# A COMPARATIVE STUDY OF THE USE OF CONSUMER 

CREDIT BEFORE AND AFTER<br>TRUTH-IN-LENDING

By<br>DOREEN NORA JOSE,<br>Bachelor of Science<br>McGill University<br>Montreal, Quebec<br>1968

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## CHAPTER I

## INTRODUCTION

## Nature of the Problem

The use of consumer credit is an important tool in family financial management. In recent years much attention has been given to this area of consumer education Family economists are especially concerned with the increased use of credit by families and how this affects their family life. Most families want to be financially secure, but the misuse of credit may lead to serious financial difficultieso

It is important that all families be educated to use credit wisely as the effective use of credit may help them achieve their goals. With the improvement of available educational materials, teachers, extension personnel and family counsellors can aid families to increase their understanding of the responsibility involved in credit use.

Today, families use credit in larger amounts and in a greater number of ways. Consequently, legislators have passed laws to regulate credit transactions. On July 1, 1969, the Federal Truth-in-Lending legislation went into effect. However, the present concern is whether this law actually helps consumers to use credit wisely.

This study proposes to investigate the extent to which families
use credit for durable goods costing $\$ 100$ or more and to determine if there is a relationship between certain family characteristics and the use of credit during two different periods of time。 The five selected family variables were: (1) the family size, (2) the age of the head, (3) the educational attainment of the head, (4) the employment status of the wife, and (5) the family income leve1. The time periods were July 1, 1968 through June 30, 1969, and January 1 through December 31, 1970 .

## Significance of the Study

The United States Department of Agriculture is concerned with the national implications of the use of credit by families, and especially the effect that the Federal legislation may have on these families. The Consumer and Food Economics Research Division directs its attention to problems of the consumer, or the family unit. This direct involvement, along with Oklahoma State University's desire to make the courses that it teaches realistic and geared to today's needs, provided the initiating forces for this study.

Since 1940, there has been an overall increase in the use of consumer credit. However, this growth has not been at an even rate for all divisions of credit. There has been a decrease in the portion of the total credit outstanding accounted for by non-installment credit and a definite increase in the amount accounted for by installment credit.

The World War II period was characterized by a scarcity of consumer goods, which resulted in an overall decline in the use of credit. But since 1950, the use of credit has continued to grow. Industry
produced more goods, which were used by consumers by means of credit. During this period of time there has been an increase in the acceptance for credit use. In March 1972, the total amount of credit outstanding was $\$ 136.1$ billion compared to $\$ 123.6$ billion in March, 1971 (15, 16).

This trend is predicted to continue. One author states ... "it thus seems clear that the consumers are in a strong financial position for expanding credit use". (19). An article in a recent issue of Business Week sums up the forecast for credit, "When the consumer buys, he will buy on credit' (71).

## Objectives

The specific objectives of this study were:

1. To determine the type of transaction that families use to pay for durable goods costing $\$ 100$ or more, in 1969 and 1970.
2. To investigate the frequency that cash and credit transactions are used by each of the selected family variables.
3. To compare the total amount committed, the amount paid on old debts and the amount paid on new debts for each of the selected family variables.
4. To study the problems encountered by families in making credit payments in 1969 and 1970 。
5. To make recommendations, for the educational use of the data concerning credit involvement.

## Hypotheses

The null hypotheses tested were:

1. There will be no significant difference in the distribution of
the 1970 sample over the 1969 sample.
2. There will be no significant difference in the type of transaction that families used in 1970 over families in 1969.
3. The number of cash transactions, the selected family variables and the year are mutually independent.
4. The number of credit transactions, the selected family variables and the year are mutually independent.
5. The total amount committed, the selected family variables and the year are mutually independent.
6. The amount paid on old debts, the selected family variables and the year are mutually independent.
7. The amount paid on new debts, the selected family variables and the year are mutually independent.

It was also hypothesized that:

1. The three member families use credit more frequently than smaller and larger families.
2. Families with young heads use credit more frequently than those families with older heads.
3. As the education of the head increases the frequency with which families use credit increases.
4. Families with homemakers employed full time outside the home will use credit more frequently than families with full-time homemakers.
5. As the income of families increase, the frequency with which families use credit increases.

## Assumptions

This study was planned on the basis of the following assumptions: 1. The eligible families (husband and wife, married one or more years, with head under 45 years of age) are those most likely to use credit.
2. The extent to which credit is used by eligible families in Enid, Oklahoma is typical of families in the Mid-West.
3. The kinds of problems the eligible families face in making credit payments are characteristic of families in the Mid-West.
4. All other economic forces remaining constant between 1969 and 1970, only the Truth-in-Lending Law will have any bearing on the use of credit.
5. The population from which the sample was taken has approximately a normal distribution.

## Limitations

All the decisions regarding the overall cooperative survey were made prior to the time this researcher became involved with this study. The dates for collection of the data, and the design of the interview schedules were determined by personnel at the Oklahoma State University and at the United States Department of Agriculture. The interview schedules were taken by trained, paid interviewers.

The study will be limited to the analysis of that part of the data provided by the interview schedule relative to the use of credit and the experiences in making credit payments by families. Only five selected family variables, the family size, the age of the head, the
educational attainment of the head, the employment status of the wife and the family income level, were used in the analysis to determine the traits of families using credit.

## Definitions

The definitions as outlined in the instructions given to the interviewers in 1969 and 1971 were used throughout this study (26, 27)。

Consumer Credit refers to deferred payment purchases and installment loans for goods and services for family living, except home mortgages. This includes short term charge accounts where interest is charged. For the purpose of this study the terms consumer credit and credit will be used interchangeably.

Eligible Family refers to the type of family likely to use credit more. These families met pre-determined criteria, and were the only families from which data were collected. To be eligible for a schedule, a household must include a couple that has been married (or living together) 1 year or more and the husband must be under 45 years of age.

Schedule Year refers to the time period considered for collection of the data. In the 1969 data, the schedule year was July 1, 1968 through June 30, 1969 and in the 1970 data, January 1, 1970 through December 31, 1970.

Family Size refers to the number of persons who occupy the housing
unit. These were classified as 2 member, 3 member and 4 member and over.

Age of Head refers to the actual age in years of the husband. These were grouped as less than 25 years, 25-34 years and $35-44$ years.

Educational Attainment of Head refers to the highest level of education completed by the husband. These were categorized as less than high school, high school and more than high school.

Emp loyment of Wife refers to the employment of the wife outside the home. The classes used were none, full-time 35 or more hours of work a week all year, and parttime - less than 35 hours of work all year.

Family Income refers to the money income before taxes of both husband and wife from all sources - earnings, interest, dividends, rents, etc. This does not include the income of other persons in the household unless the entire amount is pooled. The categories studied were, less than $\$ 5,000 ; \$ 5,000$ $\$ 10,000$ and greater than $\$ 10,000$.

Cash Transaction refers to any item purchased with cash from income or savings or gifts. This also includes purchases on a 30 -day credit card or other charge

- account on which no interest was charged. This does not include items purchased with cash from a loan.
$\frac{\text { Credit Transaction }}{}{ }^{\prime}$.
charge account, with a loan or on an installment plan. This includes credit used by the husband and/or wife but not the credit used by other adults or teenage children living in the home. Total Amount Committed refers to the dollar amount that the family is required to pay regularly during the schedule year. This includes consumer debt payments, food for use at home and for meals and snacks eaten away from home, taxes on the home and insurance payments including life, health, car, homeowner and personal property.

Old Debt refers to consumer credit debts owed before the schedule year but being paid on during the schedule year.

New Debt refers to consumer credit debts taken on and paid on during the schedule year.

Durable Good refers to an item costing $\$ 100$ or more and used in the home or by family members. The schedule contained such items as TV, boat, camper, carpet, furniture. Payments on homes are excluded.

Borrowing money refers to obtaining a cash loan from any lending institution or from any friend or relative to meet a debt or an installment payment.

Unplanned Cuts In Spending refers to a family being forced to make cuts in their regular spending that they had not planned to make prior to taking on a consumer credit debt. They found making payments more difficult than they had expected.

Late Payment refers to a payment made somewhat later than the due date on the bill but within the month or period before the issuance of the next regular bill.

Skipped Payment refers to a payment not made within the month or period to which the due date pertains. A skipped payment and a neglected payment are used synonymously.

Dwelling Unit refers to a room or group of rooms occupied or intended to be occupied as separate living quarters by a family, other group, or a person living alone. Trailers and apartments as well as homes are synonyms.

Format of the Thesis

In this chapter the researcher has indicated the problem to be studied, its economic importance to families, the assumptions and the limitations and the hypotheses to be tested.

Chapter II outlines the major reasons families use credit and provides the background for the selection of the eligible family criteria for this study. The Truth-in-Lending legislation is discussed including the facts leading up to the passing.

In Chapter III the methodology of the survey is described. This includes the selection of the population and the sample, a description of the complete interview schedule and the segment used for this study and the test statistic.

The analysis of the data is described in Chapter IV. The data is presented in two and three dimensional contingency tables. The chi-
square test statistic was applied to test the null hypotheses.
Chapter $V$ summarizes the analyses and the conclusions. It also
offers suggestions for the educational use of the information concerning credit involvement and for further research in the area of credit use by families.

## CHAPTER II

## REVIEW OF LITERATURE

## Introduction

A major goal of families is to live better economically (83). Although no two families have the same needs and wants, all families use a variety of goods and services to satisfy their needs and wants. The economic wants are not satisfied automatically, as obtaining the necessary goods and services to satisfy these wants requires planning and management ( $6,63,83$ ) . In order to satisfy these wants, Burk (8) suggests that

- . each consumer decides first, for a given period of time what portion of the income to spend o o. The next decision may be whether to use cash or to make monthly payments to obtain the commodity or service.

This theory is supported by Cohen and Morgan。 They directed their study under the assumption that "there are some consumers who consistently pay cash; others are willing to use installment credit for at least some purchases" (12)。

The past three or four decades have shown considerable change in the attitude toward the use of credit (1). Previously, families were acquiring only the necessities of life and doing without any luxuries. However, "the attitudes of debt have changed from poverty-stricken to part of American way of life (9). Today, families acquire durable goods as they are needed, and pay for them out of future income. This
change in attitude in the use of credit has also resulted in families being over-extended.

Historically, the use of installment credit has been for the acquiring of durable goods (13, 59, 63). In 1970, durable goods expenditures accounted for 14.5 percent of total consumption expenditures (5). Booth (4, 5) states in the finance facts annual series that,

The financing of consumer durables has been the major factor in changes in consumer installment credit extensions and, in recent years has amounted to between $60 \%$ and $70 \%$ of all installment extended during each year.

Consumer credit will continue to be a major concern for many families. For some the use of credit will result in problems. Cohen has shown that "the use of credit does not impair and the use of cash does not encourage thriftiness in the form of liquid assets" (12). Therefore, as with cash expenditures, "prudence in the use of credit by consumers and in the extension of credit by lenders is and always will be needed" (48). Credit laws have been legislated and passed, but the final responsibility for good judgment in using credit is placed on the family.

The Role of Credit in the American Economy

Consumer credit has played an important part in the development of the present economy. "The system of mass production and mass distribution is based on an adequate credit system" (6). "And mass production depends on the ability of a lot of people to buy what is produced'r. (35) 。 Thus, credit is a vital link. Credit allows families to increase material comforts on the basis of future income rather than present assets (18, 63). Therefore credit helps to create the
necessary balance between the supply of and the demand for goods and services.

The increasing trend in the use of credit has influenced consumer spending. Knudsen (49) suggests there is a lag between increased income and increased spending to allow for adjustment of the consumer budget. The ramifications are that this increased spending probably means increased use of credit. Along with a 6.5 percent personal income increase from 1970 to 1971, the consumers willingness to spend and to take on debt strengthened in 1971 (34)。 In December 1971, the Survey of Current Business (19) predicted that "consumers are in a strong financial position for expanding credit use.". This expansion of credit use depends on the consumers willingness to spend. As a result of being willing to spend and the availability of credit, families may alter their demand (50) thereby, creating new markets for the desired goods and services. Credit, when properly used, contributes to an expanded economy.

Credit is also associated with some dangers to the economy. Cole (13) suggests that if credit is used in excess in the country, it "can lead to over stimulation of business activities and to inflation." The implication is that over extended credit can create a demand for consumer goods which cannot be matched by the supply with the existing production capacities. This produces a demand-pull type of inflation or a situation of buyers willing to spend more money than it takes to purchase the available goods at current prices. The artificial expansion of a family's purchasing power through greater use of credit may contribute to inflation. Black (2) points out another danger of the increased credit use,
. . . too many people are being sold more debt than they can afford . . .

This creates the problem of educating consumers to use good judgment before deciding to use credit.

Because credit joins all units of the economy together, the use of credit can cause the entire economy to suffer or to benefit, depending on the responsibility of those using and extending the credit.

Reasons for Increased Credit Use

People differ in the extent to which they use credit. The ease of obtaining credit along with the change in attitude toward the acceptance of credit use has helped to $\exp$ lain the increasing credit outstanding. Several other factors contribute to this trend.

The growth in discretionary income, that portion of the income after accounting for fixed expenditures, has been cited as one factor. As the family's discretionary income increases the family is more willing to incur installment debt (23). Because these families have extra income above that required for the basic necessities for life, they tend to spend the remaining income in the form of credit transactions.

With the change from an agricultural to an industrial economy, longer periods of time were made available for credit repayment (79). This change toward urbanization has caused the family to change from a producing unit, who had little need for credit, to a consuming unit (31). Also, more family heads are fully employed to provide a regular family income (23). Because this income usually increases with the length of employment, families can borrow against the higher expected
income (79). This increase in the regularity of family income makes families more willing to incur debt.

The increased protection and family security allows families to buy goods and services on credit. Previously, families were forced to put aside funds for emergencies. However, medical insurance, social security, unemployment plans and retirement funds have reduced the fear of the unexpected, thus making families more willing to take on debt (23).

The population increase results in an increase in the number of new families. These families create new credit markets, as families who have not yet built up cash assets use credit to obtain goods and services to increase their standard of living (13, 56).

With the increasing knowledge and understanding of the advantages to be gained from using credit, the amount of credit used will increase (56). Financial institutions make credit more available and allow longer repayment periods (23). This convenience allows more families to select the credit terms which best suit their needs. Also, the attitude toward the use of credit has changed, making reasonable debt payments respectable.
"Indications are that the use of consumer installment credit which has been a nominal part of an expanding economy will continue' (56). The influence of the increasing income, population, family security and knowledge wi.ll cause the trend to use consumer credit to continue.

## Advantages to Using Credit

The use of credit has been defined as a privilege. Nickell and Dorsey (63) state,

At any given time the use of credit increases purchasing power and thus makes possible for the provision of more goods and services than cash in the hand would allow. Credit can never take the place of income in personal and family finance, but it does have the power to alter the time when income will be spent.

Rodda and Nelson (64) support this theory and suggest

- . each family must remember that today's use of credit is made out of tomorrow ${ }^{\imath}$ s repayment from future income.

Before using credit, each family must evaluate the effect of the payments on the financial situation of the family. The careful planning for the use of credit should be part of the family's total money plan.

Although credit increases purchasing power at any given moment, unless the purchase makes possible additional earning power, the final total purchasing power is not really increased, but the time of the payment is merely delayed (66).

Many authors suggest that installment buying is justifiable only under certain conditions. Wilhelms and Heimerl (82) suggest four of these criteria.

1. articles that constitute an investment to increase income,
2. goods of lasting value which permanently improve the family's living and which will be in use long after the last payment is made,
3. necessities rather than luxuries,
4. high priced articles rather than small purchases.

Morgan specifies items he considers to be wise and acceptable uses of
credit. The top six items are medical, education, car, furniture, accumulated bills, and expenses if income is cut off (1). The planned use of credit offers the following advantages.

1. Greater convenience in purchasing goods and services (6, 13, 80, 82). Dunkelberg and Sṭafford (25) point out in their study that the use of installment credit provides a means for the consumer to adjust expenditures so that consumption can be smoothed over time and does not become dependent on the more uneven flows of resources. Thus, credit permits families to buy goods and services they need when they don't have enough cash saved to pay for them. This immediate satis. faction of owning goods may in some cases prompt families to save (3). Also, credit avoids the necessity of carrying large sums of money while shopping and travelling. Often credit customers enjoy additional conveniences such as advanced sale notices, buying on approval, ordering by telephone and easier to return goods (6, 82). For some families it is convenient to pay for all purchases within a given period of time, at once and receiving records of these expenses (6).
2. Enjoyment of goods and services while paying for them (6, 13, 63, 64, 80). The high cost of consumer durables makes it difficult to save enough money to pay cash for these i.tems. Credit makes it possible to use the goods and services and to enjoy them while the family is paying for items out of future income. However, the use of credit should be part of a long range plan in which payments are worked into the budget over a period of time (6).
3. Opportunity to maintain a higher standard of living (6, 12, $63,64,72,80)$. Many families use credit to obtain goods which would require a long saving period. By purchasing a home on credit, families
satisfy their needs while paying for this commodity which has great durability and a long period of utility. In a study by Ward (81), it was concluded that

- . . consumers desire to improve their standard of living is a stronger influence on the decision to buy on credit than is the fact that extra charges are involved.

Low and middle income families can purchase goods and services which would not be available to them without, the use of credit. Credit debt provides a means for them to enjoy the affluent economy (9, 79).
4. A method of handling financial emergencies (6, $13,63,80$, 82). When a family runs into hard luck, emergencies, income fluctuations or unemployment, the use of credit will temporarily help families get back on their feet (28). Families with a decreased income because of unexpected expenses as a result of accidents, sickness or death, can use credit as a means of handling the difficulty.
5. Meeting peak-load conditions (13, 82). Families especially need credit when expenses pile up suddenly and it is necessary to spread payments over a period of time. Credit use spares families the alternatives of borrowing from a friend or depleting savings (6). For some families, the use of credit may be the best method to finance the education of the children.
6. Establishing a credit rating (76, 82). By using credit wisely, families will always have credit available in the event that it may be needed. Credit becomes an important asset to families (13)。 The American Bankers Association has adopted standards based on (a) emp loyment record, (b) income, (c) residence stability, (d) financial structure and (e) debt record, to determine the credit rating of the family. The prompt meeting of all credit obligations will keep the
credit rating of a family high, as a good credit standing is important (64). The established credit rating whether good or bad will follow the family wherever they go (76).
7. Speculation $(63,80)$. Many families who have planned their financial management can use credit and profit from the use. However, this is not true of all families, as those who cannot manage their money usually end up owing several people.

No family through the use of credit can consistently live beyond its income. Families must remember that caution in the use of credit is essential if credit is to aid in financial security. Unwisely used, credit sometimes leads to financial disaster. Families buy things they do not need or more than they can afford, pay no attention to financial charges, skip payments and get into trouble with creditors, thus become credit risks (72).

## Profile of Credit Users

Families are the major users of credit. Consumers of all ages, educational attainments, income levels and occupations use credit while managing their financial affairs (6). Because of the widespread use of credit and the variety of persons using credit, all people must be educated to become competent in dealing with credit use. Given the availability of credit, families make the final decision to use or not to use credit to finance their durable good purchases (53).

The size of the family indicates the need for expenditures on the basic necessities and determines the amount of the income to be allocated for the purchase of durable goods (53). David studied the effect of the family size on family consumption under the assumption
that size is the most critical influence on consumption. He concluded that despite increases in the size of the family, the family must still live within their financial means (24). Another study indicated that the average amount of debt increases slightly as the size of the family increases (65).
"A negative relationship seems to exist between the age of the head of the household and its average propensity to incur debt" (65). Lee points out that the young consumers are more likely to have a favorable attitude towards debt (53). They are also expected to have larger expenditures on durable goods and will carry larger amounts of debt. Linden describes the young as being more dependent on credit (71). Katona et al. have isolated the families with $25-34$ year old heads as the age group most frequently incurring debt (38). They also concluded that 16 percent of families with heads under 25 years, have committed to debt over one-fifth of their income (47). Thus, age of the head appears to be an important factor in the amount of credit used.

The educational attainment of the head affects the amount of credit used. Lee (53) describes the relationship between education and credit use as follows:

Durable good buyers who have at least a college degree are much less likely to use credit than the rest of the population. It could be due to the difference in their attitude toward borrowing because education provides opportunities to develop many aspects of a man's character and ability which in turn influences his value judgment, knowledge of social and economic institutions and the consequences of borrowing.

Katona et al. also found that installment debt was not as frequent among college degree persons as those with lower education (43).
"Employment has a direct effect on the use of consumer credit" (71). Skilled and unskilled workers tend to use a large amount of credit, because these families have a small amount of liquid assets (80). Katona et al. determined that if the head is self employed or retired then they are less likely to have debt than those with heads working for others (41). They also found out that installment debt was more frequent with those who worked forty hours per week than those who worked less. A current trend is the increase in the number of wives employed either for the purpose of raising family living standards or for personal fulfillment. To date no study has been completed to compare the effect of the wives' employment and the use of credit.

The stage in the family life cycle determines the amount of credit the family is required to use. The use of installment debt is most frequent when people are married and have children (6, 52, 68, 80). "Needs for a home and durables are greatest at this period as the wife is less likely to be employed" (52). As the children leave home the pressure to assume debt declines (68). Usually retired persons do not use a lot of credit, but because the income is low during this period, there may be a need for credit in the case of emergencies. Results of a study show that recently married families have more debt than longer married families (41).

One of the factors which influences the probability that a family will owe installment debt are the liquid asset holdings. If little or no financial reserves are available, then the family is likely to have more installment debt than the affluent families (41). In general, as the liquid assets rise, the frequency with which debt occurs, de-
creases because these families tend to use cash (80).
According to Miner, income is the only variable that has signfficant influence on the amount the individual borrows. High income families have little need for borrowing money and low income families are given credit reluctantly and for a short time (53, 80)。 In 1966, there was an increase in the frequency of families in the top income levels owing installment debt (43). By 1970, of those families earning more than $\$ 15,000$ per year, a higher portion had outstanding installment debt than in 1969, while the opposite was true for families in low income levels (47). However, the proportion who owe installment debt is highest in the middle income group (5, 52). The middle income group have both the need for credit and the ability to borrow so they can make more frequent use of credit (53). Schipper found that "the family whose income has gone up will carry on the average less debt than the family whose income is relatively stable" (65).

