + N_3 d_3^2}{N_1 + N_2 + N_3}}$$

$$d_1 = (X_1 - X_{123}) = 331.5237$$

$$d_2 = (X_2 - X_{123}) = -40.7434$$

$$d_3 = (X_3 - X_{123}) = -5.3649$$

$$= \sqrt{\frac{1036842 \times 11 + 726271.29 \times 82 + 914732.73 \times 57 + 109907.96 \times 11 + 1660.0246 \times 82 + 28.7822 \times 57}{150}}$$

$$= \sqrt{\frac{11405262 + 59554246 + 52139766 + 1208987.6 + 136122.02 + 1640.5827}{150}}$$

$$= \sqrt{829640.1613} = 910.8458$$

c.v. for beginning stage

$$\text{c.v.} = \frac{123}{X_1} \times 100$$

$$= \frac{910.8458}{1498.45} \times 100$$

$$= 60.7859$$

c.v. for expanding stage

$$= \frac{910.8458}{1126.1829} \times 100 = 80.879$$

c.v. for contracting stage

$$= \frac{910.8458}{1161.5614} \times 100 = 78.4156$$

Expanding stage shows greater variation than beginning and contracting stage.

Variables	Cumulative Percentage	X <sub>1</sub>	Cumulative Percentage	X <sub>2</sub>	Cumulative Percentage	X <sub>3</sub>	Cumulative Percentage
0	0	0	0	1	1.221	4	7.018
25	0.0335	0	0	0	1.221	2	10.526
85	0.1139	0	0	1	2.44	0	10.526
160	0.2143	1	9.09	0	2.44	0	10.526
260	0.3483	0	9.09	0	2.44	0	10.526
380	0.509	0	9.09	2	4.88	0	10.526
530	0.7099	0	9.09	1	6.097	0	10.526
730	0.9778	0	9.09	4	10.97	0	10.526
980	1.3127	0	9.09	3	14.634	3	15.789
1280	1.7145	1	18.18	5	20.731	0	15.789
1678	2.2476	0	18.18	1	21.951	0	15.789

36983	49.5379	0	54.54	1	80.487	0	84.211
38913	52.1231	0	54.54	1	81.70	0	84.211
40913	54.8020	2	72.72	6	89.024	1	85.965
42963	57.548	0	72.72	1	90.243	0	85.965
45063	60.3609	1	81.81	1	91.463	0	85.965
47213	63.2407	0	81.81	1	92.682	0	85.965
49563	66.3885	0	81.81	0	92.682	2	89.474
51963	69.6032	0	81.81	1	93.90	0	89.474
54463	72.9519	0	81.81	2	96.341	1	91.223
57213	76.6355	0	81.81	0	96.341	1	92.982
60013	803860	1	90.90	2	96.341	0	92.982
63013	84.4045	0	90.90	2	98.78	1	94.737
66156	88.6144	0	90.90	0	98.78	1	96.491
69656	93.3026	1	100.00	0	98.78	1	98.246
74656	100.00	0	100.00	1	100.00	1	100.00

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13674	18.316	0	36.36	1	46.341	2	47.368
14630	19.5965	0	36.36	0	46.341	1	<b>49.123</b>
15630	20.9360	1	45.45	6	53.658	6	59.650
16700	22.3693	0	45.45	1	44.878	2	59.650
17800	23.8427	1	54.54	1	56.097	2	63.158
18940	25.3697	0	54.54	0	56.097	1	64.912
20100	26.9235	0	54.54	1	57.317	0	64.912
21300	28.509	0	54.54	6	64.634	2	68.421
22550	30.2052	0	54.54	1	65.853	0	68.421
23845	31.9390	0	54.54	0	63.853	1	70.175
25205	33.7615	0	54.54	2	68.292	0	70.175
26603	35.6341	0	54.54	0	68.292	1	71.9298
28105	37.6460	0	54.54	4	73.170	4	78.947
29655	39.7221	0	54.54	0	73.170	1	80.702
31355	41.9993	0	54.54	3	76.829	0	80.702
33155	44.41036	0	54.54	1	78.048	2	84.211
35055	46.9554	0	54.54	1	79.268	0	84.211

