## Determining the Expenditure, Investment and Saving Patterns in Respect of Family Life Cycles

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## Özet

Ailelerin Yaşam Dönemlerine Göre Harcama, Yatırım ve Tasarruf Modellerinin Belirlenmesi Bu araştırma, farklı yaşam dönemindeki ailelerin (N=200) harcama, tasarruf ve yatırım modelleri konusunda bilgi elde etmek amacıyla H.Ü. Merkez ve Beytepe kampüslerinde farklı hizmet sınıflarında çalışan personel üzerinde pilot çalışma olarak planlanmış ve yürütülmüştür. Başlangıç (%95.4) ve daralma (%95.9) dönemindeki aileler arasında geliri çerisinde en yüksek payı alan harcama grubu olarak konut işletme masraflarını, genişleme dönemindeki (%84.9) aileler arasında ise gıda harcamasını bildirenlerin önde geldiği belirlenmiştir.

**Anahtar Kelimeler:** ailelerin harcama modelleri, aile yaşam dönemi, aile ekonomisi, ailelerin tasarruf ve yatırım modelleri.

## Abstract

This research was planned and carried out as a pilot project on the personnel vvorking at different labour classes at Hacettepe University Beytepe and Merkez Campuses in order to have information about expenditure, investment and saving (models) patterns of families at different life stages (N = 200). It was determined that the highest ratio as expenditure group is household operations among beginning stage (95,4%) and contracting stage (95,9%) families. Hovvever, among expanding stage families (84,9%) food expenditure are higher than the others.

**Key words:** family expenditure patterns, family life cycle, family economy, family investment pattern, family saving pattern.

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#### INTRODUCTION

Decisions made by families as a consumer unit will affect the Country economy as well as of their own. For instance, vvhich products and services do the families need? How much and when do they need them? How will they use their income and how will they add value to their savings? In other vvords, its obvious that the expenditure decisions of families will affect the macro - micro - economic decisions and the economy of our Country vvhich is going through critical days. There for, one of the most important information that was made use of about the behaviors of families a consumer unit is the family member budget analysi taken as consuming models or as a vvider perspective.

Although the factors described as economic, demographic and psycho-social are effective in trends of family good and service expenditure, saving and investment, two basic factors, among others, are most important: income and family life cycle (VVells & Gubar, 1966; Fitzsimmons & VVilliams, 1973; VVagner & Hanna, 1983; Cage, 1989; Deacon & Firebaugh, 1988).

Analysis of the expenditure models changing due to the life cycles contribute to social and economic development of the society and the families. It is helpful to guess the average income necessary to meet the needs and vvishes that may appear during any life cycle. And, also, it assists understanding long term expenditure plans and unexpected changings in the future.

Family life cycle is a congest described with the age of the leader of the family, his marital status, his job and the age of the oldest child ete (Engel, Blackvvell, & Miniarol, 1990; Movven, 1990; Dubois, 2000). Although nuclear families with children have social and economic differences from each other, they go through similar stages in their life time (Gross, Crandall, & Knoll, 1973). These stages can be named as beginning stage, expanding stage and contraeting stage (Fitzsimmons & Williams, 1973; Terzioğlu, 1987).

In addition, these stages can have sub stages according to the age and number of the children, their education levels ete. (Fitzsimmons & VVilliams, 1973; Terzioğlu, 1987; Güven, 1991).

The spent time in each of the life stages is different from each other from according to family characteristics, functions and amount of the income (Fitzsimmons & Williams, 1973; Güven, 1991). Due to these variations, the kind, amount and guality of families' resources differentiate. Also their expenditure, products and the services they use differentiate. For this reason, it is inevitable that the families take place in different consumer groups throughout their lives generally, family expenditure start with the first steps of life cycles, increase vvith the birth of the child and reaches the top vvith the children studying at high school or university. The financial load of the family decreases when the children get married and leave their homes having their economic freedom (Fitzsimmons & Williams, 1973; Saxton, 1993; Lamonne & Riedman, 1994). And also saving and investment of the families differ according to life stages, income and consuming expenditure, and its gradually inerease during the developing periods of the life cycles (VVells & Gubar, 1966).