## Prevention of Credit Abuse

The explosion in the use of credit by consumers leads to the problems inherent in the extension of credit. "Easy credit has become the most serious consumer problem and the one with sometimes the most tragic consequences" (55). Bryant et al. (6) support this statement by simply stating, "You can control credit--or credit will control you." Basically, financial difficulties occur when the family expenses or debt obligations exceed the family's means. The use of credit does, however, allow a family to "spend more in any given year than their current income and current liquid reserve' (37).

In a study by Matsen (1) the profile of the problem credit user
was described. Of those who were over-extended, 25 percent indicated the over purchase of consumer goods, and 75 percent that poor financial management were the causes of them being in debt. According to this study, family debt was higher if the spouse worked outside the home and where the family income was $\$ 4,000$ to $\$ 5,000$. Thus the need for consumer education programs seem evident, especially in the area of money management.

The misuse of credit often is a result of a family being misguided and misinformed on money matters. The best plan to help families from going into excessive debt is to make them aware of methods to keep them from assuming excessive debt. Families have to consider the relationship between the income and the expenditures. Smythe (66) suggests a basic guideline,

To be financially stable a family cannot take on credit commitments that total more than the difference between its income and its other monetary commitments.

Because all families have different needs and wants, no simple formula can be given to suggest the maximum amount of credit debt to be assumed.

The determination of safe credit levels must be made individually by each family on the basis of its own financial situation (66).

Those families with credit problems can handle their difficulties in several ways. However, families counselled as soon as they realized their problem, may be helped by simply developing a money management plan or revising the existing family budget (6). Often, a family comes upon something unexpected which suddenly reduces the amount of money available for credit payments. Once again, a sound money management plan when developed and followed, would provide families
with enough emergency money to meet such situations. Most important, families in financial difficulty should be encouraged to take action, immediately when the problem is first encountered.

## Facts Leading to Truth-in-Lending Act

As the years passed and the amount of credit used by families increased, it became apparent that credit regulations should be reviewed. Credit instruments had become highly technical and legalistic, resulting in few people understanding the terms or knowing the costs involved in the contracts they had signed. Creditors were stating finance charges in a variety of ways. The terms of the contract were usually spelled out in the fine print and often required the services of a lawyer to interpret the legal language in order to make meaningful comparisons among lenders (78)。 Often consumers paid little attention to the terms of the credit contract, providing the down payment could be met and the monthly payment fitted into the budget (78). Many of these deals were not to the consumers advantage. Thus, the need for legislation was evident. "Some legislators thought in terms of federal legislation, while others in terms of state legisla. tion'" (62).

Former President John F. Kennedy initiated the era of consumerism and his concern developed into the Consumer Bill of Rightso Under this Bil1, which was passed in 1962, the four basic consumer rights were out lined; the right to choose, the right to safety, the right to be heard and the right to be informed (14). The right to be informed provided the basis for credit legislation.

The first federal truth-in-lending bill was introduced by Senator

Paul Douglas of Illinois in 1960, in the 86 th Congress. This "Consumer Credit Labeling Bill" (S2755) required the statement of total finance charges in dollars and cents and in simple annual rate to accompany every credit transaction (13, 62, 74, 77). However, opposition to this bill was heavy, resulting in its defeat. Attempts were made by Senator Douglas to meet these objections by proposing new bills in the succeeding sessions of Congress as Truth-in-Lending Acts. But again, these were defeated (74, 77)。

In 1967, Senator William Proxmire of Wisconsin picked up where Senator Douglas had left off and introduced the Truth-in-Lending Bill (S5). With support from the executive branch, this bill passed the Senate on July 11,1967 (13, 62, 74, 77). This bill required a full disclosure of the dollar and cents cost of most credit transactions, exempting first mortgages and finance charges under ten dollars from the annual rate disclosure requirement. It also required creditors to reveal the monthly or periodic rate of revolving credit (77).

Meanwhile, Representative Leonor K. Sullivan of Missouri was revising the Senator Proxmire's Truth-in-Lending Bill. This was (HR11601) introduced in the House on July 20, 1967 (74, 77). It was passed in an amended form on February 1,1968 (62, 77). The amended Bill required a full disclosure of the dollars and cents cost of most credit transactions including first mortgages. It required revolving credit rates to be reflected as annual rates. Credit advertising restrictions, administrative enforcement provisions and garnishment limitations were included. "The Bill proposed a National Commission on Consumer Finance to study the consumer credit industry and to make recommendations to Congress with respect to additional legislation" (77)。

On May 22, 1968, a House-Senate Conference Committee agreed on a version that adopted, for the most part, the provisions of HR11601 as amended (77).

The Consumer Credit Protection Act (CCPA) was signed by President Lyndon B. Johnson on May 29, 1968. President Johnson stated in a message to Congress, "As a matter of fair play to the consumer, the cost of credit should be disclosed fully, simply and clearly" (76).

## Truth-in-Lending Act

The Truth-in-Lending Act is Title I of the four-part Consumer Credit Protection Act. Basically, Truth-in-Lending is a disclosure law (58, 78). It is meant to require the lender to state plainly the terms of the contract in a language that is uniform and concise in accordance with regulations of the Federal Reserve Board (58, 78). All the information must be given to the consumer before the transaction is completed (75). Briefly the other parts of the Consumer Credit Protection Act are Title II dealing with extortionate credit transactions, Title III pertaining to wage garnishment and Title IV providing for the creation of a National Commission of Consumer Finance (76, 77).

The Truth-in-Lending Act requires that for all consumer credit contracts up to $\$ 25,000$ and home mortgages of any size the true annual interest rate or, the "annual percentage rate" be disclosed, as well as any extra charges not included in a cash deal. This excludes credit up to seventy-five dollars, if the finance charge is five dollars or less, credit over seventy-five dollars if the finance charge is seven and a half dollars or less, or monthly bills if the
finance charge is fifty cents or less．In addition，installment con－ tracts must state in dollars，the total of all finance charges and re－ volving credit accounts and monthly bills must state the＂nominal annual percentage rate，＂twelve times the monthly rate，Simply stated， all information important to the informed use of credit must be dis－ closed（74，76，77，78）．

Another feature of the Truth－in－Lending Act provides protection to the homeowner．Mortgage interest is calculated to be any money paid。 Any installment scheme involving a lien on one＇s residential property wi 11 provide the consumer the right for the next three business days to cancel the agreement without penalty and to have any down payments fully refunded（73，74，76，77，78）。

The Truth－in－Lending Act also regulates credit advertising（56， 76）．＂Any advertising mentioning specific terms such as the size of installments must tell the whole story，including the annual rate of finance charges and in revolving credit the billing method＂（74）．

In 1970，the Truth－in－Lending was amended to include regulations related to credit cards．Tippett．（75）summarizes this amendment as follows：

These provisions ban the unsolicited mailing of consumer credit cards；limit the cardholder＇s liability to \＄50 when a card is lost or stolen，with no liability if the issuer of the card is informed before the card is used； require that all cards bear identification of the user • 。

The Truthøin－Lending Act does not regulate or control finance charges for credit（58，76，77）．The whole idea was to provide every consumer who has the need for credit，meaningful information with respect to the cost of credit so he will be able to effectively shop for credit．

## Truth-in-Lending: A Diversity of Views

In 1965, prior to the passing by Congress of the Truth-in-Lending Act, Curran (22) under the direction of the American Bar Association completed the first comprehensive study of the laws regulating and conr. trolling consumer credit loan and sales transactions. This study outlined the mass and the complexity of the consumer credit regulatory statutes and pointed out that only specialized lawyers could find the relevant statutory material dealing with a consumer credit problem. Moo (58) feels that the Consumer Credit Protection Act "has done nothing to simplify or systematize the existing body of credit control legiso lation." He continues in his article on Legislature Control of Conm sumer Credit Transactions, " . . . the CCPA merely adds to the existing confusion • - ."

Truth-in-Lending was intended as a major step toward helping the consumer adapt to his credit oriented world (77). The reaction to the passing of the Truth-in-Lending Act is described by Chairnoff (10). He stated,

Requiring uniform and meaningful disclosure of the cost of consumer credit, the law has been hailed by some as a major breakthrough in consumer protection and condemned by others as an ineffective addition to the mountain of paperwork already burdening consumer credit transactions.

Consumers Union suggest that "the protection offered in the Consumer Credit Protection Act is minimal" (73)。 This view is supported by Morse (62) as he described the current laws.

-     - laws which accommodate the sellers of credit, but which have no rationale for consumers.

Some consumers consider credit a substitute for money and for some of these no amount of information will protect them from endless
amounts of debt（6）．For many consumers，debt will be taken on re－ gardless of the families ability to pay．

A survey by the Federal Reserve Bank of Philadelphia in June 1969 indicated that only one out of every ten consumers knew that Truth－in－Lending was a federal law that would provide consumers with certain credit information（10）。 Katona et al。 show that＂in spite of the implementation of the Truth－in－Lending Law and its attendant publicity，the great majority of consumers are unaware of the true cost of installment credit＇（48）。 The survey showed that only 34 per－ cent of the respondents estimated the rate of interest to be as high as 10 percent（48）．These results indicate a need for educating the consumers if they are to benefit from credit legislation．

Later，Mandell（54）conducted a study to determine the perception of incurred interest rates on credit transactions before and after the effective date of Truth－in－Lending．The major finding was that：

Consumers who borrowed on installment loans since the Truth－in－Lending Law went into effect are more aware of the true rate of interest that they are paying than were consumers who borrowed before the Law was enacted．

He also concluded that characteristics of borrowers，in particular income level and age，had no effect on the knowledge of incurred interest rates，but the size of the loan had more effect．

The size of the loan proved to be the best indicator of accuracy both before and after the enactment of the law indicating perhaps that persons who borrow relatively larger amounts of money are more concerned with interest rates since interest charges constitute a more important item in the family budget．

Chairnoff summed up the future impact of Truth－in－Lending by putting responsibility on the consumer．He stated，＂regardless of the amount of information imparted to them，they must be willing to
upgrade their credit knowledge" (10).

## Summary

Credit is one of the most powerful economic forces in our society. The effect that using credit has on a family's financial situation depends on the planning and management that he family is willing to put forth.

The increased use of credit has influenced the growth of the economy. Families as well as lenders are responsible for the contributions and the dangers involved in the use of credit.

Several factors were cited to account for the trend toward increasing credit use. The growth in the discretionary income and the increased regularity of the income resulted from a change in the population. The overall increase in education and change in the protection offered to.a family help to explain why the amount of credit outstanding continues to increase.

The planned use of consumer credit offers many advantages to families who use credit. All the advantages discussed will help the family only if caution is followed when using credit. Otherwise, the unwise use of credit causes problems to many families.

As families are the major users of consumer credit, several personal characteristics were discussed. The major seven areas investigated supported with previous studies included the size of the family, the age of the head, the educational attainment of the head, the employment classification of the family members, the stage in the family life cycle, the liquid asset holdings and the income. For each, previous studies indicated the traits of the family most likely to use
credit.
The increased use of credit can result in some very serious problems. The misuse of credit often is the result of a family being misguided and misinformed on money matters. It was suggested that families take immediate action, if they encounter problems in using credit.

The need for credit legislation and the steps taken in the past decade to improve the laws were outlined. The initial Truth-in-Lending Bill was traced to the final passing of the consumer credit protection act. The major areas covered in Truth-in-Lending were discussed. Although Truth-in-Lending was meant to provide the consumer with information to use credit wisely, many authors are concerned that consumers are not aware of this law.

Through an effective consumer education program, families should become aware of their consumer rights and responsibilities. Because the power of credit is great, no intelligent consumer can afford to ignore it or to misuse it.

Chapter III will describe the methodology employed in this study.

## CHAPTER III

## METHODOLOGY

## Introduction

The use of consumer credit for buying durable goods has increased rapidly over the past years. Because credit is now considered a respectable financial resource for families, many families buy items on credit instead of paying cash. This decision means a different kind of family financial planning and presents a different kind of experience for the family in meeting the credit payments. To obtain information as to how families use credit, a two stage survey was developed. This survey was conducted by Oklahoma State University, Division of Home Economics in cooperation with the Consumer and Food Economics Research Division of the United States Department of Agriculture。

The first stage, "Family Decision-Making in the Use of Consumer Credit," was designed to collect data about the experiences of actual families in making decisions about and the use of consumer credit of various kinds. This information was gathered in September and October 1969 for the year July 1, 1968 to June 30, 1969. This was the year immediately preceding the time that the Truth-in-Lending legislation went into effect. The second stage, "Family Attitudes in the Use of Consumer Gredit," was planned to collect data about the attitudes of families toward credit use and the effect of credit use on family life
in 1970, the year after the effective date of Truth-in-Lending.

## Selection of the Population

The city of Enid, Oklahoma was selected as the location for this two stage survey. Because of the size of the city, 45,000 , it was believed that there would be a distribution of all family types, thus providing a wider range of families for data collection. Since Enid is only sixty miles from Stillwater, it was convenient to make frequent visits, while the interviews were being carried out. The third reason for selecting Enid, was that the city was not likely to have a lot of other surveys being conducted at the same time. Thus, homemakers would be more willing to take the time to provide accurate and complete information.

## Selection of the Sample

A random block sample was selected to give a representative cross-section of the population of Enid, Oklahoma. This block sample was designed and drawn by statisticians at Oklahoma State University。 The sampling was done without replacement so as to give each block in the city limits of Enid a chance to be selected for finterviewing. Only dwelling units in these areas were visited. It should be noted that a sample block, in some cases, included more than one city block. Each dwelling was not visited on each of the selected sample blocks. To determine which dwelling an interviewer was to visit first, each Sample Block was given a Block Start Number and to determine how many dwellings to skip before visiting the next, there was a Block Sampling Rate assigned. The interviewers were instructed to
to start at the northeast corner of the sample block and to proceed in a clockwise direction. Thus, an instruction reading Block Number -24; Block Start Number -2; Block Sampling Rate -3 told the interviewer to go to Block Number 24, begin with the second dwelling and visit every third unit after that. Throughout the survey, the Block Start Number was selected at random for each Block Number, and the Block Sampling Rate remained at three.

For each of the designated dwellings, a record card was completed to determine whether the family was eligible for a schedule. Only families meeting the three pre-determined criteria were eligible for the collection of the data. The eligibility requirements were a husband and wife family, married at least one year, with the husband under 45 years of age. This type of family was chosen because previous research showed that they were likely to use credit more than other family types.

For each of the eligible families the same interview schedule was completed. The information recorded was that given by the home-maker--the wife of the head of the household.

## Interviewers: Selection and Training

The interviewers were all local women from the Enid area, who had had contacts with the Oklahoma State University Extension personnel in Garfield County. They were screened and chosen on the basis of a personal application and the results of a written test. The only other criteria were that those selected to interview had a car and were available to take interviews anywhere in the community in evenings and on weekends as well as during the regular working day hours.

Prior to the actual collection of the data, a training session was held to acquaint the interviewers with the purpose of the survey, techniques for conducting a satisfactory interview, and methods of recording the information accurately. Each area of the survey schedule was discussed in detail. Also, the interviewers were given a manual to serve as a guide while actually collecting the data. Toward the end of the training session, the interviewers were given an opportunity to do practice interviews with families in the community not living in the blocks included in the random block sample, and then to return to the training workshop to discuss any problems. Every precaution was taken to insure that all interviewers in both 1969 and 1971 were given similar instructions.

## The Interview Schedule

The interview schedule was lengthy and required 30 to 45 minutes to complete. The schedule was divided in several sections allowing for only those sections to be completed which related to the situation of the family being interviewed.

In 1969, the schedule (shown in Appendix A) was used with each family. This schedule was divided into seven sections:

- . Section I, "Credit Used During the Schedule Year"; II, "Payments on Previous Credit Transactions"; and VII, "Household Information' were asked of every eligible family.
. . Section III, "Decisions on Credit for Durables," was asked only of families that bought something costing over $\$ 100$ on credit or took out an installment loan for a durable good during the schedule year.
- . Section IV, "Decisions on Loans for Non Durables," was asked only of families that took out a loan for over $\$ 100$ for a nondurable item or for consolidating or refinancing debts.
- . Section V, "Making Credit Payments," was asked only of families that made payments on consumer debts during the schedule year.
- . Section VI, "Details on Cash Purchases," was asked only of families that made a major cash purchase during the schedule year.

Although the 1971 interview schedule (shown in Appendix B) was shorter than that used in 1969, there were comparable questions. The schedule was divided into five sections:

- . Sections I, "General Satisfaction"; II, "Attitudes About and History of Credit Use"; III, "Credit Used During the Schedule Year"; and V, "Household Information" were asked of every eligible family.
- . Section IV, "Making Credit Payments," was asked only of families that made payments on consumer debt during the schedule year.

Sections of the Interview Schedule Studied

Only a segment of the overall survey was utilized by this researcher. This study of the use of credit by families analyzes those areas of the schedules with comparable questions for both the 1969 and the 1970 surveys to isolate the effect of the Truth-in-Lending Law on the amount of credit used by families.

Sections I and II of the 1969 interview schedule and Section III of the 1971 interview schedule provided information on the number of cash and credit transactions for durable goods costing over $\$ 100$ that a family had made during the schedule year. These sections also supplied
data concerning the amount that families paid on old debts and new debts over a given period of time. It was felt the first step in helping families with money problems was to ascertain the traits of families using credit including the amount of credit used.

To reach the 4th objective of this study Section V of the 1969 interview schedule and Section IV of the 1971 interview schedule were investigated. The chief concern was with the experiences encountered by families as they made payments on the credit debts. The amount the family worried about making the payments, the number of times savings were used, the number of times money was borrowed, the number of times unplanned cuts were made in spending, the number of times late payments were made and the reason payments were skipped were the items of specific interest.

## Tabulation of the Data

All the data gathered on the 1969 and the 1971 interview schedules were coded and punched on computer cards. The tables needed for this study were outlined and computer programs were written to generate the required tables from the overall survey data. Because of the lack of entries in several of the cells in the tables from the first computer run, the tables were collapsed along both variables to provide higher cell frequencies.

The data was analyzed in two and three dimensional tables. The two dimensional tables were used when a transaction variable was compared to the two years, while the three dimensional tables were employed when a transaction variable, a family variable and the two years were compared. The data will be presented under the following divi-
sions; the description and comparison of the sample, the type of transaction, the number of cash transactions, the number of credit transactions, the total amount committed, the amount paid on old debts, the amount paid on new debts and the experiences encountered while making credit payments. For each of the cells, the percentage and the expected value were computed. Statistical tests were run to test the null hypotheses.

The Test Statistic

The chi-square test statistic was used to analyze the data. This statistic is most suited to categorical data. The statistic chi-square with $n$ degrees of freedom is defined as the sum of squares of $n$ independent normally distributed variates with zero means and unit variances.

The observed frequencies and the expected frequencies are presented in each table. The observed values refer to the numbers observed in the cells and the expected values refer to the average number assuming that the null hypothesis is true.

For an analysis simply testing the independence of two classifi* cations, the expected cell frequencies may be calculated by equation (1).

$$
\begin{equation*}
\mathbb{E}_{i . j}=\frac{r_{i}{ }^{c}{ }_{j}}{n} \tag{1}
\end{equation*}
$$

where $E_{i j}$ denotes the expected value for the cell in the $i^{\text {th }}$ row and the $j^{\text {th }}$ column,
$r_{i}$ denotes the total of the $i^{\text {th }}$ row,
$c_{j}$ denotes the total of the $j^{\text {th }}$ column,
$n$ denotes the grand total for the whole table.

The chi-square test statistic is a function of the square of the deviations of the observed cell frequencies from the expected cell frequencies, weighted by the reciprocal of their expected cell values. This value may be computed by equation (2).

$$
\begin{equation*}
x^{2}=\sum_{i=1}^{v} \sum_{j=1}^{w} \frac{\left[0_{i j}-E_{1 j}\right]^{2}}{E_{i \cdot j}} \tag{2}
\end{equation*}
$$

where $X^{2}$ denotes the chi-square test statistic,
$v$ denotes the number of rows,
w denotes the number of columns,
$O_{i j}$ denotes the observed frequency in the cell of the $i^{\text {th }}$ row and the $j^{\text {th }}$ column,
$E_{i j}$ denotes the expected frequency in the cell of the $i^{\text {th }}$ row and the $j^{\text {th }}$ column.

The degrees of freedom associated with a contingency table
possessing $v$ rows and $w$ columns is given by equation (3).
Degrees of Freedom $=(v-1)(w-1)$
where $v$ denotes the number of rows,
w denotes the number of columis.
Prior to the analysis, it was determined that a significance level of $\alpha=.05$ would be used.

The calculated value of chi-square test statistic is then comm pared to the tabulated critical value at the determined significance level for the correct number of degrees of freedom. If the calculated chi-square test statistic value exceeds the critical tabulated value at $\alpha=.05$ for the correct number of degrees of freedom, then the null hypothesis is rejected and it is concluded that the data present suf. ficient evidence to indicate that the null hypothesis is not true.

If the calculated chi-square test statistic value is less than the critical tabulated value at $\alpha=.05$ for the correct number of degrees of freedom, then the null hypothesis is not rejected and it is concluded that the data do not present sufficient evidence to indicate that the null hypothesis is true.

For certain portions of the analysis, the mutual independence of three classifications was tested. The classification was made according to 1. the amount of expenditure or number of transactions, 2. the individual family variable and 3. the year. This was accomplished by employing three dimensional tables and slightly modifying the previously described equations.