2078	2.7834	0	18.18	2	24.39	1	17.544
2578	3.4532	0	18.18	4	29.268	4	24.561
3128	4.18988	0	18.18	1	30.48	0	24.561
3703	4.96	0	18.18	1	31.71	0	24.561
4303	5.7638	0	18.18	3	35.37	1	26.316
4918	6.5875	0	18.18	0	35.37	1	28.070
5568	7.4582	0	18.18	0	35.37	1	29.825
6268	8.3958	0	18.18	0	40.243	4	36.842
6993	9.367	0	18.18	1	41.46	0	36.842
7723	10.33448	0	18.18	1	42.68	0	36.842
8473	11.3494	1	27.27	0	42.68	1	38.596
9273	12.421	0	27.27	0	42.68	1	40.351
10106	13.5368	0	27.27	2	45.121	0	40.351
10964	14.6860	1	36.36	0	45.121	0	40.351
11824	15.838	0	36.36	0	45.121	1	42.105
12724	17.0435	0	36.36	0	45.121	1	43.859

APPENDIX V

ANALYSIS FOR DISPERSION OF SAVINGS BASED ON FAMILY SIZE

Family Size - Small

$X_1$	$X_1$	$X_1$	$X_2$	$X_2$	$X_2$	$X_2$	$X_2$
0	1000	2100	0	300	700	1160	1700
75	1000	2100	0	300	700	1200	1700
150	1000	2350	0	300	750	1200	1700
200	1000	2350	0	300	800	1200	1800
300	1000	2750	25	400	833	1200	1900
338	1000	2800	25	400	833	1200	2000
500	1100	2800	120	400	860	1200	1928
500	1100	3000	120	400	860	1200	2000
500	1140	3143	120	500	950	1295	2000
550	1200	3500	200	500	950	1360	2050
600	1200	3500	200	500	950	1400	2150
600	1360	...	200	500	1000	1500	2400
700	1800	...	250	575	1000	1500	2500
700	1800	...	250	600	1000	1500	2500
700	1930	...	250	600	1000	1500	1000
725	2000	...	250	615	1000	1500	3000
730	2000	...	250	650	1000	1500	3000
750	2000	...	250	700	1000	1500	3000
900	2000	...	300	700	1100	1500	5000
956	2000	...	300	700	1100	1550	5000

$$\begin{array}{rcl}
 X_1 & = & 68215 \\
 \bar{X}_1 & = & 1311.8269 \\
 & = & 896.7241
 \end{array}
 \qquad
 \begin{array}{rcl}
 X_2 & = & 106829 \\
 \bar{X}_2 & = & 1090.0918 \\
 & = & 908.06065
 \end{array}$$

$$\begin{aligned}
 \bar{X}_{12} &= \frac{\bar{X}_1 N_1 + \bar{X}_2 N_2}{N_1 + N_2} = \frac{1311.8269 \times 52 + 1090.0918 \times 98}{52 + 98} \\
 &= \frac{68214.999 + 106829}{150} \\
 &= \frac{175044}{150} = 1166.96
 \end{aligned}$$

$$\begin{aligned}
 d_1 &= X_1 - X_{12} \\
 &= 1311.8269 - 1166.96 \\
 &= 144.8669
 \end{aligned}$$

$$\begin{aligned}
 d_2 &= X_2 - X_{12} \\
 &= 1090.0918 - 1166.96 \\
 &= -76.8682
 \end{aligned}$$

$$s = \sqrt{\frac{\sigma_1^2 N_1 + \sigma_2^2 N_2 + d_1^2 N_1 + d_2^2 N_2}{N_1 + N_2}}$$

$$\sqrt{\frac{1720889.8 \times 52 + 1188300.1 \times 98 + 20986.419 \times 52 + 5908.7202 \times 98}{150}}$$

$$= \sqrt{\frac{89486269.6+116453409.8+1091293.8+579054.58}{150}}$$

$$= \sqrt{\frac{207610027.8}{150}} = \sqrt{1384066.852}$$

$$= 1176.464$$

$$\text{c.v.} = \frac{\sigma}{X_1} \times 100$$

$$= 89.68$$

=====

$$\text{c.v.} = \frac{\sigma}{X_2} \times 100$$

$$= 107.92$$

=====

The medium size families show greater variation in savings than small families.