The beginning stage-compared to other stages- is a more comfortable stage, because there is not a child that needs be taken care of (Saxton, 1993). Some expenditure are less than they are in the period vvith a child (expanding stage), hovvever, depts. become higher (Fitzsimmons & VVilliams, 1973; Lamonne & Riedman, 1994). The highest percentage of spendings are on food, furniture and household appliances in beginning stage families. At the same time, it is observed that the couples can spend on entertainment and leisure activities more comfortably in this stage than the other stages (Dubois, 2000; Lassvvell & Lassvvell, 1991; England & Farkas, 1986; Runyon & Stevvard, 1987; Steinmetz & Clovan, 1990).

The expanding stage beginning vvith the birth of the first child and ends with his/her leaving home, includes sub stages (Gross, Crandall, & Knoll, 1973; Güven, 1991). In this stage, spendings on food, elothing, medical care, baby-sitter, eleaning materials, and the need for a larger house vvith more furniture causes the expenses to inerease gradually. Also, when the child starts going to school, educational expenses are gradually added to the others with an important portion (Engel, Blackvvell, & Miniarol, 1990; Saxton, 1993; Lamonne & Riedman, 1994; Lassvvell & Lassvvell, 1991). Consequently, with the growth of the child the expenses of the families increase and, most probably, this stage is the period when the expenses are at the highest. Expenses on elothing, personal care, entertainment, school ete. of the grovvn up children are considerably high (Movven, 1990; Dubois, 2000;

Lamonne & Riedman, 1994; Ranyon & Stevvard, 1987). Moreover, due to the grov/th of the children expenses may increase with the need of buying a car and a house. Because, the ratio of buying a car is higher for the families that have a child of six or över, and the ratio of buying a house is higher for the families that have a child of eighteen and över (VVells & Gubar, 1966). Hov/vever, in a research carried out in our Country, among the expenses on goods and service groups, food, rent and household operations are higher. And at the progress period of expanding stage child care and education expenses are higher in an increasing ratio (Güven, 1991).

Contracting stage begins with the first child's gaining his/her economic freedom and leaving home to work and/orto get married (Gross, Crandall, & Knoll, 1973). Afterthe children's leaving home, interest in traveling, entertainment and hobbies increases during this stage since the spouses are left alone. There are, also, in small amounts, there are expenses for buying presents for the relatives and children (Fitzsimons & VViiliams, 1973; Engel,, Blacvvell, & Miniarol, 1990; Dubois, 2000; Runyon & Stevvard, 1987; Comell & Deljavan, 1983).

During the life stages, families income makes vvaves and ups and dovvns due to the changes in incidents, need and desire (Lamonne & Riedman, 1994). In order to live this stage with minimum effects, there have been different researches and thesis. One of these is to register the expenses according to different life stages and to plan the expenses accordingly. These kinds of registrations helps to decide how much the families can spend, and to predict how much the expenses can be it enables to have an actual plan of the expenses (Fitzsimmons & VViiliams, 1973). Families that have a reasonable, flexible and practical plan can establish financial strategies and prevent the misfortunes that can create financial difficulties (Lassvvell & Lassvvell, 1991). Furthermore, with the planning made serve the needs and the incidents of the families during life stages can solve, or, at least, reduce their financial problems (Deacon & Firebaugh, 1988). For this reason, to have optimum balance betvveen the present income and the expenses emerge due to, especially, the characteristics of each life stage and to preserve the present living levels and to reach the deserved living standards are extremely important for the development and happiness of the family.

## **RESEARCH METHOD**

The research data for this study were collected in 2001 through face-to-face intervievvs with the females or males ansvvering the questions in the name of their families of a number of 200 personnel vvorking on Hacettepe University Merkez and Beytepe Campuses. In calculating the size of the sample "Neyman Distribution" was done, and categorized "Random Sample Method" was used in each service class (academic, administration, technical, health, helping health and helping service ) and (n) sample size is calculated as 200. In the research, vvhether each expenditure group takes a big share in the income or not was asked one in order to determine the expenses that have high shares in family income. At the end of the research, chi-square analysis was done in the tables that if the statistical controls of the found data is över 5.