The expected value was calculated by equation (4):

$$
\begin{equation*}
E_{i j k}=n \cdot \frac{C_{i}}{n} \cdot \frac{F_{j}}{n} \cdot \frac{Y_{k}}{n} \tag{4}
\end{equation*}
$$

where $E_{i j k}$ denotes the expected frequency for the $i^{\text {th }}$ partition of the expenditure or transaction in the $j^{\text {th }}$ partition of the family variable for year.k.,
$n$ denotes the grand total of the whole table; $C_{i}$ denotes the total of the $i^{\text {th }}$ row of the expenditure or transaction,
$F_{j}$ denotes the total of the $j^{\text {th }}$ column of the selected family variable,
$Y_{k}$ denotes the grand total of frequencies for year $k$.

The chi-square test statistic was computed by equation (5):

$$
\begin{equation*}
x^{2}=\sum_{i=1}^{v} \sum_{j=1}^{w} \quad \sum_{k=1}^{z} \frac{\left[0_{i j k}-E_{i j k}\right]^{2}}{E_{i j k}} \tag{5}
\end{equation*}
$$

where $\mathrm{X}^{2}$ denotes the chi-square test statistic,
$v$ denotes the number of rows,
w denotes the number of columns,
$z$ denotes the number of years,
$0_{i j k}$ denotes the observed frequency for the $i^{\text {th }}$ partition of the expenditure or transaction in the $j^{\text {th }}$ partition of the family variable for year $k$.
$E_{i j k}$ denotes the expected frequency for the $i^{\text {th }}$ partition of the expenditure or transaction in the $j^{\text {th }}$ partition of the family variable for year $k$.

The degrees of freedom associated with the three dimensional
table is given by equation (6):
Degrees of Freedom $=(v-1)(w-1)(z-1)$
where $v$ denotes the number of rows,
w denotes the number of columns,
$z$ denotes the number of years.
As in testing the independence of two classifications, the calculated value of chi-square test statistic for testing the mutual independence of three classifications is compared to the tabulated critical value at the determined significance level of $\alpha=.05$, for the correct degrees of freedom. The null hypothesis is rejected, if the calculated chi-square test statistic value exceeds the critical tabulated value. But if the calculated chi-square test statistic value is less than the
critical tabulated value, the null hypothesis is not rejected (29, 57, 70).

## Summary

The survey designed to gather data on the use of credit by families had two distinct stages. The first stage was to collect information regarding credit transactions during the 1969 schedule year, the year immediately before Truth-in-Lending legislation went into effect. In the second stage comparable type data was collected from similar families for 1970, the year after the effective date of the legislation.

A random block sample of Enid, Oklahoma was designed and drawn by statisticians at Oklahoma State University. Families eligible for interview were husband-wife families, married at least one year in which the head was under 45 years of age. Eligible families were interviewed by trained persons during a relatively short period of time. The same interview schedule was used for each family in 1969. Although, the schedule taken in 1971 was shorter than that used in 1969, there were comparab1e questions.

For the study by this researcher, the sections of the overall survey investigated provided information to ascertain the traits of families using credit, and the amount of credit used in addition to the experiences families encounter as they make payments on the credit debts. The data was analyzed in two and three dimensional tables. To test the null hypotheses, the chi-square test statistic was utilized. Chapter IV will present an analysis of the data.

## CHAPTER IV

## ANALYSIS OF THE DATA

## Introduction

This study was designed to investigate the extent to which families use credit and to pinpoint some of the problems accompanying its use. Not all families use credit in equal amounts nor do all families encounter problems while using credit. The data presented in this chapter attempted to suggest the relationship between the five selected family variables and the frequency with which credit is used. $A$ secondary impact of the analysis is to provide information which can be used directly to update educational materials on the wise use of credit.

Each section in Chapter IV contributes to the general knowledge of the use of credit. The sample is described in relation to the family size, the age of the head, the educational attainment of the head, the employment status of the wife and the family income level. The number of transactions or the amount of the credit expenditures, the family variables and the year are presented in three dimensional tables allowing for the utilization of the chi-square test of mutual independence. The last section of the analysis deals with the experiences families have actually encountered while making credit payment.

The calculated and tabulated chimsquare test statistic values are given in Appendix $C$, Table XXXVIII, for all the tables presented in
this chapter. Each value was calculated at a significance level of $\alpha=.05$ and the correct number of degrees of freedom.

Description and Comparison of the Samples

A random block sample of Enid, Oklahoma, a city of approximately 45,000 population was designed and drawn by statisticians at Oklahoma State University. Families eligible for interview were husband-wife families, married at least one year, in which the head was under 45 years of age. There were 365 eligible families for the 1969 sample and 305 eligible families for the 1970 sample. ${ }^{1}$

These eligible families were classified for each year into the five selected family variables; the family size, the age of the head, the educational attainment of the head; the employment status of the wife and the family income level. In order to make valid comparisons from 1969 to 1970, the sample was drawn from the same population.

In Table I, family size of the sample for the two different survey years is compared. There was no significant difference in the distribution of the families according to size, as the chi-square test statistic was calculated to be 1.1014 compared to the critical tabulated value, 5.99147 (Appendix C). The three-member family represented over half of the sample each survey year, 52.07 percent in 1969 and 55.74 percent in 1970. Approximately 30 percent of the samples
$1_{\text {The }} 1969$ interview schedule (Appendix A) pertained to the use of credit from July 1,1968 to June 30 , 1969 . The survey was taken in September and October 1969. The data collected with the 1971 interview schedule (Appendix B) concerned the use of credit during the 1970 calendar year. The survey was conducted during January 1971. Throughout this study these data are referred to as the 1969 data and the 1970 data respectively.

TABLE I

## THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY

 SELECTED FAMILY SIZE| Family Size | Observed |  | Expected <br> Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| 2 Members | 52 | 14.23 | 48.49 |
| 3 Members | 190 | 52.07 | 196.12 |
| 4 Members and Over | 123 | 33.70 | 120.39 |
| Total | 365 |  |  |
| 1970 |  |  |  |
| 2 Members | 37 | 12.13 | 40.51 |
| 3 Members | 170 | 55.74 | 163.88 |
| 4 Members and Over | 98 | 32.13 | 100.60 |
| Total | 305 |  |  |

were represented by families with four or more members, while only 12 percent of the samples were two-member family size.

The distribution of the samples into the three age of head categories is shown in Table II. The 1969 data showed that there was 43.01 percent of the sample, 25 to 34 years old and the 1970 data showed that there was 42.62 percent of the sample 35 to 44 years old. Likewise, there was 38.90 percent of the sample, 35 to 44 years old and 37.37 percent of the sample 25 to 34 years old, in 1969 and 1970 respectively. The less than 25 year old heads represented approximately 20 percent of the sample each survey year. However, when the chi-square test statistic was calculated, there was no significant difference between the 1969 and 1970 age distribution of the sample.

TABLE II

## THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY AGE OF FAMILY HEAD CATEGORY

| Age of Head | Observed <br> Percent | Expected <br> Frequency |  |
| :--- | ---: | ---: | ---: |
| 1969 |  |  |  |
| Less 25 Years | 66 | 18.09 | 69.19 |
| 25 to 34 Years | 157 | 43.01 | 147.63 |
| 35 to 44 Years | 142 | 38.90 | 148.18 |
| Total | 365 |  |  |
|  |  |  |  |
| 1970 |  |  |  |
| Less 25 Years | 114 | 20.00 | 123.81 |
| 25 to 34 Years | 130 | 42.62 | 123.82 |
| 35 to 44 Years | 305 |  |  |
| Total |  |  |  |

The sample was classified according to the educational attainment of the head. Table III shows that in 1969 only 23.01 percent of the sample and in 1970 only 20.33 percent of the sample had completed less than high school. The families with heads who have completed high school represented 35.07 percent of the 1969 sample and 40.33 percent of the 1970 sample. The 1969 data showed that 41.92 percent of the families had heads who had completed more than high school compared to 39.34 percent of the 1970 families having the same educational attainment. The chi-square test statistic indicated no significant difference in the distribution of educational attainment of the head for 1969 and 1970.

TABLE III
THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY THE
LEVEL OF EDUCATIONAL ATTAINMENT
OF FAMILY HEAD

|  | Observed <br> Educational Attainment of Head <br> Freq。 |  | Expected <br> Frequency |
| :--- | ---: | ---: | ---: |
| 1969 |  |  |  |
| Less Than High School | 84 | 23.01 | 79.54 |
| High School | 128 | 35.07 | 136.74 |
| More Than High School | 153 | 41.92 | 148.72 |
| Total | 365 |  |  |
|  |  |  |  |
| 1970 | 62 | 20.33 | 66.46 |
| Less Than High School | 123 | 40.33 | 114.26 |
| High School | 120 | 39.34 | 124.28 |
| More Than High School | 305 |  |  |
| Total |  |  |  |

In Table IV the employment status of the wife in 1969 and 1970 is compared. The 1969 data indicated that 50.14 percent were not employed outside the home as compared to only 33.15 percent being employed full time. A trend may be seen, by the 1970 data as 44.92 percent of the sample were not employed, a decrease of 5.27 percentage points from 1969. However, in 1970 those families with wives employed part time increased 7.22 percentage points over 1969, 23.93 percent and 16.71 percent respectively. The calculated chi-square test statistic was 5.4934 compared to the tabulated value 5.99147 (Appendix C) thus indicating no significant difference in 1969 and 1970 distribution. The family income level was classified into three groups plus a "don't know's section for those families who did not indicate their

TABLE IV

THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY THE EMPLOYMENT STATUS OF WIFE

| Employment of Wife | Observed <br> Freq. |  | Expected <br> Frequency |
| :--- | ---: | ---: | ---: |
| $\mathbf{1 9 6 9}$ |  |  |  |
| None | 183 | 50.14 | 174.33 |
| Full-Time | 121 | 33.15 | 117.67 |
| Part-Time | 61 | 16.71 | 73.00 |
| Total | 365 |  |  |
|  |  |  |  |
| 1970 | 137 | 44.92 | 145.67 |
| None | 95 | 31.15 | 98.34 |
| Full-Time | 73 | 23.93 | 61.00 |
| Part-Time | 305 |  |  |
| Total |  |  |  |

income level. Approximately the same percentage of the sample in 1969 and 1970 had incomes under $\$ 5,000,18.90$ percent and 19.34 percent respectively. However, there was a considerable increase in the number of families with incomes over $\$ 10,000$. In 1969 , this income level accounted for 14.25 percent of the sample and in $1970,22.30$ percent of the sample. When the chi-square test statistic was applied, a significant difference in the distribution of families in the income levels was indicated. However, it should be noted that 16 respondents indicated that they did not know their family income level in the 1969 whereas all families in the 1970 data indicated an income level。

There was no significant difference in four of the variables in vestigated. It can be concluded that the family size, the age of the

TABLE V
THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY SELECTED FAMILY INCOME LEVEL

| Family Income Level | Observed |  | Expected <br> Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| Less Than \$5,000 | 69 | 18.90 | 69.73 |
| \$5,000 to \$10,000 | 228 | 62.47 | 221.18 |
| Greater Than \$10,000 | 52 | 14.25 | 65.37 |
| Don't Know | 16 | 4.38 | 8.72 |
| Total | 365 |  |  |
| 1970 |  |  |  |
| Less Than \$5,000 | 59 | 19.34 | 58.27 |
| \$5,000 to \$10,000 | 178 | 58.37 | 184.82 |
| Greater Than \$10,000 | 68 | 22.30 | 54.62 |
| Don't Know | 0 | 0.0 | 7.28 |
| Total | 305 |  |  |

head, the educational attainment of the head and the employment status of the wife distributions are the same in the 1969 sample and the 1970 sample. However, the chi-square test statistic indicated a change in the distributions of families within the income levels. Perhaps, the 16 families who did not indicate the income level of the family were in the upper level; and these 16 families may have caused the apparent change in distribution. Basically, the 1969 and the 1970 samples represented the same cross-section of the population. Therefore, having like samples facilitated the comparison as to how these families pay for durables costing $\$ 100$ and more, and as to what problems they encountered when making credit payments.

## The Type of Transaction

As outlined in Table VI, there were eight possible combinations of types of transactions in which a family may be involved. These included all combinations of the three basic types of transactions, new credit, old credit and cash. A new transaction implies that a credit transaction was begun and was being paid on during the schedule year. On the other hand, an old transaction implies that a credit transaction was commenced prior to the schedule year and was still being paid on during the schedule year. Some families used cash transactions as a method of purchasing goods and services. The "nothing" category was included as several eligible families did not complete any transactions during the schedule year. Each of the total 670 eligible families would be classified in only one of the types of transactions while paying for durable goods costing $\$ 100$ or more.

In 19697.12 percent of the sample had no transactions as compared to 3.61 percent in 1970, a 3.51 percentage point decrease. Also, it should be noted that in $1969,13.42$ percent of the sample, and in 1970 , 10.82 percent of the sample used cash only. On the other hand, 49.04 percent and 51.47 percent of the samples had only credit transactions in 1969 and 1970 respectively. Thus, the families having only credit transactions increased 2.43 percentage points and the families having only cash transactions decreased 2.60 percentage points from 1969 to 1970.

The chi-square test statistic indicated that there was no signifim cant difference in the type of transaction distribution from 1969 to 1970. The null hypothesis is not rejected at the significance level

THE FREQUENCIES OF FAMILIES IN THE SAMPLE BY TYPE OF TRANSACTION TO PURCHASE DURABLE GOODS COSTING $\$ 100$ OR MORE

| Type of Transaction | $\begin{array}{l}\text { Observed } \\ \text { Freq. }\end{array}$ |  | Percent |
| :--- | ---: | ---: | ---: |\(\left.\quad \begin{array}{c}Expected <br>

Frequency\end{array}\right]\)
${ }^{\text {New }}$ refers to credit acquired during the survey year. Old refers to credit acquired prior to the survey year.
of $\alpha=$.05. The data do not present sufficient evidence to indicate that there has been a change in the type of transaction used by the 670 eligible families. Having previously made the assumption that only the Truth-in-Lending would be considered to account for any changes, it can be concluded that this legislation had no effect on
the type of transaction used by the eligible families.

The Number of Cash Transactions

The null hypothesis tested by the data presented in Tables VII through XI, was that the number of cash transactions, the selected family variable given in each table, and the year are mutually independent. The data were organized into three dimensional tables. In reality, these would appear as two-two way tables stacked on top of one another. The first table compared the number of cash transactions to each of the five selected family variables for 1969 and the second table contained the same information for 1970. Then the chi-square test statistic was calculated to test the null hypothesis.

It is shown in Appendix D Table XXXIX that over 50 percent of the families in both 1969 and 1970 had no cash transactions. Also, there was a 2.21 percentage point decrease from 1969 to 1970 in those families who had three or more cash transactions for durables costing $\$ 100$ or more.

When the chi-square test statistic was calculated for the data presented in Table VII, it showed that the null hypothesis should be rejected. This indicated that the number of cash transactions and the family size and the year are not mutually independent. However, it is impossible to suggest what the actual dependent relationship is between the three classes tested. The 1969 data showed that 61.79 percent of the families with four or more members had no cash transactions, but in 1970 only 51.02 percent of the same sized families had no cash transactions. Of the two-member family size, in 1969 there were 19.23 percent and in 1971, 10.81 percent with three or more cash transactions.

TABLE VII

THE FREQUENCIES OF FAMILIES HAVING A SELECTED NUMBER OF CASH TRANSACTIONS BY FAMILY SIZE

| $\begin{gathered} \text { Number of } \\ \text { Cash } \\ \text { Transactions } \end{gathered}$ | Family Size |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2. Membex |  |  | - 3 Member |  |  | 4 Members \& Over |  |  |
|  | Observed |  | Expected Frequency | Observed |  | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
|  | Freq. | Percent |  | Freq. | Percent |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 24 | 46.15 | 26.84 | 105 | 55.26 | 108.39 | 76 | 61.79 | 66.41 |
| 1 | 12 | $23 \rightarrow 0.7$ | 10.87 | 46 | 24.21 | 43.90 | 23 | 18.69 | 26.90 |
| 2 | 6 | 11.54 | 5.49 | 17 | 8.95 | 22.15 | 12 | 9.76 | 13.57 |
| 3 or More | 10 | 19.23 | 5.39 | 22 | 11.58 | 21.75 | 12 | 9.76 | 13.33 |
| Total | 52 |  |  | 190 |  |  | 123 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 16 | 43.24 | 22.42 | 99 | 58.23 | 90.57 | 50 | 51.02 | 55.49 |
| 1 | 11 | 29.73 | 9.09 | 31 | 18.23 | 36.69 | 27 | 27.55 | 22.48 |
| 2 | 6 | 16.22 | 4.58 | 26 | 15.29 | 18.51 | 9 | 9.18 | 11.34 |
| 3 or More | 4 | 10.81 | 4. 50 | 14 | 8.24 | 18.18 | 12 | 12.24 | 11.14 |
| Total | 37 |  |  | 170 |  |  | 98 |  |  |

There appears to be a relationship between the size of the family and the number of cash transactions.

In Table VIII, the three classifications compared are age of head, number of cash transactions and the year. The chi-square test statistic. suggests that the null hypothesis be rejected and that the conclusion be drawn that the three classifications are not mutually independent. In 1969, the less than 25 year age group recorded the highest percentage, 13.64 percent with three or more cash transactions and the 35 to 44 year age group recorded the highest percentage, 60.56 percent with no cash transactions. However, in 1970, the situation is reversed。 The less than 25 year age group recorded the highest percentage 62.29 percent with no cash transactions and the 35 to 44 year age group recorded the highest percentage, 12.31 percent with three or more transactions.

The chi-square test statistic when calculated for the data presented in Table IX, pointed out that the number of cash transactions, the educational attainment of the head and the year are not mutually independent. The families with heads with less than a high school education represented the classification having the greatest percentage of families making no cash transactions, 67.85 percent in 1969 and 69.35 percent in 1970, On the other hand, those families with heads having more than a high school education tended to have more families with three or more cash transactions than the lesser educated.

The three levels of employment of the wife are compared to the number of cash transactions and the year in Table $X$. Of those having no cash transactions, 57.37 percent of the families where the wife did not work and 57.38 percent of the families where the wife worked

TABLE VIII

THE FREQUENGIES OF FAMILIES HAVING A SELEGTED NUMBER OF CASH TRANSAGTIONS BY THE AGE OF FAMILY HEAD GATEGORY

| Number of Cash <br> Transactions | Less Than 25 Years |  |  | Age of Head <br> 25 to 34 Years |  |  | 35 to 44 Years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Observed | erved <br> Percent | Expected <br> Frequency | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 33 | 50.00 | 38.15 | 86 | 54.77 | 81.55 | 86 | 60.56 | 81.95 |
| 1 | 19 | 28.78 | 15.45 | 41 | 26.11 | 33.03 | 21 | 14.79 | 33.19 |
| 2 | 5 | 7.57 | 7.79 | 10 | 6.37 | 16.66 | 20 | 14.08 | 16.74 |
| 3 or More | 9 | 13.64 | 7.65 | 20 | 12.73 | 16.37 | 15 | 10.56 | 16.45 |
| Total | 66 |  |  | 157 |  |  | 142 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 38 | 62.29 | 31.88 | 57 | 50.00 | 68.14 | 70 | 53.84 | 68.48 |
| 1 | 12 | 19.67 | 12.91 | 27 | 23.68 | 27.60 | 30 | 23.07 | 27.74 |
| 2 | 5 | 8.19 | 6.51 | 22 | 19.29 | 13.92 | 14 | 10.76 | 13.99 |
| 3 or More | 6 | 9.83 | 6.39 | 8 | 7.01 | 13.68 | 16 | 12.31 | 13.75 |
| Total | 61 |  |  | 114 |  |  | 130 |  |  |

TABLE IX
the frequencies of families having a selected number of cash transactions by educational attainment of family head

| $\begin{aligned} & \text { Number of } \\ & \text { Cash } \\ & \text { Transactions } \end{aligned}$ | Educational Attainment of Head |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected Frequency | Observed |  | Expected Frequency |
|  | Freq. | Percent |  | Freq. | Percent |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 57 | 67.85 | 44.00 | 81 | 63.28 | 75.69 | 67 | 43.79 | 82.15 |
| 1 | 16 | 19.05 | 17.82 | 23 | 17.96 | 30.66 | 42 | 27.45 | 33.27 |
| 2 | 3 | 3.57 | 8.99 | 12 | 9.37 | 18.20 | 20 | 13.07 | 16.79 |
| 3 or More | 8 | 9.52 | 8.83 | 12 | 9.37 | 15.19 | 24 | 15.68 | 16.49 |
| Total | 84 |  |  | 128 |  |  | 153 |  |  |
| $\underline{1970}$ |  |  |  |  |  |  |  |  |  |
| 0 | 43 | 69.35 | 36.77 | 67 | 54.47 | 63.25 | 55 | 45.83 | 68.64 |
| 1 | 10 | 16.13 | 14.89 | 27 | 21.95 | 25.62 | 32 | 26.66 | 27.80 |
| 2 | 7 | 11.29 | 7.51 | 16 | 13.01 | 15.21 | 18 | 15.00 | 14.03 |
| 3 or More | 2 | 3.23 | 7.38 | 13 | 10.57 | 12.69 | 15 | 12.50 | 13.78 |
| Total | 62 |  |  | 123 |  |  | 120 |  |  |

TABLE X

THE FREQUENCIES OF FAMILIES HAVING A SELECTED NUMBER OF CASH transactions by employment status of wife

| ```Number of Cash Transactions...``` | Employment of Wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Full-Time |  |  | Part-Time |  |  |
|  | $\overline{\mathrm{Obs}}$ <br> Freq. | erved Percent | Expected <br> Frequency | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | erved Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 105 | 57.37 | 96.48 | 65 | 53.72 | 64.99 | 35 | 57.38 | 40.37 |
| 1 | 40 | 21.86 | 39.08 | 27 | 22.31 | 26.33 | 14 | 22.95 | 16.35 |
| 2 | 17 | 9.29 | 19.71 | 14 | 11.57 | 13.28 | 4 | 6.56 | 8.25 |
| 3 or More | 21 | 11.48 | 19.37 | 15 | 12.39 | 13.05 | 8 | 13.11 | 8.10 |
| Total | 183 |  |  | 121 |  |  | 61 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 82 | 59.85 | 80.62 | 46 | 48.42 | 54.31 | 37 | 50.69 | 33.73 |
| 1 | 23 | 16.79 | 32.66 | 26 | 27.37 | 21.99 | 20 | 27.39 | 13.66 |
| 2 | 18 | 13.14 | 16.47 | 13 | 13.68 | 11.09 | 10 | 13.69 | 6.89 |
| 3 or More | 14 | 10. 22 | 16.18 | 10 | 10. 52 | 10.90 | 6 | 8.22 | 6.77 |
| Total | 137 |  |  | 95 |  |  | 73 |  |  |

part-time fell into this group in 1969. But in 1970, 59.85 percent of the families where the wife did not work and 50.69 percent of the families where the wife worked part-time had no cash transactions. The chi-square test statistic pointed out that the three classifications were not mutually independent. The employment status of the wife does not appear to change the number of cash transactions completed by the family.