APPENDIX VI

CHI SQUARE TEST

PERSONAL VARIABLES OF HOMEMAKERS VERSUS SAVINGS

Table of observed values

	Nil	1-10	11-20	21-30	31-40	41-50	Total
Employed	..	12	38	14	8	3	75
Unemployed	5	21	19	18	12	0	75
	5	33	57	32	20	3	150

$$E_{11} = 2.5$$

$$E_{14} = 28.5$$

$$E_{12} = 16.5$$

$$E_{15} = 10$$

$$E_{13} = 28.5$$

$$E_{16} = 1.5$$

Table of expected values

2.5	16.5	28.5	16	10	1.5	75
2.5	16.5	28.5	16	10	1.5	75
3	33	57	32	20	3	150

O	E	$(O - E)^2$	$(O - E)^2/E$
0	2.5	6.25	1.5
0	2.5	6.25	2.5
12	16.5	20.25	1.2
21	16.5	20.25	1.2
38	28.5	90.25	3.2
19	28.5	90.25	3.2
14	16	4	.25
18	16	4	.25
8	10	4	.4
12	10	4	.4
3	1.5	2.25	1.5
0	1.5	2.25	1.5
			$(O - E) / E = 18.1$

$$V = (r - 1) (c - 1)$$

$$= 5$$

The calculated value is greater than table value.

### Age of Homemaker

Table of observed value

Age of Homemaker	Nil	1-10	11-20	21-30	31-40	41-50	Total
21 - 40	1	19	28	20	10	3	81
41 - 60	4	14	29	12	10	0	69
	5	33	57	32	20	3	150

$$E_{11} = 2.7$$

$$E_{21} = 2.3$$

$$E_{12} = 17.82$$

$$E_{22} = 15.18$$

$$E_{13} = 30.78$$

$$E_{23} = 26.22$$

$$E_{14} = 17.28$$

$$E_{24} = 14.72$$

$$E_{15} = 10.8$$

$$E_{25} = 9.2$$

$$E_{16} = 1.62$$

$$E_{26} = 1.38$$

Table of expected values

2.7	17.82	30.78	17.28	10.8	1.62	81
2.3	15.18	26.22	14.72	9.2	1.38	69
5	33.00	57.00	32.00	20.0	3.00	150

O	E	$(O - E)^2$	$(O - E)^2/E$
1	2.7	2.89	1.07
4	2.3	2.89	1.26
19	17.82	1.39	0.08
14	15.18	1.39	0.09
28	30.78	7.73	0.25
29	26.22	7.73	0.29
20	17.28	7.4	0.43
12	14.72	7.4	0.5
10	10.8	0.64	0.06
10	9.2	0.64	0.07
3	1.62	1.9	1.17
0	1.38	1.9	1.44
			6.71

$$\begin{aligned}
 V &= (r - 1) (c - 1) \\
 &= 5
 \end{aligned}$$

Table value is greater than calculated value.

## Educational Status of Homemakers

Table of observed values

Educational Status	Nil	1-10	11-20	21-30	31-40	41-50	Total
Illiterate	2	3	..	..	..	..	5
Schooling	3	18	33	15	4	1	74
Graduation	..	11	25	17	16	2	71
Total	5	32	58	32	20	3	150

$E_{11} = .17$	$E_{21} = 2.47$	$E_{31} = 2.37$
$E_{12} = 1.07$	$E_{22} = 15.79$	$E_{32} = 15.15$
$E_{13} = 1.93$	$E_{23} = 28.6$	$E_{33} = 27.45$
$E_{14} = 1.07$	$E_{24} = 15.79$	$E_{34} = 15.15$
$E_{15} = .06$	$E_{25} = 9.87$	$E_{35} = 9.47$
$E_{16} = .1$	$E_{26} = 1.48$	$E_{36} = 1.42$

Table of expected values

.17	1.07	1.93	1.07	0.67	.1	5.01
2.47	15.79	28.6	15.79	9.87	1.48	74
2.37	15.15	27.45	15.15	9.47	1.42	71.01
5.01	32.09	57.98	32.01	20	3	150

O	E	$(O - E)^2$	$(O - E)^2 / E$
2	.17	3.35	19.7
3	2.47	.28	.11
0	2.37	5.62	.42
3	1.07	3.72	3.48
18	15.79	4.88	.31
11	15.15	20.25	1.34
0	1.93	3.72	1.93
33	28.6	19.36	.68
25	27.45	6	.22
0	1.07	1.14	1.07
15	15.79	1.58	.1
17	15.15	2.25	.15
0	0.67	.45	.67
4	9.87	34.46	3.49
16	9.47	42.64	4.5
0	.1	.01	.1
1	1.48	.23	.16
2	1.42	.34	.24
			38.67

$$\chi^2 = 38.67$$

$$V = 10$$

Calculated value is greater than table value.