## **RESULTS AND DISCUSSION**

**General Information About the Families** 43% of the families included in the research is of expanding stage, 32.5% is of the beginning stage and

24.5% is of the contracting stage. Families consisting of 4 members precede (47.5%).

In 65% of the families females vvork, in 25% they do not and in 10% they are retired. **Expenditure** 

# Groups That Have High Shares in the Family Income

It is determined that at the beginning (95.4%) and contracting (95.9%) stages the families who mentioned that household operations expenditure have a higher share (p<05), and at the expanding stage the number of the families (84.9%) that mentioned food expenditure have a higher share precedes (p>.05). This is followed by-at the beginning stage families in its order food (83.1%), paying in installments (73.8%), rent (64.6%), culture and entertainment (55.4%), and at expanding stage families clothing (74.4%), paying in installments (62.8%), in equal ratio education and household operations (60.5%), non durable household goods (detergents etc.) (55.8%) and transportation (41.9%), and among the contracting stage families the expenditure are mentioned as follovvs, household operations (95.9%), food (85.7%), health (61.2%), culture and entertainment (59.2%), paying in

installments (49.0%), house maintenance and repair (46.9%) (p<0.05) (Table 1). This data- although the priorities generally change in ali life stages it is observed that household operations, food expenditure and payment in installment are of higher ratio. Hovvever, it implies that some expenditure groups show differences according to the features of the life stages. Either among the beginning, or expanding, or contracting stage families, payments of installments, expenditure of clothing, housing, car, furniture, credit card, private courses have high shares. Among these, credit card payments. That are mentioned are in the first (1st) place in the beginning stage, in the second (2) in the expanding stage in the third (3) in the contracting stage. This implies that the families are affected by the present economic problems and rather than investment they are in dept because of consumers' non durable goods.

Expenditure groups	Beginning stage n=65		Expanding stage n=86		Contracting stage n=49		Total n=200		x <sup>2</sup> Analysis Results	
	N	%	N 00	%	N	%	N	%		
Food	54	83.1	73	84.9	42	85.7	169	84.5	x <sup>2</sup> =0.165, p>.05	
Household operations	62	95.4	52	60.5	47	95.9	161	80.5	x <sup>2</sup> =38.585, p<.05	
House maintenance and repair expenses	8	12.3	9	10.5	23	46.9	40	20.0	x <sup>2</sup> =29.515, p<.05	
Rent	42	64.6	26	30.2	9	18.4	77	38.5	x <sup>2</sup> =29.593, p<.05	
Automobile maintenance and repair	11	16.9	25	29.1	17	34.7	53	26.5	x <sup>2</sup> =5.041, p>.05	
Transportation	16	24.6	36	41.9	11	22.4	63	31.5	x <sup>2</sup> =7.566, p<.05	
Small and majör electrical household appliances	14	21.5	7	8.1	12	24.5	33	16.5	x <sup>2</sup> =7.831, p<.05	
House furnishing	29	14.5	22	25.6	12	24.5	63	31.5	x <sup>2</sup> =7.694, p<.05	
Personnel care expenditure	16	24.6	28	32.6	4	8.2	48	24.0	x <sup>2</sup> =10.204, p<.05	
Education	10	15.4	52	60.5	8	16.3	70	35.0	x <sup>2</sup> =43.017, p<.05	
Culture and entertainment	36	55.4	34	39.5	29	59.2	99	49.5	x <sup>2</sup> =6.155,p<.05	
Health (medical care)	12	18.5	34	39.5	30	61.2	76	38.0	x <sup>2</sup> =21.836, p<.05	
Clothing	23	35.4	64	74.4	16	32.7	103	51.5	x <sup>2</sup> =31.812, p<.05	
Travel	12	18.5	9	10.5	19	38.8	40	20.0	x <sup>2</sup> =15.779, p<.05	
Beverage and tobacco	24	36.9	13	15.1	12	24.5	49	24.5	x <sup>2</sup> =9.517, p<.05	
Personal insurance and pensions	10	15.4	-	-	1	2.0	11	5.5	Not applied	
Gifts and contributions	1	1.5	2	2.3			3	1.5	Not applied	
Cash contributions	-	-	1	1.2	-	-	1	0.5	Not applied	
Child care services	-	-	26	30.2	-	-	26	13.0	x <sup>2</sup> =39.615, p<.05	
Domestic cervices	5	7.7	11	12.8	14	28.6	30	15.0	x <sup>2</sup> =10.130, p<.05	
Non durable household goods	12	18.5	48	55.8	21	42.9	81	40.5	x <sup>2</sup> =21.583, p<.05	
Payments in installments	48	73.8	54	62.8	24	49.0	126	63.0	x <sup>2</sup> =7.414, p<.05	