There was no indication that the three classifications, family income level, number of cash transactions and year, compared in Table XI were mutually independent. The null hypothesis was rejected after calculating the chi-square test statistic. In both 1969 and 1970, the higher the income level the higher the percentage of the sample have three or more cash transactions and the lower the percentage of the sample having no cash transactions. In 1969 of the less than $\$ 5,000$ group 13.04 percent and of the greater than $\$ 10,000$ group 21.15 percent had three or more cash transactions. Also, in 1970 there was 59.32 percent of the less than $\$ 5,000$ group and 42.65 percent of the greater than $\$ 10,000$ group with no cash transactions.

Over half of the samples for each year had no cash transactions. There was also a decrease from 1969 to 1970 in the portion of families having three or more cash transactions. The data showed that the larger families tended to use cash transactions less frequently than smaller families. A high portion of the families with young heads had three or more cash transactions in 1969, compared to a high portion of families with young heads having no cash transactions in 1970. Those families with less educated heads tended to use cash transactions less frequently than families with higher educated heads. Likewise, low

TABLE XI
THE FREQUENGIES OF FAMILIES HAVING A SELECTED NUMBER OF CASH TRANSACTIONS BY FAMILY INCOME LEVEL

| Number of <br> Gash <br> Transactions | Family Income Level |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Ob } \\ & \text { Freq. } \end{aligned}$ | rved <br> Percent | Expected <br> Frequency | $\begin{array}{r} \mathrm{Ob} \\ \text { Freq. } \end{array}$ | rved <br> Percent | Expected <br> Frequency | $\begin{aligned} & \mathrm{Ob} \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| $0_{b}^{\text {a }}$ | 43 | 62.32 | 38.55 | 133 | 58.33 | 122.32 | 22 | 42.31 | 36.13 |
| $I_{c}^{\text {b }}$ | 12 | 17.39 | 15.61 | 52 | 22.81 | 49.55 | 12 | 23.08 | 14.63 |
| $2^{\text {c }}$ | 5 | 7.25 | 7.87 | 21 | 9.21 | 24.99 | 7 | 13.46 | 7.38 |
| 3 or More ${ }^{\text {c }}$ | 9 | 13.04 | 7.74 | 22 | 9.65 | 24. 55 | 11 | 21.15 | 7.25 |
| Total | 69 |  |  | 228 |  |  | 52 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 35 | 59.32 | 32.21 | 101 | 56.74 | 102.21 | 29 | 42.65 | 30.19 |
| 1 | 16 | 27.12 | 13.05 | 38 | 21.35 | 41.40 | 15 | 22.06 | 12.23 |
| 2 | 6 | 10.17 | 6.58 | 27 | 15.17 | 20.88 | 8 | 11.76 | 6.17 |
| 3 or Moxe | 2 | 3.39 | 6.46 | 12 | 6.74 | 20.51 | 16 | 23.53 | 6.06 |
| Total | 59 |  |  | 178 |  |  | 68 |  |  |

${ }^{\mathrm{a}} 7$ families responded "don't know"
${ }^{\mathrm{b}} 5$ families responded "don't know"
${ }^{C} 2$ families responded "don't know"
income level families used cash transactions less frequently than higher income level families. The employment status of the wife did not appear to have any effect on the number of cash transactions used by the family.

## The Number of Credit Transactions

In Tables XII through XVI, data are presented in each table to test the null hypothesis that the number of credit transactions, the selected family variable given in each table and the year are mutually independent. The data shown in Appendix E, Table XL, indicated that from 1969 to 1970 there was a 3.50 percentage point decrease in the number of families having no credit transactions and a 2.31 percentage point decrease in the families having three or more credit transactions. However, there was also a 4.66 percentage point increase in those having one credit transaction and a 2.15 percentage point increase in those having two credit transactions.

In Table XII, the number of credit transactions, the family size and the year are compared. The two-member family was the group with the largest percentage having three or more credit transactions for both years with 17.31 percent in 1969 and 8.11 percent in 1970. It should be noted that for the four member and over family size the number having no credit transactions decreased from 47.97 percent in 1969 to 37.76 percent in 1970. This decrease was balanced by an increase in those using one credit transaction, a 5.24 percentage point increase and those using two credit transactions, a 6.38 percentage point increase. The chi-square test statistic suggested that the null hypothesis be rejected and it be concluded that the three classifications are not

TABLE XII

THE FREQUENCIES OF FAMILIES HAVING A SELEGTED NUMBER OF CREDIT TRANSAGTIONS BY FAMILY SIZE

| Number of Credit Transactions | Family Size |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Members |  |  | 3 Members |  |  | 4 Members and Over |  |  |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected | Observed |  | Expected |
|  | Freq. | Percent |  | Freq. | Percent | Frequency | Freq. | Percent | Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 18 | 34.61 | 19.71 | 77 | 40.52 | 79.58 | 59 | 47.97 | 48.75 |
| 1 | 19 | 36.54 | 17.18 | 64 | 33.68 | 69.38 | 40 | 32.52 | 42.51 |
| 2 | 6 | 11.54 | 8.20 | 36 | 18.95 | 33.13 | 16 | 13.01 | 20.29 |
| 3 or More | 9 | 17.31 | 3.49 | 13 | 6.84 | 14.11 | 8 | 6.50 | 8.65 |
| Total | 52 |  |  | 190 |  |  | 123 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 14 | 37.83 | 16.47 | 67 | 39.41 | 66.49 | 37 | 37.76 | 40.74 |
| 1 | 13 | 35.14 | 14.36 | 64 | 37.65 | 57.98 | 37 | 37.76 | 35.52 |
| 2 | 7 | 18.91 | 6.86 | 29 | 17.06 | 27.68 | 19 | 19.39 | 16.95 |
| 3 or More | 3 | 8.11 | 2.92 | 10 | 5.88 | 11.79 | 5 | 5.10 | 7.22 |
| Total | 37 |  |  | 170 |  |  | 98 |  |  |

mutually independent.
When the number of credit transactions, the age of the head and the year are compared, the chi-square test statistic shows that they are also not mutually independent. Relative to frequency, more families with younger heads tend to use credit more often than those with older heads. In 1969, 12.12 percent of the families with heads less than 25 years used credit three or more times, as compared to 8.92 percent of those with heads 25 to 34 years and 5.63 percent of those with heads 35 to 44 years. There was a similar pattern in 1970: 11.47 percent, 7.02 percent and 2.31 percent of each age group respectively used credit three or more times. During the survey years there has been a decrease in the portion of families not using credit. The less than 25 year group showed an 18.21 percentage point decrease and the 35 to 44 year group a 2.44 percentage point decrease.

The calculated chi-square test statistic for the data in Table XIV was 13.4124 as compared to the tabulated critical value 12.5916, (Appendix C), thus the three classifications, the number of credit transactions, the educational attainment of the head and the year are not mutually independent. For all educational attainment levels, there was a decrease in the portion of families having no credit trans. actions. In 1969, 39.29 percent of the less than high school group, 38.28 percent of the high school group and 47.06 percent of the more than high school group had no credit transactions. This compared to the same groups in 1970 was 37.09 percent, 36.58 percent and 41.67 percent. In 1970, a lower percentage of the families with higher educated heads used one or two credit transactions than those families with lower educated heads.

## TABLE XIII

THE FREQUENCIES OF FAMILIES HAVING A SELECTED NUMBER OF CREDIT TRANSACTIONS BY THE AGE OF FAMILY HEAD CATEGORY

| ```Number of Gredit Transactions``` |  Age of Head <br> Less than 25 Years 25 to 34 Years |  |  |  |  |  | 35 to 44 Years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\mathrm{ob}}$ <br> Freq. | ved <br> Percent | Expected Frequency | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 25 | 37.88 | 28.01 | 60 | 38.22 | 59.87 | 69 | 48.59 | 60.17 |
| 1 | 19 | 28.78 | 21.84 | 51 | 32.48 | 52.20 | 53 | 37.32 | 52.46 |
| 2 | 14 | 21.21 | 11.66 | 32 | 20.38 | 24.92 | 12 | 8.45 | 25.04 |
| 3 or More | 8 | 12.12 | 4.96 | 14 | 8.92 | 10.61 | 8 | 5.63 | 10.67 |
| Total | 66 |  |  | 157 |  |  | 142 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 12 | 19.67 | 23.40 | 46 | 40.35 | 50.03 | 60 | 46.15 | 50.27 |
| 1 | 29 | 47.54 | 18.25 | 41 | 35.96 | 43.62 | 44 | 33.85 | 43.84 |
| 2 | 13 | 21.31 | 9.74 | 19 | 16.67 | 20.82 | 23 | 17.69 | 20.93 |
| 3 or More | 7 | 11.47 | 4.15 | 8 | 7.02 | 8.87 | 3 | 2.31 | 8.91 |
| Total | 61 |  |  | 114 |  |  | 130 |  |  |

## TABLE XIV

THE FREQUENCIES OF FAMILIES HAVING A SELECTED NUMBER OF CREDIT TRANSAGTIONS BY EDUCATIONAL ATTAINMENT OF FAMILY HEAD

| Number of Credit <br> Transdctions | Educational Attainment of Head |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ob <br> Freq. | ved <br> Percent | Expected <br> Frequency | $\begin{array}{r} \mathrm{Ob} \\ \text { Freq. } \end{array}$ | erved <br> Percent | Expected Frequency | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 33 | 39.29 | 32.31 | 49 | 38.28 | 55.57 | 72 | 47.06 | 60.31 |
| 1 | 32 | 38.09 | 28.16 | 47 | 36.72 | 48.45 | 44 | 28.76 | 52.58 |
| 2 | 12 | 14.29 | 13.45 | 23 | 17.97 | 23.13 | 23 | 15.03 | 25.11 |
| 3 or More | 7 | 8.33 | 5.73 | 9 | 7.03 | 9.85 | 14 | 9.15 | 10.69 |
| Total | 84 |  |  | 128 |  |  | 153 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 23 | 37.09 | 26.99 | 45 | 36.58 | 46.43 | 50 | 41.67 | 50.39 |
| 1 | 23 | 37.09 | 23.53 | 47 | 38.21 | 40.49 | 44 | 36.66 | 43.93 |
| 2 | 11 | 17.74 | 11.24 | 27 | 21.95 | 19.32 | 17 | 14.17 | 20.97 |
| 3 or More | 5 | 8.08 | 4.78 | 4 | 3.25 | 8.24 | 9 | 7.50 | 8.94 |
| Total | 62 |  |  | 123 |  |  | 120 |  |  |

In 1969, it is shown in Table XV that if the wife did not work or worked part-time the family used credit less frequently than the family with the wife working full-time. Of the families with non-working wives 42.62 percent and of the families with part-time working wives 47.54 percent compared to only 38.84 percent of the families with full time working wives had no credit transactions. However, of the families with full-time working wives 9.09 percent had three or more credit transactions. But, in 1970, as the length of employment outside the home increased, the families tended to use credit more frequently. Of those families with wives not working, 14.59 percent, of those families with wives working part-time, 20.55 percent and of those with wives working full-time 21.05 percent used two credit transactions. The chi-square test statistic showed that the three classifications in this table are not mutually independent.

The chi-square test statistic calculated for the data presented in Table XVI indicated that the null hypothesis should be rejected and it should be concluded that the number of credit transactions, the family income level and the year are not mutually independent. Each income level tended to use credit more frequently in 1970 than they did in 1969. Of those with less than $\$ 5,00034.78$ percent in 1969 and 37. 29 percent in 1970 had one credit transaction, while of those with $\$ 5,000$ to $\$ 10,00035.96$ percent in 1969 and 41.01 percent in 1970 had one credit transaction. From 1969 to 1970 , there was a decrease from 32.69 percent to 27.94 percent of those having one credit transaction and an increase from 15.38 percent to 23.53 percent of those having two credit transactions for families with incomes greater than $\$ 10,000$. There was a decrease in the number of families having no credit

TABLE XV

THE FREQUENCIES OF FAMILIES HAVING A SELEGTED NUMBER OF CREDIT TRANSACTIONS BY EMPLOYMENT STATUS OF WIFE

| Number of Credit <br> Transactions | Employment of Wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Ful1-Time |  |  | Part-Time |  |  |
|  | Observed |  | Expected Frequency | Observed |  | Expected | Observed |  | Expected |
|  | Freq. | Percent |  | Freq. | Percent | Frequency | Freq. | Percent | Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| 0 | 78 | 42.62 | 70.83 | 47 | 38.84 | 47.71 | 29 | 47.54 | 29.63 |
| 1 | 57 | 31.15 | 61.76 | 48 | 39.67 | 41.61 | 18 | 29.51 | 25.84 |
| 2 | 32 | 17.48 | 29.49 | 15 | 12.39 | 19.86 | 11 | 18.03 | 12.34 |
| 3 or More | 16 | 8.74 | 12.56 | 11 | 9.09 | 8.46 | 3 | 4.92 | 5.26 |
| Total | 183 |  |  | 121 |  |  | 61 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 64 | 46.72 | 59.19 | 31 | 32.62 | 39.87 | 23 | 31.50 | 24.77 |
| 1 | 47 | 34.31 | 51.61 | 38 | 40.00 | 34.76 | 29 | 39.72 | 21.59 |
| 2 | 20 | 14.59 | 24.64 | 20 | 21.05 | 16.59 | 15 | 20.55 | 10.31 |
| 3 or More | 6 | 4.38 | 10.49 | 6 | 6.32 | 7.07 | 6 | 8.22 | 4.39 |
| Total | 137 |  |  | 95 |  |  | 73 |  |  |

TABLE XVI
THE FREQUENCIES OF FAMILIES HAVING A SELECTED NUMBER OF CREDIT TRANSACTIONS BY FAMILY INCOME LEVEL

| Number of Credit <br> Transactions | Family Income Level |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Observed |  | Expected <br> Frequency | Observed Freq. Percent |  | Expected <br> Frequency | Observed |  | Expected Frequency |
|  | Freq. | Percent |  |  |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| $0^{\text {a }}$ | 26 | 37.68 | 28.30 | 93 | 40.78 |  | 89.80 | 23 | 44.23 | 26.53 |
| $1{ }_{\text {b }}$ | 24 | 34.78 | 24.68 | 82 | 35.96 | 78.30 | 17 | 32.69 | 23.13 |
| $2{ }^{\text {b }}$ | 11 | 15.94 | 11.78 | 35 | 15.35 | 37.38 | 8 | 15.38 | 11.04 |
| 3 or More | 8 | 11.59 | 5.02 | 18 | 7.89 | 15.92 | 4 | 7.69 | 4.70 |
| Total | 69 |  |  | 228 |  |  | 52 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| 0 | 24 | 40.68 | 23.65 | 64 | 35.96 | 75.04 | 30 | 44.11 | 22.16 |
| 1 | 22 | 37.29 | 20.62 | 73 | 41.01 | 86.05 | 19 | 27.94 | 19.33 |
| 2 | 9 | 15.25 | 9.85 | 30 | 16.85 | 31.24 | 16 | 23.53 | 9.22 |
| 3 or More | 4 | 6.78 | 4.19 | 11 | 6.17 | 13.31 | 3 | 4.41 | 3.93 |
| Total | 59 |  |  | 178 |  |  | 68 |  |  |

${ }^{a} 12$ families responded "don't know"
${ }^{\mathrm{b}} 4$ families responded "don't know"
transactions from 1969 to 1970. The two-member family tended to have credit transactions more frequently than the other family sizes. More families with young heads used credit more often than families with older heads. Those families with higher educated heads tended to have a high portion of families with no credit transactions. The data showed that families with wives employed outside the home tended to use credit more frequently than families where the wife was a fulltime homemaker. Families with an income level greater than $\$ 10,000$ appeared to use credit less frequently than other families.

## The Total Amount Committed

There were more families who had committed a large amount of money in 1970 than in 1969. Appendix E Table XLI shows that there was a 6.80 percentage point decrease in the frequency of families who had under $\$ 1,000$ committed. However, this was balanced by an increase of 3.69 percentage points in those who had $\$ 1,000$ to $\$ 1,999$ committed, by an increase of 1.90 percentage points in those who had $\$ 2,000$ to \$2,999 committed and by an increase of 1.23 percentage points in those who had greater than $\$ 2,999$ committed. The data presented in three-dimensional tables, Table XVII through XXI compared the total amount committed, the selected family variable, and the year. The chisquare test statistic, tested the null hypothesis that the three classifications are mutually independent.

The 1969 data shown in Table XVII, indicated that as the size of the family increased, there was a larger portion of families having less than $\$ 1,000$ committed. There were 67.31 percent of the families with two members, 72.63 percent of the families with three members and

TABLE XVII
THE FREQUENCIES OF FAMILIES HAVING A SELECTED AMOUNT COMMITTED by family size

| Total <br> Amount <br> Committed | Family Size |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Members |  |  | 3 Members |  |  | 4 Members \& Over |  |  |
|  | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | ved <br> Percent | Expected <br> Frequency | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | rved <br> Percent | Expected | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 35 | 67.31 | 34.27 | 138 | 72.63 | 138.37 | 96 | 78.04 | 84.78 |
| \$1000 to \$1999 | 8 | 15.38 | 6.65 | 27 | 14.21 | 26.85 | 9 | 7.32 | 16.45 |
| \$2000 to \$2999 | 3 | 5.77 | 3.49 | 10 | 5.26 | 14.11 | 10 | 8.13 | 8.64 |
| Greater Than \$2999 | - 6 | 11.54 | 4.13 | 15 | 7.89 | 16.66 | 8 | 6.50 | 10.20 |
| Total | 52 |  |  | 190 |  |  | 123 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 27 | 72.97 | 28.63 | 116 | 68.23 | 115.63 | 61 | 62.24 | 70.84 |
| \$1000 to \$1999 | 2 | 5.41 | 5.55 | 25 | 14.71 | 22.44 | 21 | 21.43 | 13.75 |
| \$2000 to \$2999 | 5 | 13.51 | 2.92 | 12 | 7.06 | 11.79 | 8 | 8.16 | 7.22 |
| Greater Than \$2999 | 3 | 8.11 | 3.44 | 17 | 10.00 | 13.92 | 8 | 8.16 | 8.52 |
| Total | 37 |  |  | 170 |  |  | 98 |  |  |

78.04 percent of the families with four members and over who had less than $\$ 1,000$ committed. In 1970, the portion of three member families having greater than $\$ 2,999$ committed was 10.00 percent, an increase of 2.11 percentage points over the same group in 1969. A1so, 13.51 percent of the two member families in 1970 and only 5.77 percent in 1969 had committed $\$ 2,000$ to $\$ 2,999$. The largest increase, 14.11 percentage points, was in the four member and over families having $\$ 1,000$ to $\$ 1,999$ committed. The three classifications were considered not mutually independent when the chi-square test statistic was applied.

According to age classification the families with heads less than 25 years of age represented the portion of the sample with the greatest amount committed. Of this age group, 13.64 in 1969 and 16.39 percent in 1970 had greater than $\$ 2,999$ committed. The younger families, as shown in Table XVIII, proved to have the most change over the two years in the amount committed. There was a decrease of 17.36 percentage points in those having less than $\$ 1,000$ committed and a decrease of 7.38 percentage points in those having $\$ 1,000$ to $\$ 1,999$ committed, while there was an increase of 7.18 percentage points in those having $\$ 2,000$ to $\$ 2,999$ committed. This same pattern is followed in the 25 to 34 year old heads. Of the older age group, 35 to 44 years, over 70 percent had less than $\$ 1,000$ committed. The chi-square test statistic showed that the three classifications are not mutually independent.

The chi-square test statistic calculated for the data given in Table XIX was 13.1894 compared to the tabulated critical value 12.5916 (Appendix C). Therefore, the three classifications, the total amount committed, the educational attainment of the head and the year are not mutually independent. In 1970, the family with a head having less than

TABLE XVIII
THE FREQUENGIES OF FAMILIES HAVING A SELEGTED AMOUNT COMMITTED BY THE AGE OF FAMILY HEAD GATEGORY

| Total <br> Amount <br> Comnitted | Age of Head |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency | $\begin{gathered} \mathrm{Ob} \\ \text { Freq. } \end{gathered}$ | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 45 | 68.18 | 48.70 | 116 | 73.89 | 104.11 | 108 | 76.06 | 104.62 |
| \$1000 to \$1999 | 7 | 10.61 | 9.45 | 24 | 15.29 | 20.21 | 13 | 9.15 | 20.30 |
| \$2000 to \$2999 | 5 | 7.57 | 4.97 | 7 | 4.46 | 10.62 | 11 | 7.75 | 10.67 |
| Greater Than \$2999 | 9 | 13.64 | 5.87 | 10 | 6.37 | 12.53 | 10 | 7.04 | 12.59 |
| Total | 66 |  |  | 157 |  |  | 142 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 31 | 50.82 | 40.69 | 82 | 71.93 | 86.99 | 91 | 70.00 | 87.42 |
| \$1000 to \$1999 | 11 | 18.03 | 7.89 | 12 | 10.53 | 16.88 | 25 | 19.23 | 16.96 |
| \$2000 to \$2999 | 9 | 14.75 | 4.15 | 10 | 8.77 | 13.02 | 6 | 4.62 | 8.91 |
| Greater Than \$2999 | 10 | 16.39 | 4.90 | 10 | 8.77 | 10.47 | 8 | 6.15 | 10.52 |
| Total | 61 |  |  | 114 |  |  | 130 |  |  |

TABLE XIX
THE FREQUENCIES OF FAMILIES HAVING A SELECTED AMOUNT COMMITTED by educational attainment of family head

| Total <br> Amount <br> Committed | Less Than High School Educational Attainment of Head $\quad$ More Than High School |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Observed |  | Expected <br> Frequency | Observed | erved Percent | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 60 | 71.43 | 56.18 | 96 | 75.00 | 96.63 | 113 | 73.86 | 104.88 |
| \$1000 to \$1999 | 10 | 11.90 | 10.90 | 16 | 12.50 | 18.75 | 18 | 11.76 | 20.35 |
| \$2000 to \$2999 | 6 | 7.14 | 5.73 | 10 | 7.81 | 9.86 | 7 | 4.58 | 10.69 |
| Greater Than \$2999 | 8 | 9.52 | 6.77 | 6 | 4.69 | 11.63 | 15 | 9.80 | 12.59 |
| Total | 84 |  |  | 128 |  |  | 153 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 41 | 66.13 | 46.94 | 84 | 68.29 | 80.75 | 79 | 65.83 | 87.64 |
| \$1000 to \$1999 | 10 | 16.13 | 9.11 | 17 | 13.82 | 15.67 | 21 | 17.50 | 17.01 |
| \$2000 to \$2999 | 4 | 6.45 | 4.78 | 10 | 8.13 | 8.24 | 11 | 9.16 | 8.94 |
| Greater Than \$2999 | 7 | 11.29 | 5.65 | 12 | 9.76 | 9.72 | 9 | 7.50 | 10.55 |
| Total | 62 |  |  | 123 |  |  | 120 |  |  |

high school education had the greatest portion of families with greater than $\$ 2,999$ committed, 11.29 percent. All three educational attainment levels showed a decrease in the portion of families having less than $\$ 1,000$ committed. The greatest change being in the more than high school level, where there was a 8.02 percentage point decrease. The total amount committed, the employment of the wife and the year are compared in Table XX. In both 1969 and 1970, families where the wife was employed full-time outside the home, had greater than \$2,999 committed more frequently than other families, 11.57 percent and 12.63 percent respectively. Of those families with a wife employed part-time, 81.97 percent in 1969 and 63.01 percent in 1970 had less than $\$ 1,000$ committed. These same families had greater than $\$ 2,999$ committed by 4.92 percent in 1969 and 6.85 percent in 1970. The chisquare test statistic showed that the three classifications were not mutually independent.

In Table XXI, data are presented to compare the family income level, the amount committed and the year. For all income levels there has been a decrease from 1969 to 1970 in the portion of families at each level having less than $\$ 1,000$ committed. Of those with less than $\$ 5,000$ income, this represented a 1.28 percentage point decrease, of those with $\$ 5,000$ to $\$ 10,000$ a 6.76 percentage point decrease and of those with incomes greater than $\$ 10,000$ a 7.36 percentage point decrease. Also, those families with the higher income had the largest amount committed, 13.46 percent in 1969 and 10.29 percent in 1970. The families with an income level $\$ 5,000$ to $\$ 10,000$ increase the portion of families in each category over $\$ 1,000$ committed, between 1969 and 1970. Of the families having greater than $\$ 2,999$ committed,

## TABLE XX

THE FREQUENCIES OF FAMILIES HAVING A SELECTED AMOUNT COMMITTED BY EMPLOYMENT STATUS OF WIFE

| Total <br> Amouni <br> Committed | Employment of Wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Ful1-Time |  |  | Part-Time |  |  |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
|  | Freq. | Percent |  | Freq. | Percent |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 135 | 73.77 | 123.18 | 84 | 69.42 | 82.97 | 50 | 81.97 | 51.53 |
| \$1000 to \$1999 | 20 | 10.93 | 23.90 | 20 | 16.53 | 16.10 | 4 | 6.56 | 10.00 |
| \$2000 to \$2999 | 16 | 8.74 | 12.56 | 3 | 2.48 | 8.46 | 4 | 6.56 | 5.25 |
| Greater Than \$2999 | 12 | 6.55 | 14.82 | 14 | 11.57 | 9.99 | 3 | 4.92 | 6.20 |
| Total | 183 |  |  | 121 |  |  | 61 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 98 | 71.53 | 102.92 | 60 | 63.15 | 69.33 | 46 | 63.01 | 43.07 |
| \$1000 to \$1999 | 15 | 10.94 | 19.97 | 16 | 16.84 | 33.42 | 17 | 23.28 | 8.36 |
| \$2000 to \$2999 | 13 | 9.49 | 10.50 | 7 | 7.37 | 7.07 | 5 | 6.85 | 11.46 |
| Greater Than \$2999 | 11 | 8.03 | 12.39 | 12 | 12.63 | 8.35 | 5 | 6.85 | 5.18 |
| Total | 137 |  |  | 95 |  |  | 73 |  |  |

## TABLE XXI

THE FREQUENCIES OF FAMILIES HAVING A SELECTED AMOUNT COMMITTED BY FAMILY INCOME LEVEL

| Total <br> Amount Committed | Family Income Level |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{Obs}$ <br> Freq. | erved <br> Percent | Expected Frequency | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected Frequency | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 ${ }^{\text {a }}$ | 50 | 72.46 | 49.22 | 164 | 71.93 | 156.16 | 39 | 75.00 | 46.12 |
| \$1000 to \$1999 | 7 | 10.14 | 9.55 | 33 | 14.47 | 30.16 | 4 | 7.69 | 8.95 |
| \$2000 to \$2999 | 5 | 7.25 | 5.01 | 16 | 7.02 | 15.93 | 2 | 3.85 | 4.70 |
| Greater Than \$2999 | 7 | 10.14 | 5.93 | 15 | 6.58 | 18.80 | 7 | 13.46 | 12.08 |
| Total | 69 |  |  | 228 |  |  | 52 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$1000 | 42 | 71.18 | 41.12 | 116 | 65.17 | 130.48 | 46 | 67.64 | 38.54 |
| \$1000 to \$1999 | 7 | 11.86 | 7.98 | 32 | 17.97 | 25.32 | 9 | 13.24 | 7.47 |
| \$2000 to \$2999 | 4 | 6.78 | 4.19 | 15 | 8.43 | 13.31 | 6 | 8.82 | 3.93 |
| Greater Than \$2999 | 6 | 10.17 | 4.95 | 15 | 8.43 | 15.70 | 7 | 10.29 | 10.10 |
| Total | 59 |  |  | 178 |  |  | 68 |  |  |

[^0]those with an income level of greater than $\$ 10,000$ increased more than the middle and lower income levels. The increase from 1969 to 1970 was 0.03 percentage points for the low income families, 1.84 percentage points for the middle income level, and 3.17 percentage points for the highest income level. The chi-square test statistic showed that the three classifications were not mutually independent.

Generally, more families committed larger amounts in 1970 than in 1969. As the family size increased, there was a larger portion of families having less than $\$ 1,000$ committed. The data indicated that families with heads less than 25 years of age, represented the portion of the sample with the greatest amount committed. Also, the family with a head having less than high school education had the greatest portion of families with greater than $\$ 2,999$ committed. The families where the wife was employed full-time seemed to have a larger amount committed, than families where the wife was either employed part-time or a full-time homemaker. Those families with higher income levels tended to have a larger portion of families having greater than \$2,999 committed.

The Amount Paid on Old Debts

This section refers to the credit debts that the family owed prior to the year of the survey but were paying on during the schedule year. The data in Appendix C Table XLII shows that 40.55 percent of the families in 1969 and 32.13 percent of the families in 1970, paid under \$100, while 38.63 percent of the families in 1969 and 47.21 percent of the families in 1970 paid over \$499。 This indicated a trend to increasing the amount paid on old debts. When comparing the amount
paid on the old debts, the selected family variable and the year, three dimensional tables were used. The chi-square test statistic was calculated for each of Tables XXII through XXVI, to test the null hypothesis for mutual independence.

From the data given in Table XXII, all three family size groups showed an increase from 1969 to 1970 in the number of families having paid greater than $\$ 499$ on old debts. Specifically, this was a 2.08 percentage point increase for the two-member family, a 10.28 percentage point increase for the three-member family, and a 8.33 percentage point increase for the four or more member family. There was 42.63 percent of three-member family had paid less than $\$ 100$ in 1969 , but only 31.18 percent of this group paid less than $\$ 100$ in 1970 . The chi square test statistic showed that the amount paid on the old debt, the family size and the year are not mutually independent.

The chi-square test statistic when applied to the data presented in Table XXIII, showed that the amount paid on the old debts, the age of the head and the year are not mutually independent. The age group, representing the highest portion of families paying less than $\$ 100$ was in 1969, the 35 to 44 year group and in 1970, the less than 25 year group. However, from 1969 to 1970 , there was a 0.17 percentage point decrease in the less than 25 year group, a 14.29 percentage point decrease in the 25 to 34 year group and a 7.51 percentage point decrease in the 35 to 44 year group who paid less than $\$ 100$ on old debts. Also for each age group there has been an increase in the portion of families paying over $\$ 499$ on old debts. The data showed a 4.37 percentage point increase with young heads, a 10.83 percentage point increase with heads 25 to 34 years and a 9.53 percentage point increase with older heads。

TABLE XXII
THE FREQUENCIES OF FAMILIES PAYING SELECTED AMOUNTS ON OLD DEBTS BY FAMILY SIZE

| Amount Paid on Old Debts | Family Sịze |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Members |  |  | 3 Members |  |  | 4 Members \& Over |  |  |
|  | Freq. | erved <br> Percent | Expected Frequency | Freq. | erved <br> Percent | Expected <br> Frequency | $\begin{aligned} & \text { Ob } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 20 | 38.46 | 17.82 | 81 | 42.63 | 71.94 | 47 | 38.21 | 44.07 |
| \$100 to \$299 | 4 | 7.69 | 6.01 | 24 | 12.63 | 24.30 | 14 | 11.38 | 14.89 |
| \$300 to \$499 | 8 | 15.38 | 4.03 | 14 | 7.37 | 16.26 | 12 | 9.76 | 9.97 |
| Greater Than \$499 | 20 | 38.46 | 20.63 | 71 | 37.37 | 83.30 | 50 | 40.65 | 51.03 |
| Total | 52 |  |  | 190 |  |  | 123 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 15 | 40.54 | 14.89 | 53 | 31.18 | 60.10 | 30 | 30.61 | 36.82 |
| \$100 to \$299 | 6 | 16.22 | 5.03 | 22 | 12.94 | 20.31 | 13 | 13.26 | 12.44 |
| \$300 to \$499 | 1 | 2.70 | 3.36 | 14 | 8.24 | 13.59 | 7 | 7.14 | 8.32 |
| Greater Than \$499 | 15 | 40.54 | 17.24 | 81 | 47.65 | 69.60 | 48 | 48.98 | 42.65 |
| Total | 37 |  |  | 170 |  |  | 98 |  |  |

## TABLE XXIII

THE FREQUENCIES OF FAMILIES PAYING SELECTED AMOUNTS ON OLD DEBTS BY THE AGE OF FAMILY HEAD CATEGORY

| Amount Paid on 01d Debts | Less Than 25 Years |  |  | Age of Head <br> 25 to 34 Years |  |  | 35 to 44 Years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Observed | erved <br> Percent | Expected <br> Frequency | Observed | erved <br> Percent | Expected <br> Frequency | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than $\$ 100$ | 25 | 37.87 | 25.31 | 61 | 38.85 | 54.12 | 62 | 43.66 | 54.39 |
| \$100 to \$299 | 10 | 15.15 | 8.55 | 12 | 7.64 | 18.28 | 20 | 14.08 | 18.38 |
| \$300 to \$499 | 9 | 13.64 | 5.73 | 17 | 10.83 | 12.24 | 8 | 5.63 | 12.29 |
| Greater Than \$499 | 22 | 33.33 | 29.31 | 67 | 42.68 | 62.67 | 52 | 36.62 | 62.98 |
| Total | 66 |  |  | 157 |  |  | 142 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 23 | 37.70 | 21.16 | 28 | 24.56 | 45.22 | 47 | 36.15 | 45.46 |
| \$100 to \$299 | 10 | 16.39 | 7.15 | 16 | 14.04 | 22.42 | 15 | 11.54 | 15.35 |
| \$300 to \$499 | 5 | 8.19 | 4.78 | 9 | 7.89 | 10.22 | 8 | 6.15 | 10.27 |
| Greater Than \$499 | 23 | 37.70 | 24.49 | 61 | 53.51 | 52.36 | 60 | 46.15 | 52.62 |
| Total | 61 |  |  | 114 |  |  | 130 |  |  |

In both 1969 and 1970, as shown in Table XXIV, the portion of the families making less than $\$ 100$ payments on the old debts increased as the educational attainment of the head increased and the portion of the families making greater than $\$ 499$ payments on the old debts de. creased as the educational attainment of the head increased. There was a decrease in the portion of families paying less than $\$ 100$ on old debts and an increase in the portion of families paying greater than $\$ 499$ on old debts from 1969 to 1970. For the less than high school group there was a 7.95 percentage point decrease in the number of families paying less than $\$ 100$. Likewise, there was a 10.02 percentage point increase in the number of families with a head attaining less than high school education and paying greater than $\$ 499$ on old debts. The chi-square test statistic showed that the three classifications tested were not mutually independent.

The comparison of amount paid on old debts, the employment of the wife and the year is given in Table XXV. In all the employment groups, there was an increase in the portion of families paying greater than $\$ 499$ on the old debts, with the part-time employment category showing a 15.74 percentage point increase from 1969 to 1970 . Of the families having a full-time employed wife, 31.40 percent in 1969 and 33.68 percent in 1970 paid less than $\$ 100$ on the old debts while 13.22 percent in 1969 and 6.31 percent in 1970 paid $\$ 300$ to $\$ 499$ on the old debts. Perhaps in 1970, with the additional income these families were able to pay off their debts earlier than in families with only one wage earner. The chi-square test statistic indicated that the three classio fications tested were not mutually independent.

The data, shown in Table XXVI, point out that in 1969 the portion

## TABLE XXIV

THE FREQUENGIES OF FAMILIES PAYING SELECTED AMOUNTS ON OLD DEBTS BY EDUGATIONAL ATTAINMENT OF FAMILY HEAD

| Amount Paid on Old Debts | Educational Attainment of Head |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than High School |  |  | High School |  |  | More Than High School |  |  |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected | Observed |  | Expected |
|  | Freq. | Percent |  | Freq. | Percent | Frequency | Freq. | Percent | Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 27 | 32.14 | 29.20 | 51 | 39.84 | 50.24 | 70 | 45.75 | 54.52 |
| \$100 to \$299 | 10 | 11.90 | 9.87 | 18 | 14.06 | 16.97 | 14 | 9.15 | 18.42 |
| \$300 to \$499 | 8 | 9.52 | 6.61 | 11 | 8.59 | 11.36 | 15 | 9.80 | 12.33 |
| Greater Than \$499 | 39 | 46.43 | 33.82 | 48 | 37.50 | 58.17 | 54 | 35.29 | 63.13 |
| Total | 84 |  |  | 128 |  |  | 153 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 15 | 24.19 | 24.40 | 41 | 33.33 | 41.97 | 42 | 35.00 | 45.55 |
| \$100 to \$299 | 9 | 14.51 | 8.25 | 17 | 13.82 | 14.18 | 15 | 12.50 | 15.39 |
| \$300 to \$499 | 3 | 4.84 | 5.51 | 8 | 6.50 | 9.49 | 11 | 9.17 | 10.31 |
| Greater Than \$499 | 35 | 56.45 | 28.26 | 57 | 46.34 | 48.61 | 52 | 43.33 | 52.75 |
| Total | 62 |  |  | 123 |  |  | 120 |  |  |

TABLE XXV

THE FREQUENCIES OF FAMILIES PAYING SELECTED AMOUNTS ON OLD DEBTS BY EMPLOYMENT STATUS OF WIFE

| Amount Paid on Old Debts | Employment of Wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Full-Time |  |  | Part-Time |  |  |
|  | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected <br> Frequency | $\begin{aligned} & \text { Obs } \\ & \text { Freq. } \end{aligned}$ | rved <br> Percent | Expected | $\begin{aligned} & \text { Obs. } \\ & \text { Freq. } \end{aligned}$ | erved <br> Percent | Expected |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 82 | 44.81 | 64.03 | 38 | 31.40 | 43.13 | 28 | 45.90 | 26.79 |
| \$100 to \$299 | 21 | 11.47 | 21.63 | 20 | 16.53 | 14.57 | 1 | 1.64 | 9.05 |
| \$300 to \$499 | 14 | 7.65 | 14.48 | 16 | 13.22 | 9.76 | 4 | 6.56 | 6.05 |
| Greater Than \$499 | 66 | 36.06 | 74.14 | 47 | 38.84 | 49.95 | 28 | 45.90 | 31.02 |
| Total | 183 |  |  | 121 |  |  | 61 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 48 | 35.04 | 53.50 | 32 | 33.68 | 36.04 | 18 | 24.65 | 23.37 |
| \$100 to \$299 | 25 | 18.25 | 18.07 | 10 | 10.52 | 12.17 | 6 | 8.22 | 7.56 |
| \$300 to \$499 | 12 | 8.76 | 12.10 | 6 | 6.31 | 8.15 | 4 | 5.48 | 5.06 |
| Greater Than \$499 | 52 | 37.96 | 61.96 | 47 | 49.47 | 41.74 | 45 | 61.64 | 25.93 |
| Total | 137 |  |  | 95 |  |  | 73 |  |  |

## TABLE XXVI

THE FREQUENCIES OF FAMILIES PAYING SELECTED AMOUNTS ON OLD DEBTS BY FAMILY INCOME LEVEL

| Amount Paid on Old Debts | Family Income Level |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Obs Freq. | erved <br> Percent | Expected <br> Frequency | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency | Ob Freq. | served <br> Percent | Expected Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than $\$ 100^{\text {a }}$ | 22 | 31.88 | 22.58 | 90 | 39.47 | 81.18 | 23 | 44.23 | 23.98 |
| \$100 to \$299 | 10 | 14.49 | 8.64 | 26 | 11.40 | 27.42 | 5 | 9.61 | 8.10 |
| \$300 to $\$ 499^{\text {b }}$ | 8 | 11.59 | 5.79 | 23 | 10.09 | 18.36 | 2 | 3.85 | 5.42 |
| Greater Than $\$ 499^{\text {b }}$ | 29 | 42.03 | 29.62 | 89 | 39.04 | 94.00 | 22 | 42.31 | 27.76 |
| Total | 69 |  |  | 228 |  |  | 52 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 24 | 40.68 | 21.38 | 53 | 29.77 | 67.82 | 21 | 30.88 | 20.07 |
| \$100 to \$299 | 11 | 18.64 | 7.22 | 27 | 15.17 | 22.92 | 3 | 4.41 | 6.76 |
| \$300 to \$499 | 5 | 8.47 | 4.84 | 14 | 7.86 | 15.34 | 3 | 4.41 | 4.53 |
| Greater Than \$499 | 19 | 32.20 | 24.75 | 84 | 47.19 | 78.55 | 41 | 60.29 | 23.21 |
| Total | 59 |  |  | 178 |  |  | 68 |  |  |

[^1]of families in each income group paying less than $\$ 100$ increases as the income increases and that in 1970 the portion of families in each income group paying greater than $\$ 499$ increases as the income increases. There was an 8.80 percentage point increase in the number of families in the less than $\$ 5,000$ income level, while there was a 9.70 percentage point decrease in the number of families in the $\$ 5,000$ to $\$ 10,000$ income level and a 13.35 percentage point decrease in the number of families in the greater than $\$ 10,000$ income level who paid less than $\$ 100$ on the old debts. Of those families in the highest income level, 42.31 percent in 1969 and 60.29 percent in 1970 paid greater than $\$ 499$ on the old debts. The chi-square test statistic for mutual independence showed that the null hypothesis should be rejected.

The data showed a trend from 1969 to 1970 to increase the portion of families paying large amounts on old debts. As the family size increases a larger portion of the families tended to have greater than $\$ 499$ committed to old debts. A larger portion of those families with a head 25 to 34 years old seemed to have a larger amount committed to old debts than other families. The portion of families making less than $\$ 100$ payments on old debts increased as the increased as the educational attainment of the head increased and the portion of families making greater than $\$ 499$ payments on old debts decreased as the educational attainment of the head increased. Families with part-time employed wives seemed to pay a larger amount on old debts than families with full time homemakers. The high income families are those most likely to pay the highest amount on old debts.

In 1969, 57.81 percent of the families paid less than $\$ 100$ on new debts compared to 53.44 percent of the families in 1970. Also, shown in Appendix $H$, Table XLIII is the fact that there was an increase in the portion of families paying greater than $\$ 499$ on new debts. The data presented in Tables XXVII through XXXI, are in three dimensional form so that the chimsquare test statistic could be calculated to test the null hypothesis. The null hypothesis tests the mutual independence of the amount paid on the new debts, the selected family variables and the year. As previously defined, new debts refer to debts taken on and paid on during the schedule year.