 TABLE 1. HIGH SHADE EXPENDITURE GROUPS ACCORDING TO LIFE CYCLE

 THE FAMILIES ARE IN THE FAMILY INCOME

Information About Saving and Investment Tendeneles of Families

The reasons for having household operations expenditure higher among the families of all life stages can be explained with the increasement of the prices of electricity and natural gas bought from outside turkey because of the insufficient production of electricity and natural gas and the devaluation of Turkish Liras. The ones that mentioned rent expenditure as being high in the beginning stage can be because their incomes are low since they are at the beginning of their careers, and they do not have their own houses in this stage. And also, because of the rents of the houses high in our Country. The reason why culture and entertainment expenditure are high may bet hey do not have any children and it gives them a change to spend their money and time more comfortably. The reason for education and transportation expenditure being high in the expanding stage may be because of the children addedtothe family. On the other hand, the reason for having high expenditure on the short-lasting house care products may be due to the increasement of the number of the family members vvhich brings higher necessities. During the contracting stage, since the people are older, more health problems are seen and, consequently, health expenditure increase. The reason why the culture and entertainment expenditure are higher in this stage is they have more leisure time to spend on such activities. Also, in the research by Borton (1955) medicine and medical care material expenditure are higher after the age of 55. Hovevver, in the research done by Güven (1991), it is determined that food expenditure are in the first place in ali stages. In addition, In the research done by Wells and Gubar (1966) it is determined that family life stages are important in food, clothing, consumer durable goods and transportation.

Among the families that save up; in the beginning stage, the ones mentioned sometimes (56.9%), in the

expanding stage, the ones said alvvays (47.7%) and in the contracting stage, the ones (that) said never (46.9%) have the higher ratio (p<0.05) (Table 2).

In addition as a result of the research by Hafferan (1982) families (expanding stage) that have children of 6-17 can have more savings than the families (beginning stage) that do not have any children.

Hovevver in a research by Güven (1991) the number of the families of beginning and expanding stages who have the oldest child betvveen 0 and 3 is higher than the families of other levels (the 5 level is not included) of expanding and contracting stage families.

When the saving reasons of the families that mentioned that they can save up (134 families) are examined; 83.0% of the beginning stage families in order to buy a car, 80.9% of them to buy a house; and 77.0% of the expanding stage families to meet the educational needs of their children, 65.6% to meet the unexpected expenditure and to be able to live more comfortably after their retirement. On the other hand, 76,9% of the contracting stage families aim to pay for the health expenditure and to live more comfortably after they retired (Table 3). These results bring in to mind the saving aims of the families are to meet the needs of the features of live stage, their present life stages and the live that they are going to go into. According to a research done by Güven (1991), among the saving reasons in the beginning stage buying real estates, such as houses, shops, and if necessary, being able to pay unexpected expenses have priorities in equal ratio. Vvîiereas in the expanding stage the number of people that mentioned about being able to pay unexpected expenses if it is needed, buying real estates; such as, houses, shops, and saving to meet educational and future needs of children is higher. In the contracting stage, on the other hand, the first priority is being able to pay for unexpected expenses.