The chi-square test statistic showed that the data presented in Table XXVII gave evidence that the three classifications are not mutually independent. The 1969 data showed that as the size of the family increased from two members to four members and over, the portion of families paying less than $\$ 100$, increased from 55.77 percent to 61.79 percent and the portion of families paying greater than $\$ 499$, decreased from 17.31 percent to 9.76 percent. In $1970,55.29$ percent of the three-member families paid less than $\$ 100$ and 10.59 percent of these families paid greater than $\$ 499$. This represented a decrease in the portion of families paying both amounts from 1969. On the other hand, of the two-member families, 27.03 percent paid greater than $\$ 499$ and 12.24 percent of the four or more members paid greater than $\$ 499$.

Both the 1969 and 1970 samples, shown in Table XXVIII, followed a pattern whereby the portion of families paying less than $\$ 100$ on new debts increased as the age of the head increased. Of those paying

TABLE XXVII
THE FREQUENGIES OF FAMILIES PAYING SELEGTED AMOUNTS ON NEW DEBTS BY FAMILY SIZE

| Amount Paid ○型 New Debes | Family Size |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Members |  |  | 3 Members |  |  | 4 Members \& Over |  |  |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected <br> Frequency | Observed |  | Expected <br> Frequency |
|  | Freq. | Percent |  | Freq. | Percent |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 29 | 55.77 | 27.09 | 106 | 55.79 | 109.37 | 76 | 61.79 | 67.01 |
| \$100 to \$299 | 8 | 15.38 | 8.98 | 38 | 20.00 | 36.26 | 21 | 17.07 | 22.21 |
| \$300 to \$499 | 6 | 11.54 | 6.11 | 20 | 10.53 | 24.69 | 14 | 11.38 | 15.13 |
| Greater Than \$499 | 9 | 17.31 | 6.26 | 26 | 13.68 | 25.28 | 12 | 9.76 | 15.49 |
| Total | 52 |  |  | 190 |  |  | 123 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 18 | 48.65 | 22.63 | 94 | 55.29 | 91.39 | 51 | 52.04 | 55.99 |
| \$100 to \$299 | 7 | 18.92 | 7:50 | 29 | 17.06 | 30.30 | 21 | 21.43 | 18.56 |
| \$300 to \$499 | 2 | 5.40 | 5.11 | 29 | 17.06 | 25.75 | 14 | 14.29 | 12.64 |
| Greater Than \$499 | 10 | 27.03 | 5.24 | 18 | 10.59 | 21.12 | 12 | 12.24 | 12.94 |
| Total | 37 |  |  | 170 |  |  | 98 |  |  |

TABLE XXVIII

THE FREQUENGIES OF FAMILIES PAYING SELECTED AMOUNTS ON NEW DEBTS BY THE AGE OF FAMILY HEAD CATEGORY

| Amount Paid |  | $s$ Than | Years |  | of Head 25 to 34 | Years | 35 to 44 Years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Debts | Observed |  | Expected <br> Frequency | Observed |  | Expectied Frequency | Observed |  | Expected <br> Frequency |
|  | Freq. | Percent |  | Freq. | Percent |  | Freq. | Percent |  |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 36 | 54.54 | 38.49 | 86 | 54.78 | 82.28 | 89 | 62.68 | 82.69 |
| \$100 to \$299 | 13 | 19.70 | 12.76 | 34 | 21.66 | 27.28 | 20 | 14.08 | 27.41 |
| \$300 to \$499 | 4 | 6.06 | 8.69 | 22 | 14.01 | 18.58 | 14 | 9.86 | 18.67 |
| Greater Than \$499 | 13 | 19.70 | 8.89 | 15 | 9.55 | 19.02 | 19 | 13.38 | 19.11 |
| Total | 66 |  |  | 157 |  |  | 142 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 23 | 37.70 | 32.16 | 63 | 55.26 | 68.75 | 77 | 59.23 | 69.09 |
| \$100 to \$299 | 14 | 22.95 | 10.66 | 23 | 20.18 | 33.46 | 20 | 15.38 | 22.91 |
| \$300 to \$499 | 13 | 21.31 | 7.26 | 13 | 11.40 | 15.53 | 19 | 1.4 .62 | 15.60 |
| Greater Than \$499 | 11 | 18.03 | 7.44 | 15 | 13.16 | 15.89 | 14 | 10.77 | 15.97 |
| Total | 61 |  |  | 114 |  |  | 130 |  |  |

greater than $\$ 499$, there was a 3.61 percentage point increase in the portion of families with a head 25 to 34 years compared to a 1.67 percentage point decrease in the portion of families with a head less than 25 years and a 2.61 percentage point decrease in the portion of families with heads 35 to 44 years. The 1970 data suggested that the portion of families paying greater than $\$ 499$ on new debts increased as the age of the head decreased. There were 18.03 percent of the families with young heads and only 10.77 percent of the families with older heads. The chi-square test statistic indicated that the amount paid on new debts, the age of the head and the year are not mutually independent. The three classifications compared in Table XXIX are the amount paid on new debts, the educational attainment of the head and the year. The chi-square test statistic showed that these were not mutually independent. In both 1969 and 1970 the families with heads attaining less than high school education tended to pay less than $\$ 100$ on new debts more frequently than did other groups; 59.52 percent of 1969 sample and 56.45 percent of 1970 sample. There was a decrease in the portion of families paying less than $\$ 100$ for families in all educational levels. These represented a 3.07 percentage point decrease of those with less than high school education, a 3.44 percentage point decrease of those high school education and a 5.49 percentage point decrease in those with more than high school education. Of those with high school education, 8.59 percent in 1969 and 13.82 percent in 1970 paid greater than $\$ 499$ on the new debts.

As shown in Table XXX, in 1969 the families with a wife employed full time, and in 1970 the families where the wife was not employed represented the groups most frequently paying less than $\$ 100$ on the new

## TABLE XXIX

## THE FREQUENCIES OF FAMILIES PAYING SELECTED AMOUNTS ON NEW DEBTS

 BY EDUCATIONAL ATTAINMENT OF FAMILY HEAD| Amount Paid on <br> New Debts | Educational Attainment of Hea |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than High School |  |  | High School |  |  | More Than High School |  |  |
|  | Observed |  | Expected <br> Frequency | Observed |  | Expected | Observed |  | Expected |
|  | Freq. | Percent |  | Freq. | Percent | Frequency | Freq. | Percent | Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 50 | 59.52 | 44.40 | 71 | 55.47 | 76.37 | 90 | 58.82 | 82.89 |
| \$100 to \$299 | 14 | 16.67 | 14.72 | 32 | 25.00 | 25.32 | 21 | 13.72 | 27.48 |
| \$300 to \$499 | 6 | 7.14 | 10.02 | 14 | 10.94 | 17.24 | 20 | 13.07 | 18.71 |
| Greater Than \$499 | 14 | 16.67 | 10.27 | 11 | 8.59 | 17.65 | 22 | 14.38 | 19.16 |
| Total | 84 |  |  | 128 |  |  | 153 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 35 | 56.45 | 37.10 | 64 | 52.03 | 63.82 | 64 | 53.33 | 69.26 |
| \$100 to \$299 | 11 | 17.74 | 12.30 | 25 | 20.33 | 21.15 | 21 | 17.50 | 22.96 |
| \$300 to \$499 | 9 | 14.52 | 8.37 | 17 | 13.82 | 14.41 | 19 | 15.83 | 15.64 |
| Greater Than \$499 | 7 | 11.29 | 8.57 | 17 | 13.82 | 14.75 | 16 | 13.33 | 16.01 |
| Total | 62 |  |  | 123 |  |  | 120 |  |  |

TABLE XXX

## THE FREQUENCIES OF FAMILIES PAYING SELEGTED AMOUNTS ON NEW DEBTS BY EMPLOYMENT STATUS OF WIFE

| Amount Paid on Nery Debts | Employment of Wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Full-Time |  |  | Part-Time |  |  |
|  | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency | Obs <br> Freq. | Observed | Expected <br> Frequency | $\begin{array}{r} \mathrm{Ob} \\ \text { Freq. } \end{array}$ | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 105 | 57.38 | 97.35 | 72 | 59.50 | 65.58 | 34 | 55.74 | 40.73 |
| \$100 to \$299 | 39 | 21.31 | 32.28 | 18 | 14.88 | 21.74 | 10 | 16.39 | 13.50 |
| \$300 to \$499 | 21 | 11.48 | 21.98 | 14 | 11.57 | 14.80 | 5 | 8.20 | 9.19 |
| Greater Than \$499 | 18 | 9.83 | 22.50 | 17 | 14.05 | 15.16 | 12 | 19.67 | 9.42 |
| Total | 183 |  |  | 121 |  |  | 61 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 84 | 61.31 | 81.35 | 45 | 47.37 | 54.80 | 34 | 46.58 | 34.03 |
| \$100 to \$299 | 27 | 19.71 | 26.97 | 15 | 15.79 | 18.16 | 15 | 20.55 | 11.29 |
| \$300 to \$499 | 13 | 9.49 | 18.36 | 18 | 18.95 | 12.38 | 14 | 19.18 | 7.69 |
| Greater Than \$499 | 13 | 9.49 | 18.80 | 17 | 17.89 | 12.67 | 10 | 13.70 | 7.87 |
| Total | 137 |  |  | 95 |  |  | 73 |  |  |

debts, 59.50 percent and 61.31 percent respectively. Of those families where the wife is not employed outside the home, there was a decrease of the portion of families paying over $\$ 100$ in 1970 as compared to 1969. But those with a full time employed wife showed the opposite trend, a decrease in the portion paying less than $\$ 100$ and an increase in the portion paying any amount greater than $\$ 100$. There was a 10.98 percentage point increase in the number of families paying $\$ 300$ to $\$ 499$ where the wife was employed partatime. However the chi-square test statistic showed that the amount paid on new debts, the employment of the wife and the year are not mutually independent.

The data compiled in Table XXXI, compare the amount paid on the new debts, the family income level and the year. The chissquare test statistic showed that these three classifications were not mutually independent. In 1969, the portion of families paying less than $\$ 100$ increased as the family income level increased, 53.62 percent of the lower income level compared to 63.46 percent of the higher income leve1 families. However in 1970, a reverse situation was seen, 55.93 percent of the low income level and 52.94 percent of the higher income level paid less than $\$ 100$. Of those families with an income level $\$ 5,000$ to $\$ 10,000$, there was a 3,77 percentage point decrease in the portion of families paying less than $\$ 100$ and a 3.95 percentage point increase in the portion of families paying greater than $\$ 499$ on the new debts. The families in 1970, with income levels greater than $\$ 10,000$ tended to increase the portion of families paying $\$ 100$ to $\$ 499$ on the new debts by 20.37 percentage points above the same income level families in 1969.

The decrease in the portion of families paying less than $\$ 100$ on

TABLE XXXI

## THE FREQUENGIES OF FAMILIES PAYING SELECTED AMOUNTS ON NEW DEBTS BY FAMILY INCOME LEVEL

| Amount Paid on New Debts | Less Than \$5000 |  |  | Family Income Level $\$ 5000$ to $\$ 10,000$ |  |  | Greater Than \$10,000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency | Obs <br> Freq. | erved <br> Percent | Expected <br> Frequency | Ob <br> Freq. | erved <br> Percent | Expected <br> Frequency |
| 1969 |  |  |  |  |  |  |  |  |  |
| Less Than $\$ 100^{\text {a }}$ | 37 | 53.62 | 38.90 | 129 | 56.58 | 123.42 | 33 | 63.46 | 36.45 |
| \$100 to \$299 | 12 | 17.39 | 12.89 | 49 | 21.49 | 40.92 | 3 | 5.77 | 12.08 |
| \$300 to \$499 ${ }^{\text {c }}$ | 8 | 11.59 | 8.78 | 27 | 11.84 | 27.86 | 4 | 7.69 | 8.23 |
| Greater Than \$499 | 12 | 17.39 | 8.99 | 23 | 10.09 | 28.53 | 12 | 23.08 | 8.43 |
| Total | 69 |  |  | 228 |  |  | 52 |  |  |
| 1970 |  |  |  |  |  |  |  |  |  |
| Less Than \$100 | 33 | 55.93 | 32.51 | 94 | 52.81 | 103.13 | 36 | 52.94 | 30.47 |
| \$100 to \$299 | 13 | 22.03 | 10.78 | 33 | 18.54 | 34.19 | 11 | 16.18 | 10.11 |
| \$300 to \$499 | 7 | 11.86 | 7.34 | 26. | 14.61 | 23.29 | 12 | 17.65 | 6.88 |
| Greater Than \$499 | 6 | 10.17 | 7.51 | 25 | 14.04 | 23.84 | 9 | 13.24 | 7.04 |
| Total | 59 |  |  | 178 |  |  | 68 |  |  |

[^2]new debts, from 1969 to 1970, indicated that families paid more on new debts in 1970. The two-member family tended to be the family size most likely to pay a larger amount on new debts. The portion of families paying less than $\$ 100$ on new debts increased as the age of the head increased. The data indicated that families with heads attaining less than a high school education tended to pay less on new debts more frequently than did families with more educated headso Families with employed wives appeared to pay more on new debts than families with a full-time homemaker. Of those families with an income level greater than $\$ 10,000$ a higher portion paid less than $\$ 100$, than families with lower incomes.

## Experiences in Making Payments on Credit Accounts

This section of the analysis deals with specific questions from the interview schedules, concerning the experiences that families encountered while making payments on their credit accounts. The 1969 data refers to payments, between July 1, 1968 and June 30, 1969, on debts taken on during or before that period, while the 1970 data res fers to payments between January 1, 1970 and December 31, 1970. The contingency Tables XXXII through XXXVII present the comparison between the two years and the selected experiences. In some of the tables, a "Don't Know" category has been included to indicate that the respondent knew that some amount should be given but did not know what amount, or did not know the answer. The chi-square test statistic was calculated for each of the experiences and compared to the critical tabulated value at a significance level of $\alpha=.05$ for the correct number of degrees of freedom.

As presented in Table XL 290 families in 1969 and 261 families in 1970 had credit payments during the schedule years. These same families are classified in Table XXXII according to the amount they worried about how they would make the payments coming due on the debtso ${ }^{1}$ The chi-square test statistic indicated that there was no significant difference in the amount the family worried when making credit payments from 1969 to 1970. The Truth-in-Lending Law appears to have had no effect on the amount of worry encountered by families. Approximately 50 percent of the samples did not worry about making the payments, 57.93 percent and 51.72 percent in 1969 and 1970 respectively. However, there was a 4.33 percentage point increase in the number who worried "a lot" from 1969 to 1970。

The number of times that a family used their savings to make payments is summarized in Table XXXIII。 ${ }^{2}$ The 1969 data showed that 34 families used savings as compared to 30 families in 1970. This represented only 11.72 percent and 11.49 percent of the eligible families who used credit in 1.969 and 1970 respectively, indicating that families tend not to use savings to make credit payments. Of those families using savings, there was from 1969 to 1970, a decrease of 8.43 percentage points in the number using savings two or less times and an increase of 8.04 percentage points in the number using savings three or more times. The calculated chi-square test statistic showed

[^3]TABLE XXXII

THE AMOUNT OF WORRY INCURRED BY FAMILIES WHEN MAKING CREDIT PAYMENTS

| Amount of Worry | Observed <br> Freq. |  | Expected <br> Frequency |
| :--- | ---: | ---: | ---: |
| 1969 |  |  |  |
| None | 168 | 57.93 | 159.47 |
| Some | 99 | 34.14 | 101.57 |
| A Lot | 23 | 7.93 | 28.94 |
| Total | 290 |  |  |
| 1970 |  |  |  |
| None | 135 | 51.72 | 143.52 |
| Some | 94 | 36.02 | 91.42 |
| A Lot | 32 | 12.26 | 26.05 |
| Tota1 | 261 |  |  |

no significant difference in the number of times savings were used to make credit payments in 1969 and 1970.

The number of families who borrowed money to make the payments on their debts, showed a decrease of 3.57 percentage points from 1969 to 1970. The data, classified into either borrowing money once or two and more times are given in Table XXXIV. ${ }^{3}$ Over half of the families who did borrow, did so once. The chi-square test statistic indicated no significant difference in the number of times families borrowed money to make credit payments.
${ }^{3}$ See the interview schedules; Appendix A, questions 93 and 94 and Appendix B, questions 37 and 38.

## TABLE XXXIII

THE NUMBER OF TIMES FAMILIES USED SAVINGS TO MAKE CREDIT PAYMENTS

| Number of Times Used Savings | Observed |  | Expected <br> Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| 1 | 12 | 35.29 | 11.16 |
| 2 | 9 | 26.47 | 8.50 |
| 3 | 4 | 11.77 | 4.78 |
| 4 or More | 8 | 23.53 | 8.50 |
| Don't Know | 1 | 2.94 | 1.06 |
| Total | 34 |  |  |
| 1970 |  |  |  |
| 1 | 9 | 30.00 | 9.84 |
| 2 | 7 | 23.33 | 7.50 |
| 3 | 5 | 16.67 | 4.22 |
| 4 or More | 8 | 26.67 | 7.50 |
| Don't Know | 1 | 3.33 | . 94 |
| Total | 30 |  |  |

TABLE XXXIV

THE NUMBER OF TIMES FAMILIES BORROWED
MONEY TO MAKE CREDIT PAYMENTS

| Number of Times Borrowed Money | Observed |  | Expected Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| 1 | 13 | 56.52 | 15.13 |
| 2 or More | 10 | 43.48 | 7.87 |
| Total | 23 |  |  |
| 1970 |  |  |  |
| 1 | 12 | 80.00 | 9.87 |
| 2 or More | 3 | 20.00 | 5.13 |
| Total | 15 |  |  |

Of those families using credit, over 33 percent of them made unplanned cuts in spending to meet the debt payments. The unplanned cuts included cuts in such items as food, clothing, recreation, entertainment and other bills. In Table XXXV it is shown that in 1969, 33.33 percent and in $1970,32.61$ percent of the families making unplanned cuts had four or more cuts. ${ }^{4}$ Also, of those making unplanned cuts, there was a 9.06 percentage points decrease in the number of families who cut their spending once. But, the chi-square test statistic indicated no significant difference in the number of times unplanned cuts in spending were made to meet credit payments.

[^4]TABLE XXXV

THE NUMBER OF TIMES UNPLANNED CUTS IN SPENDING WERE MADE BY FAMILIES TO MEET CREDIT PAYMENTS

| Number of Unplanned <br> Cuts in Spending | Observed <br> Freq. | Expected <br> Frequency |  |
| :--- | ---: | ---: | ---: |
| 1969 |  |  |  |
| 1 | 16 | 16.67 | 11.74 |
| 2 | 27 | 28.12 | 28.09 |
| 3 | 18 | 18.75 | 20.43 |
| 4 or More | 32 | 33.33 | 31.66 |
| Don't Know | 3 | 3.13 | 4.09 |
| Total | 96 |  |  |
|  |  |  |  |
| 1970 |  |  |  |
| 1 | 28 | 7.61 | 30.61 |
| 2 | 22 | 23.91 | 23.91 |
| 3 | 30 | 32.61 | 32.61 |
| 4 or More | 5 | 5.44 | 5.44 |
| Don't Know | 92 |  |  |
| Total |  |  |  |

The distribution of the families making late payments on their debt is given in Table XXXVI. ${ }^{5}$ The 1969 data showed that 34.14 percent of those families using credit, made at least one late payment compared to 31.03 percent in 1970. The chi-square test statistic showed no significant difference in the number of times that families made late payments. From 1969 to 1970, of the families making late payments, there was a decrease in the percentage of families having one late payment but an increase in the percentage of families having two, three
${ }^{5}$ See interview schedules; Appendix A, questions 99 and 100 and Appendix B, questions 45 and 46.

TABLE XXXVI
THE NUMBER OF LATE PAYMENTS MADE BY FAMILIES ON DEBTS

| Number of Late Payments Made | Observed |  | Expected <br> Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| 1 | 22 | 22.22 | 17.60 |
| 2 | 29 | 29.29 | 31.90 |
| 3 | 17 | 17.17 | 17.60 |
| 4 or More | 26 | 26.26 | 26.40 |
| Don't Know | 5 | 5.05 | 5.50 |
| Total | 99 |  |  |
| 1970 |  |  |  |
| 1 | 10 | 12.34 | 14.40 |
| 2 | 29 | 35.80 | 26.10 |
| 3 | 15 | 18.52 | 14.40 |
| 4 or More | 22 | 27.16 | 21.60 |
| Don't Know | 5 | 6.17 | 4.50 |
| Total | 81 |  |  |

and four or more late payments. In 1969, 22.22 percent and in 1970, 12.34 percent of those families making late payments, had only one late payment. But, in $1969,29.29$ percent and in $1970,35.80$ percent of those families making late payments, made two late payments.

The reasons families gave for skipping payments are given in Table XXXVII. ${ }^{6}$ Of those families using credit, in 1969, 10.34 percent and in 1970, 3.83 percent of the families skipped a payment on their debts. The most frequent reasons for skipping payments were "medical"
${ }^{6}$ See interview schedules; Appendix A, questions 102 and 104 and Appendix $B$, questions 47 and 49.

TABLE XXXVII

REASONS PAYMENTS WERE NEGLECTED

| Reasons | Observed |  | Expected <br> Frequency |
| :---: | :---: | :---: | :---: |
|  | Freq. | Percent |  |
| 1969 |  |  |  |
| Medical | 8 | 26.67 | 6.75 |
| No Money | 15 | 50.00 | 16.50 |
| Other | 7 | 23.33 | 6.75 |
| Total | 30 |  |  |
| 1970 |  |  |  |
| Medical | 1 | 10.00 | 2.25 |
| No Money | 7 | 70.00 | 5.50 |
| Other | 2 | 20.00 | 2.25 |
| Total | 10 |  |  |

and "no money". The "other" category included such responses as "to take a vacation" and "forgot". The 1969 data showed that 50.00 percent and the 1970 data showed that 70.00 percent of the families skipping payments did so because they had no money. There was no significant difference in the reasons given for skipping payments in the 1969 and 1970 samples, as indicated by the chi-square test statistics.

The six problems investigated were: the amount the family worried, the number of times savings were used, the number of times money was borrowed, the number of unplanned cuts in spending, the number of late payments and the reasons for skipping payments. There was no change, from 1969 to 1970, in the frequency which the families encountered these experiences. The only problems that seemed to affect families to any extent was making unplanned cuts in spending and making late pay-
ments to meet the credit debts.

## Summary

The 670 eligible families in this study were classified according to the size of the family, the age of the head, the educational attainment level of the head, the employment status of the wife and the family income level. For this study the majority of families had three members, with the head having attained more than high school education, with the wife unemployed and a family income level of $\$ 5,000$ to $\$ 10,000$. There were equal numbers of families with a head 25 to 34 years and 35 to 44 years of age。

The type of transaction completed by the families was compared for 1969 and 1970. There were eight possible combinations of new credit, old credit and cash, with each of the 670 families having only one of the combinations.

The number of cash transactions, the five family variables and the year were compared. It appeared that the four member or more family size had the highest portion of families using the least number of cash transactions. Also the less than high schoo1 education group tended to use the least number of cash transactions in both 1969 and 1970. On the other hand, the more than high school group seemed to use cash transactions more than other educational groups.

By comparing the number of credit transactions, the family variables and the year, traits of families using the least and the most number of transactions could be isolated. Especially, the age of the head and the family income level showed trends. The 35 to 44 year old heads seemed to be the families most likely to use the least number of
of credit transactions and the families with less than 25 year old heads tended to use the most number of credit transactions. Those families with incomes greater than $\$ 10,000$ seemed to use credit less frequently and those with incomes less than $\$ 5,000$ used credit more frequently than other income groups.

Although the trend for the total amount committed was not as clear as in other areas studied it appears that the family with the wife working full time tended to be the employment group having the largest amount committed. Likewise, the families with an income greater than $\$ 10,000$ appeared to have the greatest amount committed.

Comparing the educational attainment of the head, the families with a head having more than high school are most likely to have the least amount paid on old debts and the families with a head having less than high school education are more likely to have the greatest amount paid to old debts.

The family with two members seemed to be the family size most likely to pay the greatest amount on new debts. On the other hand, the 35 to 44 year old head is the age group of the family most likely to be paying the least on new debts.

The last section deals with the experiences encountered when making credit payments. The major finding was that approximately 33 percent of those families making unplanned cuts had four or more cuts and that over 25 percent of those families making late payments made four or more late payments. "No money" was the most frequent reason given for skipping payments on credit debts.

Chapter $V$ will contain the implications of this study。

CHAPTER V

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Summary

The utilization of credit has increased considerably over the past decades. Some families still prefer to pay cash for durable goods, while others prefer to use credit. As a result of the extensive use of credit by families, there is a concern by many that those using credit be educated to use it wisely. Wisely used credit can help families achieve some of their goals, but misused credit can lead to financial problems.

Family economists have recognized that the use of credit is an important factor in family financial security. The ease of credit availability and the lack of prudent financial management may result in family difficulties. The use of credit offers several advantages to those families who plan for its use. The use of credit affects both the family using the credit and the entire economy. Credit is a vital link in our present affluent economy.

Katona, Schipper, Lansing and others have completed studies to isolate a single trait of the credit user. However, a need was indicated to study one sample and investigate several characteristicso These previous works provided the background for the selection of the eligible family criteria used in this study; namely, husband and wife
families married a year or more with head under 45 years of age.

In these studies it was suggested that the amount of debt carried increases slowly with the family size。 However, these studies showed that there is a negative relationship between both the age of the head and the educational attainment of the head and the amount of credit used. To date no work has been completed to study the effect. of the wife's employment status on the amount of credit used by the family. Families with children are more likely to use credit than single consumers or retired families. Also, as the amount of liquid assets increased the amount of debt incurred decreased. Many authors suggested that the family income level is the trait likely to have the most effect on the amount of credit used. Although, the middle income families tend to use credit more frequently there is an increasing trend for those families with higher incomes to incur debt.

There has always been some form of credit legislation, but the increase in the amount of credit outstanding prompted current legislation to be reviewed. The past decade has shown much effort being put out by legislators to pass a new law to provide the consumer with information allowing him to shop for the credit terms that best fit his needs. The Truthwin-Lending legislation became effective on July 1 , 1969. Although this part of the Consumer Credit Protection Act was thought to help consumers, many feel that the public are not aware of the features of this legislation and thus are not using the law as it was intended。

The main purpose of the present study was to investigate the extent to which families use credit for durables costing $\$ 100$ or more and to determine if there is a relationship between certain family
characteristics and the use of credit. For the analysis five family variables were considered: the family size, the age of the head, the educational attainment of the head, the employment status of the wife and the family income level.

The overall survey was completed in two stages. The first stage collected data for the period July 1, 1968 through June 30, 1969, immediately before the effective date of Truth-in-Lending and the second stage, the year after the effective date, or for the period January 1, 1970 through December 31, 1970.

By comparing the frequency of cash and credit transactions and the amount paid on credit for the two periods of the survey, the effect of Truth-in-Lending could be isolated. The family traits related to the use of credit were investigated.

The sample was limited to families meeting the eligibility requirements and was selected by a random block design from the population of Enid, Oklahoma. Interviews were conducted by trained interviewersteduring relatively short periods of time. Only the segment of the overall interview schedule providing data on the extent to which families use credit and their experiences in using credit were analyzed for this report. The chi-square test statistic was selected to test the mutual independence of the data,

Contingency tables were constructed showing the observed frequency, the observed percent and the expected frequency, to test the null hypotheses. Prior to the analysis the significance level of $\alpha=.05$ was selected, The dataweregathered from a total of 670 families, 365 families were interviewed in the first stage and 305 families in the second stage.

## Conclusions

The seven null hypotheses tested in this study determined the mutual independence of the classifications compared.

Hypothesis 1 is that there will be no significant difference in the distribution of the 1970 sample over the 1969 sample. The hypothesis is rejected at the significance level $\alpha=.05$ when comparing the distribution of families within income levels of the two years. Howm ever, 16 families did not indicate their family income level in 1969 and this incomplete data may have caused the chi-square test statistic to give evidence to reject the hypothesis. The distribution of the families according to the family size, the age of the head, the educational attainment of the head and the employment status of the wife is not significantly different at the level $\alpha=.05$. The data in these four classifications do not present sufficient evidence to indicate that there was any change in the distribution of families.

Hypothesis 2 that there will be no significant difference in the type of transaction that families used in 1970 over families in 1969 is not rejected at the significance level of $\alpha=.05$. Of the eight combinations of transactions between old credit, new credit and cash the data do not present sufficient evidence to indicate that there was a change in the distribution of families using these types of transactions from one survey year to the next. The Truth-in-Lending law appears to have had no effect on the type of transaction used by families in this study。

Hypothesis 3 that the number of cash transactions, the selected family variables and the year are mutually independent is rejected at
the significance level of $\alpha=.05$. This indicates that the data suggests that the number of cash transactions, the family variables and the year are not mutually independent. The exact actual dependence of the three variables tested cannot be stated. There appears to be some relationship between both the family size and the employment status of the wife and the number of cash transactions.

Hypothesis 4 that the number of credit transactions, the selected family variables and the year are mutually independent is rejected at the significance level of $\alpha=.05$. The data do not give sufficient evidence to indicate that the number of credit transactions, the family variables and the year are mutually independent. The exact actual dependence of the three variables tested cannot be determined. There seems to be a relationship between the educational attainment of the head and the number of credit transactions and between the family size and the number of credit transactions.

Hypothesis 5 that the total amount committed, the selected family variables and the year are mutually independent is rejected at a significance level of $\alpha=$.05. The data present sufficient evidence to indicate that the null hypothesis is not true。 It can be concluded that the amount committed, the family variable and the year are not mutually independent. There seems to be a relationship between the educational attainment of the head, and the amount committed, but the exact actual dependence cannot be stated.

Hypothesis 6 that the amount paid on old debts, the selected family variables and the year are mutually independent is rejected at the significance level of $\alpha=005$. This indicates that the data suggests that the amount paid on old debts, the family variables and
the year are not mutually independent. The exact actual dependence of . the three variables tested cannot be stated. There appears to be a relationship between the family size and the amount paid on old debts.

Hypothesis 7 that the amount paid on new debts, the selected family variables and the year are mutually independent is rejected at a significance level of $\alpha=.05$. The data present sufficient evidence to indicate that the null hypothesis is not true. It can be concluded that the amount paid on new debts, the family variable and the year are not mutually independent. There seems to be a relationship between the family size and the amount paid on the new debts, but the exact actual dependence cannot be stated.

The five general hypotheses predicting the traits of families using credit more frequently than other families were concluded on the basis of data in the previous analysis. The first general hypothesis was rejected as it was found that the two member families were the family size most likely to use credit more frequently. The second general hypothesis was not rejected as families with heads less than 25 years were found to use credit more frequently than families with heads in the other age groups. The third general hypothesis was rejected as families with the head completing less than high school tended to use credit more frequent than more educated heads of families. The fourth general hypothesis is rejected as the families with part-time employed wives tended to use credit more frequently than the families with unemployed or full-time employed wives. The fifth general hypothesis was rejected as it was found that the families with low incomes tended to have the most credit transactions.

## Recommendations

The major weakness of this thesis was the brief study given to each section. The large quantity of data analyzed allowed only a peripheral treatment of many of the characteristics considered. The study would have been improved had there been a cross-tabulation of the data. For example, it would have been helpful to know the educational attainment of the head, and the family income level of the two member families.

As noted previously, the evaluation of a number of factors leads to the conclusion that the Truth-in-Lending Law did not have a significant effect on the use of credit by families. However, the surveys did not investigate the knowledge of the costs of credit. This study would have been strengthened by the inclusion of questions to probe the family's awareness of credit costs.

This survey was conducted in only one area of the United States. It has been shown that family expenditure habits vary from one region to another. A similar study could be carried on in other regions or simultaneously in a number of areas to gain better insight into the national effects of Truth-in-Lending.

The apparent lack of consumer awareness of the Truth-in-Lending Law, suggests that consumers are not aware of the existing laws, in other areas of family living, Future research in family economics should investigate the causes of the lack of public awareness about consumer legislation.

A further study might investigate the effect of using credit on the use of other resources such as time and energy.

The recommendations for improvement of the study can be summarized as follows:

1. cross-tabulation of the data
2. survey of knowledge of credit coṣts
3. expanded study area.

Recommendations for further study include investigations of

1. means of improving public awareness of legislation
2. correlation between the use of credit and other family resources.

The major recommendations for the immediate use of the findings of this study for educational purposes are discussed below.

Nearly every family will use credit at one time in its life span。 It is important that consumers be educated to use it wisely. Consumer education programs developed in the community, at the level of concern to the individual, will help families to be informed of the new legislation as well as providing materials to help families manage their money.

Educational materials can be developed for radio, television, news papers and periodicals as well as for the class room situation. Indio vidual learning packets on different phases of credit use could be developed. Some possible topics would be: (1) how to determine the amount of credit a family should carry, (2) what to do in the event a credit payment cannot be met, and (3) the features of new legislation as they relate to consumer protection.

For a college curriculum a simulation game on the computer could be developed where students make decisions that would affect their simulated life. Each run could represent a year of decisions, thus
students could realize how misusing credit early in life may affect them the rest of their life.

No matter how much legislation is passed or how many educational materials are available to the consumer, each family must decide how much credit it will use. Families must also accept the responsibility involved in using credit.

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## APPENDIX A

FAMILY DECISION MAKING IN THE USE OF CONSUMER CREDIT; 1969 INTERVIEW

SCHEDULE USED FOR 1969
DATA COLLECTION

|  OKLAHOMA STATE UNIVERSITY, DIVISION OF HOME ECONOMICS  <br> FAMIIY DECISION-MAKING Stillwater, OkIahoma CFE (Adm.) 315 <br> IN THE USE OF CONSUMER in Cooperation with Budget Bureau No.: <br> CREDIT U.S. DEPARTMENT OF AGRICUITURE $40-S-69064$ <br>  RECORD CARD Consumer and Food Economics Research Division |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Section A | 1. | Address of Respondent | 2. Block No. | 3. Assigrment No. | 4. Int | Interviewer: |  |  |
| Identification |  |  |  | 5a. Date of Visit(s) |  |  |  |  |
|  |  |  |  | 5b. Time of Visit(s) | AM PM | AM PM | AM | AM <br> PM |

Introduction. -- I am $\qquad$ - I am helping Oklahoma State University with a survey of how families use credit. We want this information to up-date the courses in money management at the University and to use in consumer education. We will appreciate your help. Your answers to the questions will be held in strict your help.

## Section B - HOUSEHOLD CHARACTERISTICS

## 1. Eligibility:

a. Does a couple (husband and wife) live in this household? $\qquad$
$\qquad$ No

(If yes)
b. Age of husband (head of household) ----- $\qquad$ yrs.; (45 or over)

c. Number of years married? …-._ yrs.; (Less than $1 \mathrm{yr}$. )

2. Other characteristics:
a. Number of persons in the household (total including husband and wife) $\qquad$
$\qquad$
e. Was wife (of household head) employed last week? -------- Yes $\qquad$ No $\qquad$ (If yes)
f. Last week did she work--

35 hours or more?
Less then 35 hours?
None (on vacation, sick, or temporarily laid off)? ----
$\qquad$
$\qquad$
g. Does the family own its home? ------- $\qquad$
(If rent)
$h$. How much is the rent per

$$
\begin{aligned}
& \text { ow much is the rent per } \\
& \text { month? -- }
\end{aligned}
$$




Section C - INTERVIEWER COMMENTS
Ineligible Eligible $\qquad$
(If eligible, was a schedule taken?) Yes $\qquad$

- No $\qquad$
(If no schẹdule, give reason:)
b. Number 18 years old or over -- $\qquad$
c. Number 6 to 17 years old ----- $\qquad$ (W $\qquad$ 0 $\qquad$ )

OKLAHOMA STATE UNIVERSITY
Division of Home Econamics
Stillwater, Oklahoma
in cooperation with
U.S. Department of Agriculture

Consumer \& Food Economics
Research Division
Hyattsville, Maryland

FAMILY DECISION-MAKING IN THE USE OF CONSUMER CREDIT

THIS INFORMATION WILL BE HELD IN CONFIDENCE

CFE (Adm.) - 314
Budget Bureau No. :
40-S-69064
Approval Expires: 12/31/69

Schedule No.: $\qquad$
Schedul $\qquad$

OFFICE USE ONLY

1) Family size
$\qquad$
2) Family type
$\qquad$
3) Age of head
$\qquad$
4) Years married
$\qquad$
5) Occupation
6) Working wife
7) Income

Field Ed. initials $\qquad$ Date $\qquad$
Final Ed. initials $\qquad$ Date $\qquad$

SECTION I. CREDIT USED DURING THE SCHEDULE YEAR (not including home mortgage credit)

3. Did you get a loan for anything else, such as medical bills, or to refinance or consolidate debts?
(If yes)
Yes
4. For what?
$\square$
No
5. Between July 1, 1968 and July 1, 1969 did you use consumer credit for anything we haven't already talked about?
(If yes)
6. For what?
Yes $\square$ No
$\square$
7. What type of credit?
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## SECTION II - PAYMENTS ON PREVIOUS CREDIT TRANSACTIONS (Ask all families)

Up to now I have been asking about credit you took on between July l, 1968 and July 1, 1969. Now I want to ask about other credit payments you were making during that time.
18. Between July 1, 1968 and July 1, 1969, did you pay anything on debts you owed before July 1, 1968? -.......................... (If yes)

Yes
No

| 19. What were <br> these debts <br> for? | 20. How many payments <br> did you make <br> between July 1, <br> and July 1, '69? | 21. How much <br> was each <br> payment? | (TOTAL <br> PALD <br> IN <br> YEAR) |
| :--- | :--- | :--- | :--- |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |

SECTION III - DECISIONS ON CREDIT FOR DURABLES (If no credit for durables, skip to page 11.)
(Copy from p. 3 onto line at top of proper column, item most recently bought with type of credit specified.)

Now I want to ask some questions about how you decided on same of the credit purchases you made. Let's take the $\qquad$ ——
22. How long before you bought the $\qquad$ had you been considering such a purchase? (specify)
23. How long before you bought the ___ did you decide to use credit for it? Was it--
a. Before you started shopping for the
a. Before you started shopping for the
b. While you were shopping for it? ----
b. While you were shopping for it? -----------------
d. When the bill came? $\qquad$
e. Or when? (specify) -----------------------
24. Did you have enough savings or income so you could have paid cash for the $\qquad$ ? ------(If no)
25. Did you consider waiting until you could save enough to pay cash before buying it?
(If yes)
26. Why did you decide not to wait?
(If yes to question 24)
27. Why did you decide to use credit? ----


Yes $\square$
$\square$

$\qquad$


No $\square$

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


43. Did the credit terms offered at the place where you bought influence you to buy there?
44. Did you consider getting a loan to pay
 (If yes)
45. Did you ask anywhere about getting
 If yes)
46. Where? (Give type of place) ----
47. Could you have gotten a loan? -48. Why did you decide not to get a loan?
49. Did you use a credit card in making this purchase?




SECTION IV - DECISIONS ON LOANS FOR NONDURABLES (If no loan for nondurables, skip to page l3)
(Copy from p. 3 most recent loan for nondurable--i.e., medical expense or to consolidate debts)

## I want to ask about the loan you got for

$\qquad$ -
67. How long had you been considering this loan before you took it out? (specify) $\qquad$
68. Did you have enough savings or income $\square$, $\square$ so you could have paid cash? ----Yes $\qquad$ No (If yes)
69. Why did you decide
to get a loan? --- $\qquad$
$\qquad$
70. Did anyone advise you to take
 $\square$ No (If yes)
71. Who was that? $\qquad$
72. Who in your family made the decision


Wife
$\qquad$
(If husband or wife only)
73. Was this decision agreeable

(If no or partly)
74. Why was that? $\qquad$
How many did you ask about
 $\qquad$
(If any were asked)
80. What loan terms did you ask about?
$\qquad$
81. Why did you get the loan where you did? $\qquad$
$\qquad$
82. Were you satisfied with the loan terms? ---------------------------

Yes $\square$ กо $\square$
(If no)
83. Why was that? $\qquad$
$\qquad$

84. Did you read the loan agreement $\quad$ through before you signed it?---- Yes $\square$ No $\square$
85. Was there anything you found out after you signed the agreement that you wished you had known before? -- Yes $\square$ No $\square$ (If yes)
86. What was that? $\qquad$
$\qquad$
$\qquad$

$$
\begin{aligned}
& \text { 87. Would you take out a loan for } \\
& \text { this purpose again? ---.-.- Yes } \square \text { No } \square \\
& \text { (If yes) } \\
& \text { 88. Would you do anything } \\
& \text { differentiy next time? Yes } \square \text { No } \square \\
& \text { (If yes) } \\
& \text { 89. What? }
\end{aligned}
$$

SECTION V - MAKING CREDIT PAYMENTS (If no payments made during year--see pages 3 and 4--skip to page 14.)
(If CREDIT was assumed or previous credit accounts were paid on during schedule year, fill this section.)
I want to ask now about your experience in making
payments on credit accounts. These questions are
about payments between July 1,'68 and July 1,'69 on credit you took on during or before that time.
90. Did you ever worry about how None you could make the payments

Some $\qquad$ coming due on your debts? -- A lot $\qquad$
91. Did you ever take money out of your $\qquad$ $\square$ savings to make the payments? -- Yes
(If yes)
92. How many times? $\qquad$
$\qquad$
93. Did you ever borrow money to
make the payments? -------------- Yes $\square$ No $\square$
(If yes)
94. How many times? $\qquad$
$\qquad$
99. Did you ever make any late
payments on your debts?

## --------

$\square$ (If yes)
100. How many times? $\qquad$
$\qquad$
101. What did the lender say or do? $\qquad$
102. Did you skip any payments on your
debts during the year? -------Yes $\square$ No $\square$ (If yes) How many Amount of 103. Which debts? payments? each?