	Alvvays		Sometimes		Never		Total	
Family life cycle	Ν	%	Ν	%	Ν	%	Ν	%
Beginning	10	15.4	37	56.9	18	27.7	65	100.0
Expanding	41	47.7	20	23.2	25	29.1	86	100.0
Contracting	7	14-3	19	38.8	23	46.9	49	100.0
Total	58	29.0	76	38.0	66	33.0	200	100.0

TABLE 2. SAVING POSSIBILITIES OF FAMILIES ACCORDING TO FAMILY LIFE CYCLE

	Beginning stage n=47		Expanding stage n=61		Contracting stage n=26		Total n=134	
Saving aims	N	%	N	%	N	%	Ν	%
Buying a house	38	80.9	24	39.3	2	7.7	64	47.8
Buying a car	39	83.0	16	26.2	_	-	55	41.0
Children's education	4	8.5	47	77.0	4	15.4	55	41.0
Holiday expenditure	11	23.4	20	32.8	3	11.5	34	25.4
Long lasting consumer products	3	6.4	5	8.2	6	23.1	14	10.4
Health expenditure	1	2.1	6	9.8	19	73.1	26	19.4
Unexpected expenditure	33	70.2	40	65.6	20	76.9	93	69.4
Paying (the) depts	14	29.8	20	32.8	3	11.5	37	27.6
Establish a work	2	4.3	4	6.6	-	-	6	4.5
To be able to live more comfortably during retirement	2	4.3	40	65.6	19	73.1	61	45.5

## TABLE 3. SAVING AIMS OF FAMILIES ACCORDING TO FAMILY LIFE CYCLE

It is expected that their investment preferences change since the aims and behaviors of each stage are different from each other. Hovvever, in ali the family life stages It has been observed that almost ali families prefer to evaluate saving as foreign currency rather transform and real investment (beginning:80.9%, expanging:100.0%, contracting:92.3%). Its follovved by the ones vvho invest in repo (beginnig:65.9%, expanding:73.8%. contracting:53.8%) Table 4). This situation may be because they want to prevent the continuous devaluation (of Turkish Liras as well as consideration of foreign currency as a traditional investment field. Therefore, the researches done by Öngel at al.

## TABLE 4. INVESTMENT FIELD ACCORDING TO LIFE CYCLE OF FAMILIES WITH SAVING

	Beginning stage n=47		Expanding stage n=61		Contracting stage n=26		Total n=134	
<b>Investment fields</b>	Ν	%	N	%	N	%	N	%
Property	9	19.1	11	18.0	7	26.9	27	20.1
Foreign currency	38	80.9	61	100.0	24	92.3	123	91.8
Gold	11	23.4	13	21.3	9	34.6	33	24.6
Stock exchange	15	31.9	13	21.3	5	19.2	33	24.6
Demand deposit	-	-	4	6.6	1	3.9	5	3.7
Time deposit	6	12.8	8	13.1	4	15.4	18	13.4
Stock	-	-	3	4.9	2	7.7	5	3.7
Government bond	-	-	2	3.3	2	7.7	4	3.0
National treasury bond	12	25.5	14	22.9	10	38.5	36	26-9
Repurchase agreement	31	65.9	45	73.8	14	53.8	90	61.2
İnvestment fund	5	10-6	21	34.4	3		29	21.6

(1997), and Çopur and Terzioğlu (2000), and Aydıner (2000) also show that foreign currency is a traditional investment field in our Country. Hovvever, with this research it is obtained that the ratio of the families that mentioned they add value to their investments by buying foreign currency is the highest. Also, it is follovved by the ratio of the families that they invest their money in repurchase agreement (repo). This result may be due to foreign currency increasement in our Country because of the fluctuated currency it has become a profitable and preferable investment for the families and, besides, it has been a traditional investment field.

### **RESULTS AND SUGGESTIONS**

According to the results obtained from the data of this research, expenditure groups hold a high ratio in family income, saving conditions and aims differ from each other, hovvever, their investment fields are similar to each other. Although the priorities differ from each other in ali life stages, household operations, food and payments in installments have high shares in income. Among the payment in installments including clothing, housing, car, furniture, credit card courses, the ones who mentioned credit cards are in the first place. Therefore , families are in dept because of non durable household goods rather than investment.

For this reason;

In order to meet the needs of each life stage, especially, to overcome the critical stages according to the need for the economic sources both formal and informal educational programs should be prepared starting from the beginning stage. This also, is necessary to help the families vvith gaining a habit of investment and to canalize their savings into reasonable fields. And, besides, to enlighten them about the advantages and disadvantages, its installments and the cash interest ratios of credit cards vvhich are used unconsciously, especially novvadays. In addition, to show them the vvays how credit cards can be used for the advantage of the family and help them understand the macro-economic tendencies and to become sufficient by themselves.