Did you have to make any unplanned
cuts in spending to meet the payments on your debts? ------------ Yes $\square$ No $\square$ (If yes)
96. How many times during the
year did this happen? ------ $\qquad$
97. What did you cut spending on? $\qquad$
105. How many of the skipped payments did you make up during the year ? ----- $\qquad$
106. What did the lender say or do when you skipped the payments?
$\qquad$

SECTION VI - DETAIL ON CASH PURCHASE (If no cash purchase during the year, skip to page 15)
(Copy from page 2 the item bought with CASH or 30 - or 90 -day CHARGE ACCOFNT that is likely to have cost most.)
Now I want to ask some questions about a cash purchase. 117. Why did you decide not to use credit? -_-_
Let's talk about the
Let's talk about the $\qquad$ -
107. How long before you bought the had you been considering such a purchase? (specify)
108. How many places did you shop for it? $\qquad$
109. Did you consider buying it on credit instead of paying cash? -----Yes $\square$ No $\square$ (If yes)
110. Did the store (dealer)
where you bought it
sell on credit? - Yes
 $\square$ (If yes)

17l. Did you find out about credit terms there? ------- Yes $\square$ No $\square$
112. Did you find out about credit terms from any $\qquad$ Yes $\square$ No $\square$ (If yes)
113. How many? -----.-.-. $\qquad$
114. Did you ask anywhere about getting a loan to pay for it? ------------ Yes $\square$ No $\square$ (If yes)
175. Where? (Give type of place) $\qquad$
116. Could you have gotten a loan? ---- Yes $\square$ No $\square$
18. Who in the family made the deci- Husband sion to pay cash? -------------- Wife

Both $\qquad$
119. Did anything you had heard or read influence your decision to pay cash? ----------1

## (If yes)

120. What? $\qquad$
121. Was the money you used to buy the $\qquad$ Prom-
a. Your current income?
a. Your current
b. Your savings? ------------------------

d. Or other? (specify) $\qquad$
122. Were you sorry later that you paid cash instead of using credit? ----------------- Yes $\square$ No $\square$
(If yes)
123. Why? $\qquad$

124. When you buy costly items such as this, do you pay cash always? --..--
usually? ---
usually? -------
or seldom? ------ $\qquad$

SECTION VII - HOUSEHOLD INFORMATION (Ask all families)
125. How far did you go in school? Husband Wife

Did not finish high school --
Finished high school ----.---
College 1-3 years --------College 4 years or more -..-- $\qquad$
126. Did the wife hold a paying job between July 1,1968 and July 1, 1969 ?
Yes $\square$ $10 \square$
127. What kind of work?
128. Was it a full-time
job? -
129. How many weeks was.
she employed? ----
130. How many hours per week? ------------- $\qquad$
(If family owns its home)
135.Are you making payments on
 Yes $\square$ No $\square$ (If yes)
136. How much per month? -.- $\qquad$
137. How much are the taxes on your home per year? (If not included in monthly mortgage payments) $\qquad$
138. How much do you pay per year for insurance? (Include all payments made by husband or vife)

Homeowner $\$$
(If not in mortgage) Personal Property \$
(If not in mortgage)
(If not
Other $\$ 1$ $\qquad$
(Total ------ \$ $\qquad$ )
(If household has 3 or more persons)
139. What relation are these persons to you? (List from $2 \mathrm{~b}, \mathrm{c}$, and d on record card persons other than husband and wife.)
was 5 years ago' (or at time of marriage, if married less than 5 years)?
132. Do you think your family income 5 years from now will be lower $\qquad$ , , higher $\qquad$ , or
about the same $\qquad$ as it is now?
33. Do you think your family saves more $\qquad$ _, less or aboint the same amount $\qquad$ -
as other families with similar income?
140. Please look at this card and tell me wich range your family income before tax last year (1968) fell into. Include income of both husband and wife from earnings and other sources.
134. About how much do you usually spend per week for food for your family? (Do not include nonfood items purchased at the grocery store)
$\$$ $\qquad$

APPENDIX B

FAMILY ATTITUDES IN THE USE OF CONSUMER CREDIT: 1971 INTERVIEW SCHEDULE

USED FOR 1970 DATA

COLLECTION

|  | OKLAHOMA STAIE UNIVERSITY, DIVISION OF HOME ECONOMIC |
| :--- | :---: |
| FAMILY ATHITUDES IN | Stillwater, Oklahoma |
| in cooperation with |  |
| THE USE OF CONSUMER | UREDIT |
|  | RECORD CARD |

CFE (Adm.) 315 Revised
Office of Management and Budget No.: 40-s70097 Approval Expires:April 30, 1971

|  | 1. Address of Respondent | 2. Block No. | 3. Assignment No. | 4. Int | er: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Identification |  |  | 5a. Date of Visit(s) |  |  |  |  |
|  |  |  | 5b. Time of Visit(s) | AM PM | AM PM | AM PM | AM <br> PM |

Introduction.-- I am $\qquad$ - I am helping Oklahoma State University with a survey of how femilies use credit. We want this information to up-date the courses in money management at the University and to use in consumer education. We will appreciate your help. Your answers to the questions will be held in strict confidence.
Section B - HOUSEHOLD CHARACTERISTICS

1. Eligibility:
a. Does a couple (husband and wife) live in this household? $\qquad$ Yes $\qquad$ No


## (If yes)

b. Age of husband (head of household) _-_ yrs.; (45 or over)
c. Number of years married? ------ $\qquad$ yrs.; (Less than 1 yr.)

2. Other characteristics:
a. Number of persons in the household (total
including husband and wife)
----- $\qquad$
b. Number 18 years old or over --
c. Number 6 to 17 years old ---- $\qquad$
d. Number under 6 years old ----- $\qquad$
e. Was wife (of household head) employed last week? ------- Yes $\qquad$ No $\qquad$
(If yes)
f. Last week did she work--

35 hours or more? -------------
Less than 35 hours? ----------
None (on vacation, sick, or
temporarily laid off)? -----
$\qquad$
$\qquad$
$\qquad$
g. Does the family own its home? ---------
or rent it? -----

(If eligible, was a schedule taken?) Yes $\qquad$ (If no schedule, give reason:)

No $\qquad$ (W $\qquad$ 0 $\qquad$ )

OKLAHOMA STATE UNIVERSITY
Division of Home Economics
Stillwater, Oklahoma
in cooperation with
U.S. Department of Agriculture

Consumer \& Food Economics
Research Division
Hyattsville, Maryland

FAMIIY ATTITUDES IN THE USE OF CONSUMER CREDIT THIS INFORMATION WILI BE HELD IN CONFIDENCE

CFE (Adm.) - 314 Revised Office of Management and Budget No. : 40-S70097
Approval Expires:April 30, 1971

Schedule No.: $\qquad$

IDENTIFICATION
Block No. $\qquad$
Assignment No. $\qquad$
Interviewer $\qquad$

| Visit No. | Date | If nocontact,enter time | Interview time |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Began | Ended | $\begin{aligned} & \text { Total } \\ & \text { (office) } \end{aligned}$ |
| 1. |  | $\begin{aligned} & \text { a.m. } \\ & \text { p.m. } \end{aligned}$ |  |  |  |
| 2. |  | $\begin{aligned} & \text { a.m. } \\ & \text { p.m. } \end{aligned}$ |  |  |  |
| 3. |  | $\begin{aligned} & \text { a.m. } \\ & \text { p.m. } \end{aligned}$ |  |  |  |
| 4. |  | a.m. |  |  |  |

Person(s) interviewed: wife $\qquad$ husbend $\qquad$
$\qquad$ -

OFFICE USE ONLY

1) Family size
2) Family type $\qquad$
3) Age of head
4) Years married
5) Education of head
6) Working wife

## 7) Income

Field Ed. initials $\qquad$ Date $\qquad$
Final Ed。 initials $\qquad$ Date $\qquad$

Before I ask you some specific questions about your credit use I would like to ask some general questions about your way of life.

1. Taking all things together, would
you say you're very happy, pretty
happy, or not too happy these
days?
-. Very happy
Pretty happy
Not too happy $\qquad$ (1)
$\qquad$ (3)
2. Generally, how satisfied are you
with the way you are living now--
that is, as far as money and what
you are able to have are con-
cerned? Would you say the way
you are living is --n-...............
More than satisfactory
Satisfactory
Less than satisfactory $\qquad$ (2)
$\qquad$ (3)
3. Would you say the way you are
living is better than, worse
than, or about the same as other
families with similar incomes? $\qquad$
$\qquad$ (1) Same $\qquad$ $(2)$
$(3)$
4. Do you think your family saves more, less, or about the same as other families with similar
income?
$\qquad$ (3)
5. Do you think you use more, less, or about the same amount of consumer credit--that is, credit other than 30-day charge accounts--as other
families with similar income? ---More $\quad$ Same (3)
Same
Less
6. Do you use consumer credit more
often, less often, or about as
often as you did 5 years ago (or at
time of marriage if married less
than 5 years)? ------------More often $\qquad$ $(1)$
$(2)$
About same
$\qquad$ $(2)$
$(3)$
7. Was your family income last year higher, lower, or about
the same as it was 5 years ago
(or at time of marriage, if
married less than 5 years)? --...- Higher $\qquad$
Lower $\qquad$ (3)
8. Do you think your family income 5 years from now will be higher, lower, or about
the same as it is now? ----------- Higher $\qquad$
Lower

9. People have many different attitudes about
using credit. I am going to read you several
statements and would like to know for each
one whether you agree or disagree.

## Agree Disagree (No opinion)

a. The use of credit
should be reserved for emergencies only. $\qquad$
$\qquad$ 3) $\qquad$ (2)
b. The use of credit has made the benefits of using expensive goods possible for all the people instead of just the rich. (3) $\qquad$ (1) $\qquad$ (2)
c. People who buy on credit are likely to work harder than others
to repay their debts. $\qquad$
$\qquad$ (1) $\qquad$ (2)
d. Most people use
credit to buy articles
of little or no lasting value. $\qquad$ ) $\qquad$ (3) $\qquad$ (2)
e. People in this country would be better off if such goods as automobiles and appli-
ances could not be
bought except on a
cash basis. $\qquad$

1) $\qquad$ (3) (2)

| FOR |  |  | Code: | 0 | 1 | 2 | 3 | $-(1)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| OFFICE | Total | score |  | 5 | 6 | $-(2)$ |  |  |
| USE |  | 8 | 9 | 10 | $-(3)$ |  |  |  |

10. Do you use department store charge accounts, bank credit cards, or gas credit cards?

> Yes_
$\qquad$ No $\qquad$ (1)
(If yes)
11. When the bill comes each month, do you ------------ Pay it all? $\qquad$
Sometimes pay all and sometimes pay part? Pay only part? $\qquad$ (2)
(3)
12. How often do you make purchases on the
installment plan, or take out a loan
from a bank, loan company, or credit
union? ---n------------------------Never $\qquad$ (1)

Occasionally
 $(2)$
$(3)$
13. Did your parents--(both husband's and wife's) use consumer credit for anything other than
a house, farm, or business equipment?------

14. Did your parents--(both husband's and wife's) have any strong feelings for or against the use of consumer credit?
Yes-against Yes-for
$\square$


15. Do you think your parents' attitude toward credit has influenced your use of credit?

$$
\begin{gathered}
c r e q 1 t \\
\text { No } \\
\text { Yes }
\end{gathered}
$$

$\qquad$ (1)

SECTION III--CREDIT USED DURING THE SCHEDUIE YEAR (not including hame mortgage credit)


ASK THE QUESTIONS ON THIS PAGE ABOUT ITEMS BOUGHT ON CREDIT OR LOANS RECEIVED


Up to now I have been asking about credit you took on between Jan. 1, 1970 and Dec. 31, 1970. Now I want to ask about other credit payments you were making during that time.
30. Between Jan. 1, 1970 and Dec. 31, 1970, did you pay anything

(If yes)


| 31. What were <br> these debts <br> for? | 32.How many payments <br> did you make <br> between Jan. 1, 1970 <br> and Dec. 31, 1970?33. How much <br> was each <br> payment? | (TOTAL <br> PAID <br> IN <br> YEAR) |  |
| :---: | :---: | :---: | :---: |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |
|  |  | $\$$ | $\$$ |

SECTION IV--MAKING CREDIT PAYMENTS (If no payments made during year (pages 5 and 6) skip to page 8)

I want to ask now about your experience in making payments on credit accounts. These questions are about payments between Jan. 1, 1970 and Dec. 31, 1970, on credit you took on during or before that time.
34. During that period did you worr about how you would make the Sometimes - (2) debts?-- Every month Every month $\qquad$ (3)
$(4)$
35. Draring that period did you ever
take money out of your savings
take money out of your savin
to make the payments?-- Yes $\qquad$ (2) No $\qquad$ (1)
(If yes)
36. How many times? $\qquad$
37. Did you borrow any money during that period to make the
payments? -------------- Yes $\qquad$ (2) No $\qquad$
(If yes)
38. How many times? $\qquad$
39. Did you have to make any unplanned
cuts in spending to meet the payments on your debts dur-
ing that period? ----.- Yes $\qquad$ (2) No $\qquad$ (1)
(If $\cdot \mathrm{yes}$ )
40. How many times during the year did this happen? ---------- $\qquad$
41. What did you cut spending on? $\qquad$
42. Was this a hardship for your family? ---------------------- No

43. During the last year did you do anything to increase your income so you could meet
debt payments--such as, wife going to work, or husband taking a second job?
(If yes)
44. What? $\qquad$
45. Did you ever make any late payments on your debts?--Yes (2) N $\qquad$ (1)
(If yes)
46. How many times? $\qquad$
47. Did you skip any payments on your debts that you didn't make up during the year? Yes $\qquad$ (2) No $\qquad$ (1)
(If yes)
48. How many times? $\qquad$
49. Why did you skip these payments? $\qquad$
50. What did the lender say or do when you skipped these payments? $\qquad$
51. How far did you go in school? Husband Wife

Did not finish high school Finished high school
Finished l-3 yrs. college
Finished 4 or more yrs. college $\qquad$
52. You indicated earlier that you (your wife)
were (were not) working last week (from Record Card 2e). Did you (your wife) hold
a paying job between Jan. l,
1970, and Dec. 31, 1970? --- Yes $\qquad$ No $\qquad$
(If yes)
53. What kind of work? $\qquad$
54. Was it a full-time job? Yes $\qquad$ No $\qquad$ (If no)
55. How many weeks were you your wife) employed? ---
56. How many hours per week?
57. Please look at this card and tell me which range your family income before tax last year (1970) fell into. Include income of both husband and wife from earnings and other sources.

APPENDIX C
CALCULATED AND TABULATED CHI-SQUARE
TEST STATISTIC VALUES FOR TABLES
PRESENTED IN CHAPTER IV

## TABLE XXXVIII

## CALCULATED AND TABULATED CHI-SQUARE TEST STATISTIC VALUES FOR TABLES PRESENTED IN CHAPTER IV

| Table <br> Number | $\begin{aligned} & \text { Degrees } \\ & \text { of } \\ & \text { Freedom } \end{aligned}$ | $\begin{array}{r} \text { Chi-Sq } \\ \text { Calculated } \end{array}$ | Values Tabulated at $\alpha=.05$ |
| :---: | :---: | :---: | :---: |
| I | 2 | 1.1014 | 5.9915 |
| II | 2 | 2.1957 | 5.9915 |
| III | 2 | 2.0471 | 5.9915 |
| IV | 2 | 5.4934 | 5.9915 |
| V | 3 | 19.8486 | 7.8147 |
| VI | 7 | 8.3838 | 14.0671 |
| VII | 6 | 18.4743 | 12.5916 |
| VIII | 6 | 24.2336 | 12.5916 |
| IX | 6 | 33.8148 | 12.5916 |
| X | 6 | 15.3466 | 12.5916 |
| XI | 9 | 61.2488 | 16.9190 |
| XII | 6 | 16.5300 | 12.5916 |
| XIII | 6 | 31.0667 | 12.5916 |
| XIV | 6 | 13.4124 | 12.5916 |
| XV | 6 | 20.8299 | 12.5916 |
| XVI | 9 | 54.5325 | 16.9190 |
| XVII | 6 | 16.7867 | 12.5916 |
| XVIII | 6 | 28.3642 | 12.5916 |
| XIX | 6 | 13.1894 | 12.5916 |
| XX | 6 | 38.7606 | 12.5916 |
| XXI | 9 | 45.5187 | 16.9190 |
| XXII | 6 | 16.2323 | 12.5916 |
| XXIII | 6 | 26.7003 | 12.5916 |
| XXIV | 6 | 19.5188 | 12.5916 |
| XXV | 6 | 43.2889 | 12.5916 |
| XXVI | 9 | 67.7771 | 16.9190 |
| XXVII | 6 | 13.8618 | 12.5916 |
| XXVIII | 6 | 27.6017 | 12.5916 |
| XXIX | 6 | 15.0005 | 12.5916 |
| XXX | 6 | 27.3447 | 12.5916 |
| XXXI | 9 | 54.4686 | 16.9190 |
| XXXII | 2 | 3.6804 | 5.9915 |
| XXXIII | 4 | 0.5390 | 9.4877 |
| XXXIV | 1 | 2.2205 | 3.8415 |
| XXXV | 4 | 4.4303 | 9.4877 |
| XXXVI | 4 | 3.1903 | 9.4877 |
| XXXVII | 2 | 1.5085 | 5.9915 |

APPENDIX D

THE FREQUENGIES OF FAMILIES BY A SELECTED NUMBER OF CASH TRANSACTIONS MADE

## TABLE XXXIX

THE FREQUENCIES OF FAMILIES BY A SELECTED NUMBER OF CASH TRANSACTIONS MADE

| Number of Cash Transactions | Frequency |  |
| :---: | :---: | :---: |
|  | Observed | Expected |
| - 1969 |  |  |
| 0 | 205 | 201.57 |
| 1 | 81 | 81.72 |
| 2 | 35 | 41.40 |
| 3 or More | 44 | 40.31 |
| Total | 365 |  |
| 1970 |  |  |
| 0 | 165 | 168.43 |
| 1 | 69 | 68.28 |
| 2 | 41 | 34.59 |
| 3 or More | 30 | 33.68 |
| Total | 305 |  |

APPENDIX E

## THE FREQUENCIES OF FAMILIES BY A SELECTED NUMBER OF GREDIT TRANSACTIONS MADE

## TABLE XL

THE FREQUENCIES OF FAMILIES BY A SELECTED NUMBER OF CREDIT TRANSACTIONS MADE

| Number of <br> Credit Transactions | Frequency |  |
| :---: | :---: | :---: |
|  | Observed | Expected |
| 1969 |  |  |
| 0 | 154 | 148.18 |
| 1 | 123 | 129.11 |
| 2 | 58 | 61.56 |
| 3 or More | 30 | 26.15 |
| Total | 365 |  |
| 1970 |  |  |
| 0 | 118 | 123.82 |
| 1 | 114 | 107.89 |
| 2 | 55 | 51.44 |
| 3 or More | 18 | 21.85 |
| Total | 305 |  |

APPENDIX F
THE FREQUENGIES OF FAMILIES BY SELEGTED AMOUNTS COMMITTED

## TABLE XLI

THE FREQUENCIES OF FAMILIES BY SELECTED AMOUNTS COMMITTED

| Total Amount Committed | Frequency |  |
| :---: | :---: | :---: |
|  | Observed | Expected |
| 1969 |  |  |
| Less Than \$1000 | 269 | 257.67 |
| \$1000 to \$1999 | 44 | 50.12 |
| \$2000 to \$2999 | 23 | 26.14 |
| Greater Than \$2999 | 29 | 31.05 |
| Total | 365 |  |
| 1970 |  |  |
| Less Than \$1000 | 204 | 215.32 |
| \$1000 to \$1999 | 48 | 41.88 |
| \$2000 to \$2999 | 25 | 21.85 |
| Greater Than \$2999 | 28 | 25.95 |
| Total | 305 |  |

APPENDIX G
THE FREQUENCIES OF FAMILIES BY SELECTED AMOUNTS PAID ON OLD DEBTS

## TABLE XLII

THE FREQUENCIES OF FAMILIES BY SELECTED
AMOUNTS PAID ON OLD DEBTS

| Amount Paid <br> on <br> Old Debts | Frequency <br> Expected |  |
| :--- | :---: | ---: |
| Observed |  |  |
| 1969 |  |  |
| Less Than $\$ 100$ | 148 | 134.01 |
| $\$ 100$ to $\$ 299$ | 42 | 45.23 |
| $\$ 300$ to $\$ 499$ | 34 | 30.51 |
| Greater Than $\$ 499$ | 141 | 155.26 |
| Total | 365 |  |
|  |  |  |
| 1970 |  |  |
| Less Than $\$ 100$ | 98 | 111.98 |
| $\$ 100$ to $\$ 299$ | 21 | 37.78 |
| $\$ 300$ to $\$ 499$ | 144 | 25.49 |
| Greater Than $\$ 499$ | 305 | 129.74 |
| Total |  |  |

APPENDIX H
THE FREQUENCIES OF FAMILIES BY SELECTED
amounts paid on new debts
table XliII
THE FREQUENCIES OF FAMILIES BY SELECTED amounts paid on New debts

| Amount Paid |  |  |
| :---: | :---: | :---: |
| New. Debts | Observed | Expected |
| 1969 |  |  |
| Less Than \$100 | 211 | 203.74 |
| \$100 to \$299 | 67 | 67.55 |
| \$300 to \$499 | 40 | 46.30 |
| Greater Than \$499 | 47 | 47.39 |
| Total | 365 |  |
| 1970 |  |  |
| Less Than \$100 | 163 | 170.25 |
| \$100 to \$299 | 57 | 56.44 |
| \$300 to \$499 | 45 | 38.69 |
| Greater Than \$499 | 40 | 39.60 |
| Total | 305 |  |

```
VITA
Doreen Nora Jose Gandidate for the Degree of
Master of Sçience
```

Thesis: A COMPARATIVE STUDY OF THE USE OF CONSUMER CREDIT BEFORE AND AFTER TRUTH-IN-LENDING

Major Field: Home Management, Equipment and Family Economics
Biographical:
Personal Data: Born in Alliston, Ontario, Canada, September 19, 1945, the daughter of William (deceased) and Nora McKay; married to H. Douglas Jose, 1968.

Education: Graduated from Banting Memorial High School, Alliston, Ontario, Canada, June 1964; received the Bachelor of Science degree from Macdonald College of McGill University, Montreal, Quebec, Canada, with a major in General Home Economics, May, 1968.

Professional Experience: Dietitic Assistant, Grace Hospital, Toronto, Ontario, Canada, May to September, 1967; Home Economics Senior High School Teacher, Easthampton Public Schools, Easthampton, Massachusetts, 1968-1970; Graduate Teaching Assistant in Home Management, Equipment and Family Economics Department, Division of Home Economics, Oklahoma State University, 1970-1972.

Professional Organizations: Canadian Home Economics Association, American Home Economics Association, Oklahoma Home Economics Association, Omicron Nu, Phi Upsilon Omicron.


[^0]:    ${ }^{\text {a }} 16$ families responded "don't know"

[^1]:    ${ }^{\mathrm{a}} 13$ families responded "don't know"
    $\mathrm{b}_{1}$ family responded "don't know".

[^2]:    ${ }^{1}{ }_{12}$ families responded "don't know"
    $b_{3}$ families responded "don't know"
    ${ }^{C}{ }_{1}$ family responded $" d o n^{p} t k^{k} W^{\prime \prime}$

[^3]:    ${ }^{1}$ See the interview schedules; Appendix A, question 90 and Appendix B, question 34.
    ${ }^{2}$ See the interview schedules; Appendix A, questions 91 and 92 and Appendix B, questions 35 and 36.

[^4]:    ${ }^{4}$ See interview schedules; Appendix A, questions 95 and 96 and Appendix $B$, questions 39 and 40 .