#### **REFERENCES:**

Aydıner, A. (2001). Kadının Çalıştığı ve Çalışmadığı Ailelerde Mal ve Hizmet Harcamalarının İncelenmesi. Master tezi, Ankara :Hacettepe Üniversitesi.

Borton, S.G. (1955). The Life Cycle and Buying Patterns. In C.H.Lincoln (Ed.), *ConsumerBehavior(Mol.* II).New York: University Press, guoted in (VVells, W.D., & Gubar, G. (1966).

Life Cycle Concept in Marketing Research. *Journal of Marketing Research*, *3*,355-363.

Cage, R. (1989). Spending Differences Across Occupational Fields. *Monthly Labor Review, 112,* 33-42.

**Comel, C.E., & Deljavan, F. (1983).** Consumption Patterns of The Retired Household. *Journal of Gerontology, 38*,480-490.

Çopur, Z.,& Terzioğlu, R.G. (2000). Ailelerin Tasarruf ve Yatırım Eğilimlerinin İncelenmesi. *Ev Ekonomisi Dergisi, 6,* 40-48.

**Deacon, R., & Firebaugh, F.M. (1988).** *Family Research Management* (2<sup>n</sup> ed.). Massachusets: Allyn and Bacon Inc. **Dubois, B. (2000).** *Understanding the Consumer A European Perspective* (1 ed.). London: Prentice Hail Inc.

Engel, J.F., Blackvvell, R.D., & Miniarol, P.W. (1990).

*Consumer Behavior* (3 ed.). Orlando: The Dryden Press. **England. P., & Farkas, G. (1986).** *Households Employment and Gender*(3<sup>r</sup> ed.). New York: Aidine Company.

**Fitzsimmons, C, & VVilliams, F. (1973).** *The Family Economy. Nature and Management of Resources* (3<sup>r</sup> ed.). Michigan:Edward Brothers Inc.

Gross, I.H., Crandall, E.W., & Knoll, M.M. (1973).

Management for Modern Families (2 ed). New Jersey: Prentice-Hall Inc.

**Güven, S. (1991).** Aile Yaşam Dönemleri ve Özelliklerinin Ev İdaresi İlkeleri Yönünden İncelenmesi Doktora Tezi, Ankara: Hacettepe Üniversitesi.

Hefferan, C. (1982). Determinants And Patterns Of Family Saving. *Home Economics Research Journal*, 11,47-55. Lamonne, M.A., & Riedman.A. (1994). *Marriages and Families* (3 ed.). Belmont

California: VVadsvvorth Publishing Company. Lassvvell, M., & Lassvvell, T. (1991). *Marriage and The Family* (2<sup>nd</sup> ed.). Belmont California: VVadsvvorth Publishing Company. Mowen, J.C. (1990). *Consumer Behavior* (2 ed.). New York :Macmillan.

Öngel, E. et al. (1997). Yüksek Enflasyonun Aile İçi İlişkiler Üzerinde Etkisi (inci baskı). Ankara: Özkan Matbaacılık. Runyon, K.E., & Stevvard, D.W. (1987). Consumer Behavior and the Practice of Marketing (3<sup>r</sup> ed.). Columbos: A Bell & Hovvell Information Company.

Saxjton, L. (1993). The Individual Marriage and The Family (2 ed.). Belmont California: VVadsvvorth Publishing Company.

Steinmetz, S.K. & Clovan, S. (1990). Marriage and Family Realities Historical and Contemporary Perspectives (2<sup>n</sup> ed.). New York: Harper & Row Publishers. **Terzioğlu, R.G.** (1987). Ev İdaresi İlkeleri (1.baskı). Ankara:Doğuş Mat.ve Tic.Ltd.Sti.

VVagner, J.,& Hanna, S. (1983). The Effectiveness of Family Life Cycle Variables in Consumer Expenditures Research. Journal of Consumer Research, 10,281 - 291.

VVells, W.D., & Gubar, G. (1966). Life Cycle Concept in Marketing Research. *Journal of Marketing Research, 3*, 355-363.